

# RECLAMATION

*Managing Water in the West*

FINDING OF NO SIGNIFICANT IMPACT

## **Central Valley Project Interim Renewal Contracts for Panoche Water District and San Luis Water District 2015-2017**

FONSI-14-007



U.S. Department of the Interior  
Bureau of Reclamation

February 2015

## **Mission Statements**

The mission of the Department of the Interior is to protect and manage the Nation's natural resources and cultural heritage; provide scientific and other information about those resources; and honor its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

**BUREAU OF RECLAMATION**  
**South-Central California Area Office, Fresno, California**

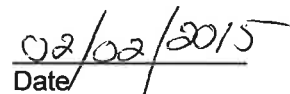
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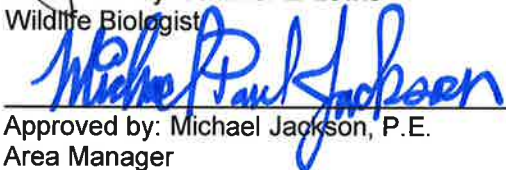
**Central Valley Project Interim Renewal  
Contracts for Panoche Water District and  
San Luis Water District 2015-2017**

  
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## Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the South-Central California Area Office of the Bureau of Reclamation (Reclamation), has determined that the renewal of two Central Valley Project (CVP) San Luis Unit interim renewal contracts for Panoche Water District (PWD) and San Luis Water District (SLWD) for the contract period March 1, 2015 through February 28, 2017 is not a major federal action that will significantly affect the quality of the human environment and an environmental impact statement is not required. This Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA) Number EA-14-007, *Central Valley Project Interim Renewal Contracts for Panoche Water District and San Luis Water District 2015 – 2017*, and is hereby incorporated by reference.

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA between November 7, 2014 and December 8, 2014. No comments were received.

## Background

Section 3404(c)(1) of the Central Valley Project Improvement Act (CVPIA) authorizes and directs Reclamation to prepare appropriate environmental review before renewing an existing water service contract for a period of twenty-five years. Section 3404(c) of the CVPIA further provides for the execution of interim renewal contracts for contracts which expired prior to completion of the CVPIA Programmatic Environmental Impact Statement (PEIS). Interim renewal contracts have been and continue to be undertaken under the authority of the CVPIA to provide a bridge between the expiration of the original long-term water service contracts and the execution of new long-term water service contracts as required by the CVPIA. The interim renewal contracts reflect current Reclamation law, including modifications resulting from the Reclamation Reform Act and applicable CVPIA requirements. The initial interim renewal contracts were negotiated beginning in 1994 for contractors whose long-term renewal contracts were expiring then with subsequent renewals for periods of two years or less to provide continued water service. Many of the provisions from the interim renewal contracts were assumed to be part of the contract renewal provisions in the description of the PEIS Preferred Alternative.

## **Proposed Action**

In accordance with and as required by Section 3404(c) of the CVPIA, Reclamation proposes to execute interim renewal contracts with PWD and SLWD for contract period March 1, 2015 through February 28, 2017 as described in Section 2.2 of EA-14-007.

## **Environmental Commitments**

Reclamation and the contractors will implement the environmental protection measures included in Table 3 of EA-14-007 as well as all measures and terms and conditions included in the associated Section 7 Endangered Species Act compliance documents (see Appendix C and D of EA-14-007). Environmental consequences for resource areas assume the measures specified would be fully implemented.

## **Findings**

Reclamation's finding that implementation of the Proposed Action will result in no significant impact to the quality of the human environment is supported by the following findings:

### **Resources Eliminated from Detailed Analysis**

As described in Section 3.1 of EA-14-007, Reclamation analyzed the affected environment and determined that the Proposed Action does not have the potential to cause direct, indirect, or cumulative adverse effects to the following resources: land use, cultural resources, Indian Sacred Sites, Indian Trust Assets, socioeconomic resources, environmental justice, air quality, or global climate change.

### **Water Resources**

Impacts to water resources associated with the Proposed Action would be comparable to those described under the No Action Alternative although tiered pricing provisions are not included in the contracts under the Proposed Action. Execution of interim renewal contracts, with only minor administrative changes to the contract provisions, would not result in a change in contract water quantities or a change in water use. Water delivery during the interim renewal contract period would not exceed historic quantities pursuant to their respective interim renewal contracts. The execution of interim renewal contracts delivering the same quantities of water that have historically been put to beneficial use would not result in any growth-inducing impacts. In addition, no substantial changes in growth due to the execution of these interim renewal contracts are expected to occur during the short timeframe of this renewal.

### **Biological Resources**

Under the Proposed Action, conditions of special status species and habitats would be the same as current conditions described in the Affected Environment

and under the No Action Alternative in EA-14-007. Existing and future environmental commitments addressed in Biological Opinions, including the CVPIA Biological Opinion, the continuation of ongoing species conservation programs, and compliance with permits for the Grassland Bypass Project (GBP) would continue to be met under the Proposed Action.

Reclamation's biological impacts determination also takes into account PWD and SLWD compliance with applicable requirements of existing Biological Opinions, as described above in Section 3.3.1 of EA-14-007. The Proposed Action would not result in substantial changes in natural and semi-natural communities, other land uses that have the potential to occur within the study area, and other portions of the San Luis Unit. Additionally, execution of interim renewal contracts under the Proposed Action would not involve construction of new facilities or installation of structures.

On December 29, 2014, Reclamation received a memorandum from the U.S. Fish and Wildlife Service concurring with Reclamation's determination that effects of the Proposed Action are not likely to adversely affect San Joaquin kit fox, giant garter snake, and blunt-nosed leopard lizard and habitat (see Appendix C in EA-14-007). Reclamation will comply with all measures contained within the concurrence memorandum.

***Effects to Listed Anadromous Fish Species and Fish Habitat***

Potential effects to listed anadromous fish species and their habitat may result from changes in water quality resulting from agricultural drainage that originates from within PWD and SLWD. Sacramento River winter-run Chinook salmon and Central Valley spring-run Chinook salmon from the Sacramento River watershed migrate through the lower portion of the Action area, and could be exposed, although only briefly, to project-related agricultural drainage. Therefore, the proposed action may effect, but is unlikely to adversely affect Sacramento River winter-run Chinook salmon and Central Valley spring-run Chinook salmon from the Sacramento River watershed.

The experimental population of Central Valley spring-run Chinook salmon and any Central Valley steelhead originating from the San Joaquin River watershed would also migrate through the Action area, but would travel through the mainstem of the San Joaquin River. Exposure to project-related effects would occur during upstream and/or downstream migration periods through the Action area and may adversely affect some Central Valley spring-run Chinook salmon and Central Valley steelhead.

For Southern Distinct Population Segment (DPS) of North American green sturgeon, however, the waterways downstream of PWD and SLWD to the lower portion of the Delta functions as migratory, holding, and rearing habitat for adults and juveniles throughout the year. This long-lived species may remain within the Action area for several months to years. Therefore, the Proposed Action may adversely affect Southern DPS of North American green sturgeon.

Reclamation consulted with the National Marine Fisheries Service (NMFS) on potential impacts from the Proposed Action to Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, and Southern DPS of North American green sturgeon, designated critical habitat, and Essential Fish Habitat (EFH). On January 20, 2015, a Biological Opinion was issued by NMFS for the effects of agricultural drainwater entering the San Joaquin River as a result of issuing interim renewal contracts to PWD and SLWD (see Appendix D of EA-14-007). They concluded the execution of these interim renewal contracts would not jeopardize the continued existence of the federally listed endangered Sacramento River winter-run Chinook salmon, threatened Central Valley spring-run Chinook salmon, threatened Central Valley steelhead, the threatened Southern DPS of North American green sturgeon, nor would it result in the destruction or adverse modification of designated critical habitat of Central Valley steelhead and the Southern DPS of North American green sturgeon. NMFS also transmitted EFH conservation recommendations for Pacific salmon, as required by the Magnuson-Stevens Fishery Conservation and Management Act. Reclamation will comply with the requirements of the Biological Opinion and EFH conservation recommendations issued by NMFS.

### **Cumulative Impacts**

Cumulative impacts relating to diversion of water and CVP operations were considered in the CVPIA PEIS. Reclamation's action is the execution of two interim renewal contracts between the United States and PWD and SLWD as required by CVPIA 3404(c). These contracts have previously been renewed and it is likely that subsequent interim renewals will be needed in the future pending the execution of the contractor's long-term renewal contract. Because the execution of interim renewal contracts maintain the status quo of deliverable quantities and CVP operations, and in essence only change the legal arrangements of a continuing action, they do not contribute to cumulative impacts in any demonstrable manner.



# RECLAMATION

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Final Environmental Assessment

## **Central Valley Project Interim Renewal Contracts for Panoche Water District and San Luis Water District 2015-2017**

EA-14-007



U.S. Department of the Interior  
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Appendix C	Concurrence Memo from the U.S. Fish and Wildlife Service
Appendix D	Biological Opinion from the National Marine Fisheries Service

# Section 1 Introduction

The Bureau of Reclamation (Reclamation) provided the public with an opportunity to comment on the Draft Finding of No Significant Impact (FONSI) and Draft Environmental Assessment (EA) between November 7, 2014 and December 8, 2014. No comments were received. Changes between this Final EA and the Draft EA, which are not minor editorial changes, are indicated by vertical lines in the left margin of this document.

## 1.1 Background

On October 30, 1992, the President signed into law the Reclamation Projects Authorization and Adjustment Act of 1992 (Public Law 102-575) which included Title 34, the Central Valley Project Improvement Act (CVPIA). The CVPIA amended previous authorizations of the Central Valley Project (CVP) to include fish and wildlife protection, restoration, and mitigation as project purposes having equal priority with irrigation and domestic water supply uses, and fish and wildlife enhancement as having an equal priority with power generation. Through the CVPIA, Reclamation is developing policies and programs to improve the environmental conditions that were affected by the operation and maintenance (O&M) and physical facilities of the CVP. The CVPIA also includes tools to facilitate larger efforts in California to improve environmental conditions in the Central Valley and the San Francisco Bay-Delta system.

Section 3404(c) of the CVPIA directs the Secretary of the Interior to renew existing CVP water service and repayment contracts following completion of a Programmatic Environmental Impact Statement (PEIS) and other needed environmental documentation by stating that:

*... the Secretary shall, upon request, renew any existing long-term repayment or water service contract for the delivery of water ... for a period of 25 years and may renew such contracts for successive periods of up to 25 years each ... [after] appropriate environmental review, including preparation of the environmental impact statement required in section 3409 [i.e., the CVPIA PEIS] ... has been completed.*

Reclamation released a Draft PEIS on November 7, 1997. An extended comment period closed on April 17, 1998. The U.S. Fish and Wildlife Service (USFWS) became a co-lead agency in August 1999. Reclamation and the USFWS released the Final PEIS in October 1999 (Reclamation 1999) and the Record of Decision

(ROD) in January 2001. The CVPIA PEIS analyzed a No Action Alternative, 5 Main alternatives, including a Preferred Alternative, and 15 Supplemental Analyses. The alternatives included implementation of the following programs: Anadromous Fish Restoration Program with flow and non-flow restoration methods and fish passage improvements; Reliable Water Supply Program for refuges and wetlands identified in the 1989 Refuge Water Supply Study and the San Joaquin Basin Action Plan; Protection and restoration program for native species and associated habitats; Land Retirement Program for willing sellers of land characterized by poor drainage; and CVP Water Contract Provisions for contract renewals, water pricing, water metering/monitoring, water conservation methods, and water transfers.

The CVPIA PEIS provided a programmatic evaluation of the impacts of implementing the CVPIA including impacts to CVP operations north and south of the Sacramento-San Joaquin River Delta (Delta). The PEIS addressed the CVPIA's region-wide impacts on communities, industries, economies, and natural resources and provided a basis for selecting a decision among the alternatives.

Section 3404(c) of the CVPIA further provides for the execution of interim renewal contracts for contracts which expired prior to completion of the CVPIA PEIS by stating that:

*No such renewals shall be authorized until appropriate environmental review, including the preparation of the environmental impact statement required in section 3409 of this title, has been completed. Contracts which expire prior to the completion of the environmental impact statement required by section 3409 [i.e., the CVPIA PEIS] may be renewed for an interim period not to exceed three years in length, and for successive interim periods of not more than two years in length, until the environmental impact statement required by section 3409 has been finally completed, at which time such interim renewal contracts shall be eligible for long-term renewal as provided above.*

Interim renewal contracts have been and continue to be undertaken under the authority of the CVPIA to provide a bridge between the expiration of the original long-term water service contracts and the execution of new long-term water service contracts as required by the CVPIA. The interim renewal contracts reflect current Reclamation law, including modifications resulting from the Reclamation Reform Act and applicable CVPIA requirements. The initial interim renewal contracts were negotiated in 1994 with subsequent renewals for periods of two years or less to provide continued water service. Many of the provisions from the interim renewal contracts were assumed to be part of the contract renewal provisions in the description of the PEIS Preferred Alternative.

The PEIS did not analyze site specific impacts of contract renewal but rather CVP-wide impacts of execution of long-term renewal contracts. Consequently, as long-term renewal contract negotiations were completed, Reclamation prepared environmental documents that tiered from the PEIS to analyze the local effects of execution of long-term renewal contracts at the division, unit, or facility level (see Section 1.1.1). Tiering is defined as the coverage of general matters in broader environmental impact statements with site-specific environmental analyses for individual actions. Environmental analysis for the interim renewal contracts has also tiered from the PEIS to analyze site specific impacts. Consequently, the analysis in the PEIS as it relates to the implementation of the CVPIA through contract renewal and the environmental impacts of implementation of the PEIS Preferred Alternative are foundational and laid the groundwork for this document. The PEIS analyzed the differences in the environmental conditions between existing contract requirements (signed prior to CVPIA) and the No Action Alternative described in this EA which is reflective of minimum implementation of the CVPIA.

In accordance with and as required by Section 3404(c) of the CVPIA, Reclamation proposes to execute two San Luis Unit interim renewal contracts for Panoche Water District (PWD) and San Luis Water District (SLWD). The two interim renewal contracts listed in Table 1 would be renewed for a two-year period from March 1, 2015 through February 28, 2017. In the event a new long-term water service contract is executed, the interim renewal contract then-in-effect would be superseded by the long-term water service contract.

Table 1 Contractors, Existing Contract Amounts, and Expiration Dates

Contractor	Current Contract Number	Contract Quantity (acre-feet)	Expiration of Existing Interim Renewal Contract
Panoche Water District	14-06-200-7864A-IR3	94,000	2/28/2015
San Luis Water District	14-06-200-7773A-IR3	125,080	2/28/2015

Reclamation has prepared this EA, which tiers from the PEIS, to determine the site specific environmental effects of any actions resulting from the execution of these two interim renewal contracts. The long-term contracts for PWD and SLWD expired December 31, 2008. In 2008, Reclamation executed the first interim renewal contracts for each of the contractors for up to two years and two months. Previous interim renewal EAs which tiered from the PEIS have been prepared for these contracts and approved as follows:

- EA-12-055, Central Valley Project Interim Renewal Contracts for Panoche Water District and San Luis Water District 2013-2015 (Reclamation 2013) which covered contract years<sup>1</sup> 2013 through 2015.

<sup>1</sup> A contract year is from March 1 of a particular year through February 28/29 of the following year.

- EA-10-070, *San Luis Water District's and Panoche Water District's Water Service Interim Renewal Contracts 2011-2013* (Reclamation 2010a) which covered contract years 2011 through 2013
- EA-07-056, *San Luis Unit Water Service Interim Renewal Contracts – 2008-2011* (Reclamation 2007) which covered the contract years 2008 through 2011

This EA was developed consistent with regulations and guidance from the Council on Environmental Quality, and in conformance with the analysis provided in *Natural Resources Defense Council v. Patterson*, Civ. No. S-88-1658 (Patterson). In *Patterson* the Court found that "...[on] going projects and activities require NEPA [National Environmental Policy Act] procedures only when they undergo changes amounting in themselves to further 'major action'." In addition, the court went further to state that the NEPA statutory requirement applies only to those changes. The analysis in this EA and the incorporated EAs finds in large part that the execution of the interim renewal contracts is in essence a continuation of the "status quo", and that although there are financial and administrative changes to the contracts, the contracts continue the existing use and allocation of resources (i.e., the contracts are for the same amount of water and for use on the same lands for existing/ongoing purposes). Further, on March 8, 2013, the Federal Court in the Eastern District of California found that Reclamation "appropriately defined the status quo as the 'continued delivery of CVP water under the interim renewal of existing contracts'" and that "[t]he indisputable historical pattern of use of the resource (water) further supports the Bureau's definition of the no-action alternative" (Document 52 for Case 1:12-cv-01303-LJO-MJS). On February 6, 2014, the Eastern District Court of California further stated that "agency actions that do not alter the status quo *ipso facto* do not have a significant impact on the environment" and that the "[a]n action that does not change the status quo cannot cause any change in the environment and therefore cannot cause effects that require analysis in the EA" (Document 88 for Case 1:12-cv-01303-LJO-MJS). This EA is therefore focused on the potential environmental effects resulting to proposed changes to the contract as compared to the No Action Alternative.

### **1.1.1 Long-Term Renewal Contracts**

CVP water service contracts are between the United States and individual water users or districts and provide for an allocated supply of CVP water to be applied for beneficial use. Water service contracts are required for the receipt of CVP water under federal Reclamation law and among other things stipulates provisions under which a water supply is provided, to produce revenues sufficient to recover an appropriate share of capital investment, and to pay the annual O&M costs of the CVP.

Reclamation completed long-term renewal contract environmental documentation in early 2001 for CVP contracts in the Friant Division, Hidden Unit, and Buchanan Unit of the CVP (Reclamation 2001). Twenty-five of the 28 Friant



Division long-term renewal contracts were executed between January and February 2001, and the Hidden Unit and Buchanan Unit long-term renewal contracts were executed in February 2001. The Friant Division long-term renewal contracts with the City of Lindsay, Lewis Creek Water District, and City of Fresno were executed in 2005. In accordance with Section 10010 of the Omnibus Public Land Management Act of 2009 (Public Law 111-11), Reclamation entered into 24 Friant Division 9(d) Repayment Contracts by December 2010.

A Final Environmental Impact Statement (EIS) analyzing effects of the long-term renewal contracts for the Sacramento River Settlement Contracts and the Colusa Drain Mutual Water Company was completed in December 2004 (Reclamation 2004a). The 147 Sacramento River Settlement Contracts were executed in 2005, and the Colusa Drain Mutual Water Company contract was executed on May 27, 2005. A revised EA for the long-term renewal contract for the Feather Water District water-service replacement contract was completed August 15, 2005 and the long-term renewal contract was executed on September 27, 2005 (Reclamation 2005a).

Environmental documents were completed by Reclamation in February 2005 for the long-term renewal of CVP contracts in the Shasta Division and Trinity River Divisions (Reclamation 2005b), the Black Butte Unit, Corning Canal Unit, and the Tehama-Colusa Canal Unit of the Sacramento River Division (Reclamation 2005c). All long-term renewal contracts for the Shasta, Trinity and Sacramento River Divisions covered in these environmental documents were executed between February and May 2005. As Elk Creek Community Services District's long-term contract didn't expire until 2007 they chose not to be included at that time. Reclamation continues to work on long-term renewal contract environmental documentation for Elk Creek Community Services District.

Reclamation completed long-term renewal contract environmental documents for the Delta Division (Reclamation 2005d) and the U.S. Department of Veteran Affairs (Reclamation 2005e). In 2005, Reclamation executed 17 Delta Division long-term renewal contracts.

Reclamation completed long-term renewal contract environmental documents for Contra Costa Water District (Reclamation 2005f) and executed a long-term renewal contract in 2005.

Regarding certain long term contract renewals related to the Sacramento River Settlement Contracts and certain Delta Division Contracts, the United States Court of Appeals for the Ninth Circuit recently held that Reclamation was obligated to consult under section 7 (a)(2) of the Endangered Species Act before renewing the contracts and remanded the case to the United States District Court. The Ninth Circuit decision did not include a remedy affecting the status of the existing contracts. The Sacramento River Settlement contractors have petitioned for

review in the United States Supreme Court. The District Court has yet to engage in any further proceedings.

Reclamation completed long-term renewal contract environmental documents for the majority of the American River Division (Reclamation 2005g). The American River Division has seven contracts that are subject to renewal. The ROD for the American River long-term renewal contract EIS was executed for five of the seven contractors. Reclamation continues to work on long-term renewal contract environmental documentation for the other two remaining contractors.

On March 28, 2007, the San Felipe Division existing contracts were amended to incorporate some of the CVPIA requirements; however, the long-term renewal contracts for this division were not executed. The San Felipe Division contracts expire December 31, 2027. Reclamation continues to work on long-term renewal contract environmental documentation for the San Felipe Division.

Long-term renewal contracts have not been completed for the City of Tracy, Cross Valley contractors, the San Luis Unit and the 3-way partial assignment from Mercy Springs Water District to Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District (Westlands) Distribution District # 1 as ESA consultation by the USFWS and National Marine Fisheries Service (NMFS) for the CVP/State Water Project (SWP) Coordinated Operations was remanded in 2010 (Document 757, Case 1:09-cv-00407-OWW-DLB) and 2011 (Document 633, Case 1:09-cv-01053-OWW-DLB), respectively, by the U.S. District Court without *vacatur* prior to completion of the long-term environmental analysis. In 2014, the U.S. Court of Appeals for the Ninth Circuit reversed the components of the district court's ruling that invalidated the biological opinions (Case: 11-15871, D.C. No. 1:09-cv-00407-OWW-DLB and Case: 12-15144, D.C. No. 1:09-cv-01053-LJO-DLB) . As the CVP/SWP Coordinated Operations ESA consultation has been upheld, Reclamation is pursuing completion of environmental compliance for the remaining long-term contracts under separate environmental documentation.

## 1.2 Need for the Proposed Action

Interim renewal contracts are needed to provide the mechanism for the continued beneficial use of the water developed and managed by the CVP for the authorized purposes including but not limited to irrigation and municipal & industrial use, and for the continued reimbursement to the federal government for costs related to the construction and operation of the CVP. Additionally, CVP water is essential to continue agricultural production and municipal viability for these contractors.

As described in Section 1.1.1, execution of long-term renewal contracts for the contracts listed in Table 1 is still pending. The purpose of the Proposed Action is to execute two interim renewal contracts in order to extend the term of the contractors' existing interim renewal contracts for two years, beginning March 1,

2015 and ending February 28, 2017. Execution of these two interim renewal contracts is needed to continue delivery of CVP water to these contractors, and to further implement CVPIA Section 3404(c), until their new long-term renewal contract can be executed.

### 1.3 Scope

Delta exports of CVP water for delivery under interim renewal contracts is an on-going action and the diversion of CVP waters for export to South-of-Delta (SOD) contractors was described in the PEIS (see Chapter III of the PEIS). As the diversion of water for delivery under the interim renewal contract is an on-going action, this EA covers the environmental analysis of fulfilling Reclamation's obligation to renew interim renewal contracts pending execution of their long-term renewal contract. Renewal of the contracts is required by Reclamation Law, including the CVPIA, and continues the current use and allocation of resources by CVP contractors, within the framework of implementing the overall CVPIA programs.

This EA has been prepared to examine the impacts on environmental resources as a result of delivering water to the contractors listed in Table 1-1 under the proposed interim renewal contracts. The water would be delivered for agricultural and municipal and industrial (M&I) purposes within Reclamation's existing water right place of use. The water would be delivered within the contractors existing service area boundaries using existing facilities for a period of up to two years. See Appendix A for contractor-specific service area maps.

Environmental reviews of CVP operations and other contract actions have been or are being conducted within the framework of the CVPIA PEIS. As discussed above, the long-term contract renewals for many CVP contractors both north and south of the Delta have already been executed following site-specific environmental review with a few, such as the contractors included in this EA, remaining to be completed. Water resources north of the Delta including the Trinity, Sacramento and American rivers are not analyzed in this EA. Several environmental documents and associated programs address north of Delta water resources including, but not limited to:

- The Bay Delta Conservation Plan that is being developed to provide the basis for the issuance of endangered species permits for the operation of the CVP and SWP. The Bay Delta Conservation Plan is a long-term conservation strategy that addresses species, habitat and water resources that drain to the Delta.
- The Trinity River Restoration Program was developed to restore the Trinity River as a viable fishery. The 2001 Trinity River ROD issued for the program specifies four modes of restoration including: flow management through releases from Lewiston Dam, construction of

channel rehabilitation sites, augmentation of spawning gravels, control of fine sediments and infrastructure improvements to accommodate high flow releases.

- The CVP Conservation Program was formally established to address Reclamation's requirements under the ESA. Over 80 projects have been funded by the CVP Conservation Program since its beginning and more recent budgets are allowing for funding of seven to fourteen projects annually.
- The Habitat Restoration Program was established under Title 34 of the CVPIA to protect, restore, and mitigate for past fish and wildlife impacts of the CVP not already addressed by the CVPIA.
- The CVPIA PEIS (described above).

In addition, Reclamation is currently preparing environmental documentation pursuant to NEPA for the coordinated operation of the CVP and SWP as required by Court Order. The execution of interim renewal contracts does not affect the operation of the CVP or SWP as it maintains existing uses and does not affect the status quo.

## **1.4 Issues Related to CVP Water Use Not Analyzed**

### **1.4.1 Contract Service Areas**

No changes to any contractor's service area are included as a part of the alternatives or analyzed within this EA. Reclamation's approval of a request by a contractor to change its existing service area would be a separate discretionary action. Separate appropriate environmental compliance and documentation would be completed before Reclamation approves a land inclusion or exclusion to any contractor's service area.

### **1.4.2 Water Transfers and Exchanges**

No sales, transfers, or exchanges of CVP water are included as part of the alternatives or analyzed within this EA. Reclamation's approvals of water sales, transfers, and exchanges are separate discretionary actions requiring separate additional and/or supplementary environmental compliance. Approval of these actions is independent of the execution of interim renewal contracts. Pursuant to Section 3405 of the CVPIA, transfers of CVP water require appropriate site-specific environmental compliance. Appropriate site-specific environmental compliance is also required for all CVP water exchanges.

### **1.4.3 Contract Assignments**

Assignments of CVP contracts are not included as part of the alternatives or analyzed within this EA. Reclamation's approvals of any assignments of CVP contracts are separate, discretionary actions that require their own environmental compliance and documentation.

#### 1.4.4 Warren Act Contracts

Warren Act contracts between Reclamation and water contractors for the conveyance of non-federal water through federal facilities or the storage of non-federal water in federal facilities are not included as a part of the alternatives or analyzed within this EA. Reclamation decisions to enter into Warren Act contracts are separate actions and independent of the execution of interim renewal contracts. Separate environmental compliance would be completed prior to Reclamation executing Warren Act contracts.

#### 1.4.5 Purpose of Water Use

Use of contract water for M&I use under the proposed interim renewal contracts would not change from the purpose of use specified in the existing contracts. Any change in use for these contracts would be separate, discretionary actions that require their own environmental compliance and documentation.

#### 1.4.6 Drainage

This EA acknowledges ongoing trends associated with the continued application of irrigation water and production of drainage related to that water. It does not analyze the effects of Reclamation's providing agricultural drainage service to the San Luis Unit. The provision of drainage service is a separate federal action that has been considered in a separate environmental document, the *San Luis Drainage Feature Re-Evaluation Final Environmental Impact Statement* [SLDFR FEIS] (Reclamation 2005h). The SLDFR FEIS evaluated seven Action alternatives in addition to the No Action Alternative for implementing drainage service within the San Luis Unit. The ROD for the SLDFR-FEIS was signed March 9, 2007. The actions considered in this EA would not alter or affect the analysis or conclusions in the SLDFR FEIS or its ROD. In 2008, Reclamation prepared the *San Luis Drainage Feature Re-Evaluation Feasibility Report* (Feasibility Report) to evaluate the feasibility of implementing the SLDFR FEIS Preferred Alternative (Reclamation 2008a).

The SLDFR FEIS identified drainage areas within PWD and SLWD and incorporated the Westside Regional Drainage Plan. The Westside Regional Drainage Plan components are currently being implemented through the ongoing Grassland Bypass Project (GBP). Reclamation and the San Luis & Delta-Mendota Water Authority prepared the *Grassland Bypass Project 2010-2019 Environmental Impact Statement and Environmental Impact Report* (Reclamation 2009) and Reclamation completed associated consultations under the ESA. The Project is permitted to Reclamation and the San Luis & Delta-Mendota Water Authority by the California Water Quality Control Board, Central Valley Region and is further controlled by environmental commitments and mitigation requirements pursuant to the Use Agreement considered in the 2009 GBP EIS. Further, as part of the SLDFR Feasibility Report, Reclamation has completed construction of a Demonstration Treatment Plant near Firebaugh, California within Panoche Drainage District's San Joaquin River Improvement Project (SJRIP) reuse area located within the Grasslands Drainage Area. Initial

equipment testing and operations is underway. The primary purpose of the treatment plant is to demonstrate and operate the reverse osmosis and selenium biotreatment technologies described in the Feasibility Report in order to collect cost and performance data required for final design of the corresponding full-scale drainage service treatment components to be constructed in Westlands in accordance with Public Law 86-488 and the Revised Control Schedule filed November 4, 2011 by the United States in *Firebaugh Canal Water District, et al. v United States of America, et. al.*, (CV-F-88-634 and CV-F-91-048 Partially Consolidated). Reclamation completed an EA entitled *San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District* on June 7, 2012 (Reclamation 2012a) which analyzed the construction and 18-month operation of the Demonstration Treatment Facility.

On October 8, 2013 Westlands filed several court documents related to the above noted litigation including a “Notice of Motion and Motion for Order Temporarily Suspending Federal Defendants’ Drainage Activities Within Westlands Water District” (Motion). Westlands’ Motion provided for an order that in essence would suspend Reclamation’s drainage activities within Westlands for six months. Westlands also noted that “Temporarily suspending drainage activities within Westlands would facilitate settlement negotiations between Federal Defendants and Westlands relating to the provision of drainage service within Westlands”. And further that a temporary suspension would avoid Federal expenditures for a drainage solution that ultimately may not be adopted after settlement, for which Reclamation will seek reimbursement from Westlands. However, Westlands also specifically noted that activities related to the construction and testing of the Demonstration Treatment Plant in the Panoche Drainage District would continue (Documents 968, 968-1, 968-2, and 968-3, Case 1:88-cv-00634-LJO-DLB).

On October 28, 2013 the Department of Justice filed a “Response” to Westlands’ Motion. The Response noted that an orderly suspension of work in the central sub-unit of Westlands while the Federal Defendants and Westlands negotiate may avoid the expenditure of federal appropriations, which Westlands will have to repay, on a drainage solution that may be different than one ultimately agreed to under a settlement. The Response also noted that those funds *in excess* of amounts required to support an adjusted schedule of activities following a period of suspension should the parties fail to reach a settlement – should be available for expenditure by Reclamation on other high priority activities. The Response further noted that in the event the Court grants Westlands’ Motion and orders the suspension of drainage activities as requested by Westlands, that Reclamation intends nevertheless to continue the construction and testing of the Demonstration Treatment Plant currently under construction within the Panoche Drainage District as noted in Westlands Motion (Document 969, Case 1:88-cv-00634-LJO-DLB).

On November 13, 2013, District Court Judge Lawrence J. O'Neill signed an order that stated: "Therefore, IT IS HEREBY ORDERED that Westlands' motion is GRANTED. Federal Defendants may suspend all activities described in the Revised Control Schedule, except the activities related to the Demonstration Plant...for a period of six months from the date of this Order. Reclamation may, consistent with applicable law, redirect appropriations designated for drainage activities within Westlands to other, high-priority activities." (Document 973, Case 1:88-cv-00634-LJO-DLB).

On April 14, 2014, Westlands submitted a motion (Document 975-1, Case 1:88-cv-00634-LJO-DLB) requesting an additional 6 month suspension of drainage activities within Westlands. On April 30, 2014, District Court Judge Lawrence J. O'Neill granted the motion (Document 979, Case 1:88-cv-00634-LJO-DLB).

On December 6, 2014, Westlands submitted a third motion requesting to further suspend drainage activities for another six months (Document 983, Case 1:88-cv-00634-LJO-DLB). Following a request from the Court for supplemental briefing by Westlands on the absence of harm to the public resulting from further delay (Document 992, Case 1:88-cv-00634-LJO-DLB), Reclamation filed a motion concurring that a further six-month partial suspension of drainage activities within Westlands will not be adverse to the public interest. On January 7, 2015, the court issued an order granting Westlands request for a temporary suspension through April of 2015. While a general framework for a proposed settlement has been agreed to by the United States and Westlands, the exact terms of a proposed settlement are currently being reviewed by the Department of Justice.

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## Section 2 Alternatives Including the Proposed Action

The No Action Alternative and the Proposed Action include the execution of interim renewal contracts for PWD and SLWD. The two interim contracts, their contract entitlements, and purpose of use under both alternatives can be found in Table 2 below.

Table 2 Contracts, Contract Entitlements and Purpose of Use

Contractor	Contract number	Contract Quantity (acre-feet)	Purpose of Use
<b>SAN LUIS UNIT</b>			
Panoche Water District	14-06-200-7864A-IR3	94,000	Ag &/or M&I
San Luis Water District	14-06-200-7773A-IR3	125,080	Ag &/or M&I

For purposes of this EA, the following assumptions are made under each alternative:

- A. Execution of each interim renewal contract is considered to be a separate action;
- B. A two year interim renewal period is considered in the analysis, though contracts may be renewed for a shorter period.
- C. The contracts would be renewed with existing contract quantities as reflected in Table 2;
- D. Reclamation would continue to comply with commitments made or requirements imposed by applicable environmental documents, such as existing biological opinions including any obligations imposed on Reclamation resulting from re-consultations; and
- E. Reclamation would implement its obligations resulting from Court Orders issued in actions challenging applicable biological opinions that take effect during the interim renewal period.

### 2.1 No Action Alternative

The No Action Alternative is the continued delivery of CVP water under the interim renewal of existing contracts which includes terms and conditions required by non-discretionary CVPIA provisions. The No Action Alternative, therefore, consists of the interim renewal of current water service contracts that were considered as part of the Preferred Alternative of the CVPIA PEIS (Reclamation 1999) adapted to apply for an interim period.

The CVPIA PEIS Preferred Alternative assumed that most contract provisions would be similar to many of the provisions in the 1997 CVP interim renewal contracts, which included contract terms and conditions consistent with applicable CVPIA requirements. In addition, provisions in the existing long-term contracts that are specific to the San Luis Unit contracts regarding O&M of certain facilities and drainage service under the 1960 San Luis Act would be incorporated into the No Action Alternative without substantial change.

### **2.1.1 Other Contract Provisions of Interest**

Several applicable CVPIA provisions which were incorporated into the Preferred Alternative of the Final PEIS and which are included in the No Action Alternative include tiered water pricing, defining M&I water users, requiring water measurement, and requiring water conservation. These provisions were summarized in EA-07-56 (Reclamation 2007) and are incorporated by reference into this EA.

In addition, the No Action Alternative includes environmental commitments as described in the biological opinion for the CVPIA PEIS (USFWS 2000).

## **2.2 Proposed Action**

The Proposed Action evaluated in this document is the execution of two interim renewal water service contracts between the United States and the contractors listed in Table 2. These are the same contracts included under the No Action Alternative. Both PWD and SLWD are currently on their third interim renewal contract and this Proposed Action would be their fourth. Drafts of the interim renewal contracts have been released for public comment at the following website: [http://www.usbr.gov/mp/cvpia/3404c/lt\\_contracts/2015\\_int\\_cts/](http://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2015_int_cts/).

The Proposed Action would continue these existing interim renewal contracts, with only minor, administrative changes to the contract provisions to update the previous interim renewal contracts for the new contract period. In the event a new long-term water service contract is executed, the interim renewal contract then-in-effect would be superseded by the long-term water service contract. No changes to the contractors' service areas or water deliveries are part of the Proposed Action. CVP water deliveries under the two proposed interim renewal contracts can only be used within each designated contract service area (see Figure 1). The contract service area for the proposed interim renewal contracts have not changed from the existing interim renewal contracts. If the contractor proposes to change the designated contract service area separate environmental documentation and approval will be required. The proposed interim renewal contract quantities (Table 2) remain the same as in the existing interim renewal contracts. Water can be delivered under the interim renewal contracts in quantities up to the contract total, although it is likely that deliveries will be less than the contract total.

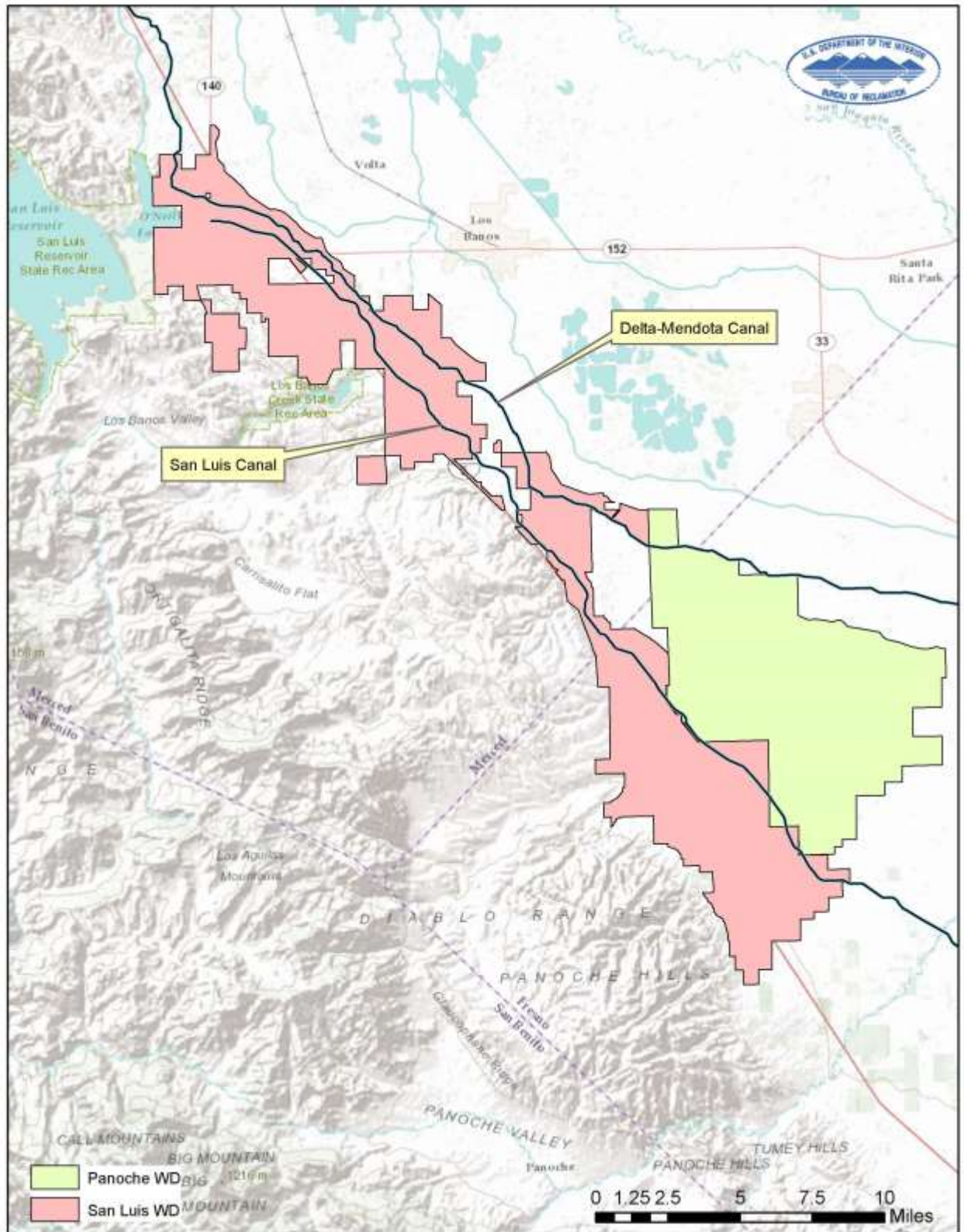


Figure 1 Contractors Service Area

The two interim renewal contracts contain provisions that allow for adjustments resulting from court decisions, new laws, and from changes in regulatory requirements imposed through re-consultations. Accordingly, to the extent that additional restrictions are imposed on CVP operations to protect threatened or endangered species, those restrictions would be implemented in the administration of the two interim renewal contracts considered in this EA. As a result, by their express terms the interim renewal contracts analyzed herein would conform to any applicable requirements lawfully imposed under the federal ESA or other applicable environmental laws.

### **2.2.1 Environmental Commitments**

Reclamation and the contractors would implement the environmental protection measures included in Table 3 as well as all measures and terms and conditions included in the associated Section 7 ESA compliance documents (see Appendix C and D). Environmental consequences for resource areas assume the measures specified would be fully implemented.

Table 3 Environmental Protection Measures and Commitments

<b>Resource</b>	<b>Protection Measure</b>
Water Resources	CVP water may only be served within areas that are within the CVP Place of Use.
Biological Resources	No CVP water would be applied to native lands or lands untilled for three consecutive years or more without additional environmental analysis and approval.
Various	No new construction or modification of existing facilities would take place as part of the Proposed Action.

### **2.2.2 Comparison of Alternative Differences**

The primary difference between the Proposed Action and the No Action Alternative is that the Proposed Action does not include tiered pricing. Section 3405(d) of the CVPIA does not require tiered pricing to be included in contracts of three years or less in duration and negotiations between Reclamation and Delta Division, San Luis Unit, and San Felipe Division contractors concluded with a form of contract which does not include tiered pricing. Consequently, if at least 80 percent of the contract total is delivered in any year during the term of the interim renewal contracts, in such year no incremental charges for water in excess of 80 percent of the contract total would be collected and paid to the Restoration Fund. The terms and conditions under the Proposed Action is a continuation of the terms and conditions under the first executed interim renewal contract excepting minor administrative changes.

## **2.3 Alternatives Considered but Eliminated from Further Analysis**

### **2.3.1 Non-Renewal of Contracts**

Section 1(4) of the “Administration of Contracts under Section 9 of the Reclamation Project Act of 1939” dated July 2, 1956 provided for the rights of

irrigation contractors to a stated quantity of the project yield for the duration of their contracts and any renewals thereof provided they complied with the terms and conditions of those contracts and Reclamation law. Section 2 of the “Renewal of Water Supply Contracts Act of June 21, 1963” provided the same for M&I contractors. Therefore, Reclamation does not have the discretionary authority to not renew CVP water service contracts. Reclamation law mandates renewals at existing contract amounts when the water is being beneficially used. The non-renewal alternative was considered, but eliminated from analysis in this EA because Reclamation has no discretion not to renew existing water service contracts as long as the contractors are in compliance with the provisions of their existing contracts.

### **2.3.2 Reduction in Interim Renewal Contract Water Quantities**

Reduction of contract water quantities due to the current delivery constraints on the CVP system was considered in certain cases, but eliminated from the analysis of the interim renewal contracts for several reasons:

First, the Reclamation Project Act of 1956 and the Reclamation Project Act of 1963 mandate renewal of existing contract quantities when beneficially used. Irrigation and M&I uses are beneficial uses recognized under federal Reclamation and California law. Reclamation has determined that the contractors have complied with contract terms and the requirements of applicable law. It also has performed water needs assessments for all the CVP contractors to identify the amount of water that could be beneficially used by each water service contractor. In the case of each interim renewal contractor, the contractor’s water needs equaled or exceeded the current total contract quantity.

Second, the analysis of the PEIS resulted in selection of a Preferred Alternative that required contract renewal for the full contract quantities and took into account the balancing requirements of CVPIA (p. 25, PEIS ROD). The PEIS ROD acknowledged that contract quantities would remain the same while deliveries are expected to be reduced in order to implement the fish, wildlife, and habitat restoration goals of the Act, until actions under CVPIA 3408(j) to restore CVP yield are implemented (PEIS ROD, pages 26-27). Therefore, an alternative reducing contract quantities would not be consistent with the PEIS ROD and the balancing requirements of CVPIA.

Third, the shortage provision of the water service contract provides Reclamation with a mechanism for annual adjustments in contract supplies. The provision protects Reclamation from liability from the shortages in water allocations that exist due to drought, other physical constraints, and actions taken to meet legal or regulatory requirements. Reclamation has relied on the shortage provisions to reduce contract allocations to water service contractors in most years in order to comply with regulation requirements. Further, CVP operations and contract implementation, including determination of water available for delivery, is subject to the requirements of Biological Opinions issued under the federal ESA for those

purposes. If contractual shortages result because of such requirements, the Contracting Officer has imposed them without liability under the contracts.

Fourth, retaining the full historic water quantities under contract provides the contractors with assurance the water would be made available in wet years and is necessary to support investments for local storage, water conservation improvements and capital repairs.

Therefore, an alternative reducing contract quantities would not be consistent with Reclamation law or the PEIS ROD, would be unnecessary to achieve the balancing requirements of CVPIA or to implement actions or measure that benefit fish and wildlife, and could impede efficient water use planning in those years when full contract quantities can be delivered.

## Section 3 Affected Environment and Environmental Consequences

This section describes the service area for PWD and SLWD which receive CVP water from the Delta via the Delta-Mendota Canal and the San Luis Canal. The Proposed Action area includes the contractors' service area as shown in Figure 1. However, the assessment of effects on anadromous fish includes areas downstream of drainage from the contractors' service area.

### 3.1 Resources Eliminated from Further Analysis

Reclamation analyzed the affected environment and determined that the Proposed Action would not have the potential to cause direct, indirect, or cumulative adverse effects to the resources listed in Table 4.

Table 4 Resources Eliminated from Further Analysis

Resource	Reason Eliminated
Land Use	The interim renewal contracts for PWD and SLWD would not provide for additional water supplies that could act as an incentive for conversion of native habitat or increased agricultural production acreage. Generally, lands within the San Luis Unit that are productive are farmed. In addition, the short terms of the interim renewal contracts do not provide sufficient certainty to permit M&I development of land currently in agricultural production; therefore, land would continue to be used for existing purposes under either alternative. Likewise, the interim renewal contracts would not change contract terms or conditions governing the allocation of CVP water during times of limited supply (i.e., drought), so would not provide additional water reliability conducive to conversion of land use from agricultural to M&I uses. Consequently, there would be no impact to land use as a result of the Proposed Action alternative.
Cultural Resources	There would be no impacts to cultural resources as a result of implementing the Proposed Action as the Proposed Action would facilitate the flow of water through existing facilities to existing users. No new construction or ground disturbing activities would occur as part of the Proposed Action. The pumping, conveyance, and storage of water would be confined to existing CVP facilities. Reclamation has determined that these activities have no potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1). See Appendix A for Reclamation's determination.
Indian Sacred Sites	The Proposed Action would not limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or affect the physical integrity of such sacred sites. There would be no impacts to Indian sacred sites as a result of the Proposed Action.
Indian Trust Assets	No physical changes to existing facilities are proposed and no new facilities are proposed. Continued delivery of CVP water to PWD and SLWD under an interim renewal contract would not affect any Indian Trust Assets because existing rights would not be affected; therefore, Reclamation has determined that the Proposed Action would not impact Indian Trust Assets. See Appendix B for Reclamation's determination.
Socioeconomic Resources	The proposed execution of interim renewal contracts with only minor administrative changes to the contract provisions would not result in a change in contract water quantities or a change in water use and would not adversely

Resource	Reason Eliminated
	impact socioeconomic resources within the contractors' respective service areas.
Environmental Justice	The proposed execution of interim renewal contracts with only minor administrative changes to the contract provisions would not result in a change in contract water quantities or a change in water use. The Proposed Action would not cause dislocation, changes in employment, or increase flood, drought, or disease. The Proposed Action would not disproportionately impact economically disadvantaged or minority populations as there would be no changes to existing conditions.
Air Quality	The Proposed Action would not require construction or modification of facilities to move CVP water to PWD or SLWD. CVP water would be moved either via gravity or electric pumps along the Delta-Mendota Canal and San Luis Canal which would not produce emissions that impact air quality. The generating power plant that produces the electricity to operate the electric pumps does produce emissions that impact air quality; however, water under the Proposed Action is water that would be delivered from existing facilities under either alternative and is therefore part of the existing conditions. In addition, the generating power plant is required to operate under permits issued by the air quality control district. As the Proposed Action would not change the emissions generated at the generating power plant, no additional impacts to air quality would occur and a conformity analysis is not required pursuant to the Clean Air Act.
Global Climate Change	The Proposed Action does not include construction of new facilities or modification to existing facilities. While pumping would be necessary to deliver CVP water, no additional electrical production beyond baseline conditions would occur. In addition, the generating power plant that produces electricity for the electric pumps operates under permits that are regulated for greenhouse gas emissions. As such, there would be no additional impacts to global climate change. Global climate change is expected to have some effect on the snow pack of the Sierra Nevada and the runoff regime. Current data are not yet clear on the hydrologic changes and how they will affect the San Joaquin Valley. CVP water allocations are made dependent on hydrologic conditions and environmental requirements. Since Reclamation operations and allocations are flexible, any changes in hydrologic conditions due to global climate change would be addressed within Reclamation's operation flexibility under either alternative.

## 3.2 Water Resources

### 3.2.1 Affected Environment

Reclamation makes CVP water available to contractors for reasonable and beneficial uses, but this water is generally insufficient to meet all of the contractors' needs due to hydrologic conditions and/or regulatory constraints. In contractors' service areas, contractors without a sufficient CVP water supply may extract groundwater if pumping is feasible or negotiate water transfers when CVP contract supplies are insufficient to satisfy water needs. Table 5 below summarizes CVP contract deliveries and other water deliveries for PWD and SLWD over the past five years.



Table 5 Five Year CVP Allocation and Water Use Summary for PWD and SLWD

Water Year	CVP Contract Amount (acre-feet)	CVP Allocation	CVP Contract (acre-feet)	Other Water Used	Total Applied Water	Irrigated Acres
Panoche Water District						
2013	94,000	20%	18,800	43,663	62,463	37,436
2012	94,000	40%	37,600	28,395	65,995	37,000
2011	94,000	80%	75,200	0	75,200	37,240
2010	94,000	45%	42,300	20,804	63,104	37,279
2009	94,000	10%	9,400	35,954	45,354	37,092
	<b>Averages</b>	<b>39%</b>	<b>36,600</b>	<b>62,423</b>	<b>62,423</b>	<b>37,209</b>
Percent of water needs satisfied by CVP contract allocation = 59%						
San Luis Water District						
2013	125,080	20%	25,016	56,319	81,335	33,819
2012	125,080	40%	50,032	43,087	93,119	34,664
2011	125,080	80%	100,064	209	100,273	32,486
2010	125,080	45%	56,286	24,059	80,345	31,234
2009	125,080	10%	12,508	58,331	70,839	30,848
	<b>Averages</b>	<b>39%</b>	<b>48,781</b>	<b>36,401</b>	<b>85,182</b>	<b>32,610</b>
Percent of water needs satisfied by CVP contract allocation = 57%						

### ***Water Delivery Criteria***

The amount of CVP water available each year for contractors is based, among other considerations, on the storage of winter precipitation and the control of spring runoff in the Sacramento and San Joaquin River basins. Reclamation's delivery of CVP water diverted from these rivers is determined by state water right permits, judicial decisions, and state and federal obligations to maintain water quality, enhance environmental conditions, and prevent flooding. The CVPIA PEIS considered the effects of those obligations on CVP contractual water deliveries. Experience since completion of the CVPIA PEIS has indicated even more severe contractual shortages applicable to SOD water deliveries (Reclamation 1999), and this information has been incorporated into the modeling for the current CVP/SWP Coordinated Operations of the Delta (Reclamation 2004b).

**Water Delivery Conditions under CVPIA Implementation** Modeling done for the CVPIA PEIS predicted that, with the implementation of the CVPIA PEIS Preferred Alternative and under conditions in the late 1990s, SOD CVP agricultural water service contractors would receive an average of 59 percent of their current total contract amounts (Reclamation 1999). These conditions would result in the delivery of total contract amounts to agricultural water service contractors located SOD approximately 15 percent of the time. Minimum deliveries of zero would occur only in critically dry years.

Additionally, tables from the CVP/SWP Coordinated Operations Plan (Reclamation 2004b) also show that deliveries of over 80 percent of the contract total for agricultural purposes would occur between 22 and 24 percent of the time (Figure 2). Under these conditions, modeling predicts that tiered pricing would apply once every fourth or fifth year.

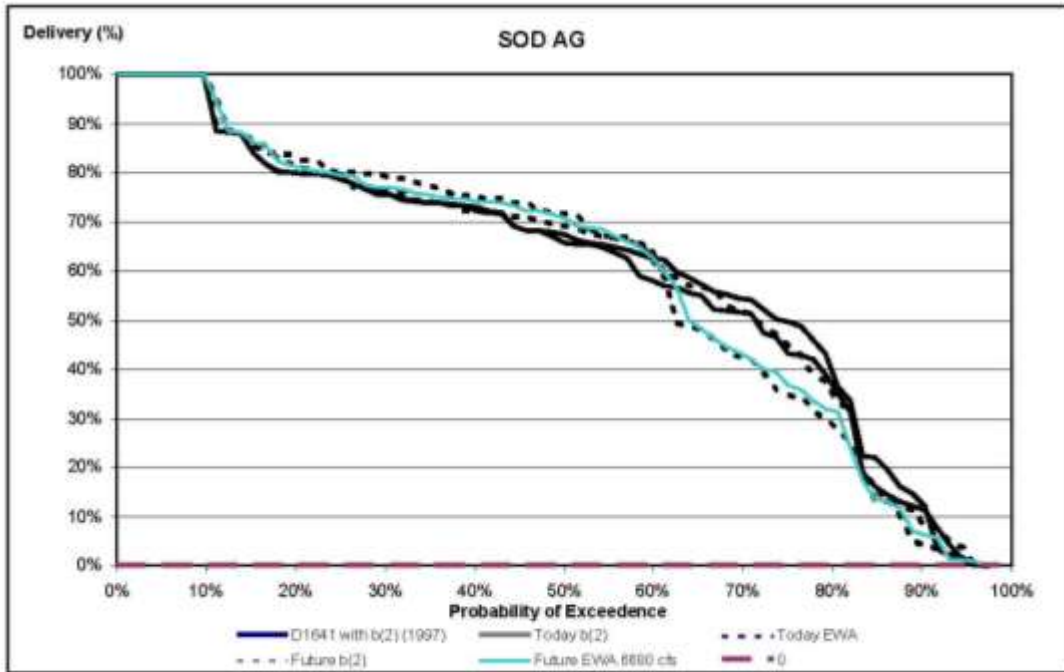


Figure 2 CVP SOD Agricultural Allocation Exceedance Chart (Source: Reclamation 2004b)

### ***Contractor Water Needs Assessment***

In conjunction with CVP-wide contract renewals after issuance of the PEIS, a Water Needs Assessment was developed in order to identify the beneficial and efficient future water needs and demands for each interim renewal contractor projected, in most cases (including the contracts considered here), through 2025. Water demands were compared to available non-CVP water supplies to determine the need for CVP water. If the negative amount (unmet demand) was within 10 percent of the total supply for contracts greater than 15,000 acre-feet per year (AFY), or within 25 percent for contracts less than or equal to 15,000 AFY, the test of full future need of the water supplies under the contract was deemed to be met. Because the CVP was initially established as a supplemental water supply for areas with inadequate supplies, the needs for most contractors were at least equal to the CVP water service contract and frequently exceeded the previous contract amount. Increased total contract amounts were not included in the needs assessment because the CVPIA stated that Reclamation cannot increase contract supply quantities.

The Water Need Assessments did not consider the effects of additional constraints on the CVP's ability to deliver CVP water that were not evident at the time of the analysis. Many factors, including hydrologic conditions and implementation of federal and state laws have further constrained the CVP's ability to deliver water to its SOD water service contractors, including PWD and SLWD. Since the last Water Needs Assessment, CVP allocations have continued to decline as a consequence of regulatory actions (including but not limited to the CVP/SWP

Coordinated Operations biological opinions) and hydrologic conditions. These additional water delivery reductions are not reflected in Figure 2 above. As depicted in Table 5, over the past five years, SLWD and PWD CVP contracts have, on average, yielded less than 60 percent of their respective water needs.

### ***Panoche Water District's Water Use***

PWD is located on the western side of the San Joaquin Valley in both Merced and Fresno Counties (Figure 1). PWD's conveyance system is composed of approximately 45 miles of canals and pipelines to serve its landowners. This includes approximately 15 miles of unlined canals, 22 miles of lined canals, and almost 8 miles of pipeline. PWD obtains CVP water through two diversion points on the Delta-Mendota Canal and five diversion points on the San Luis Canal.

**CVP Contracts** On August 16, 1955, PWD entered into a long-term contract (Contract 14-06-200-7864) with Reclamation for 93,988 AF of CVP supply from the Delta-Mendota Canal (Reclamation 1955). This contract was amended on August 30, 1974 (Contract 14-06-200-7684A) to allow a maximum delivery of 94,000 AF of CVP supply from the Delta-Mendota Canal or San Luis Canal. This contract was further revised on January 13, 1986 and November 14, 1988 in amendatory contracts that revised some contract terms but did not revise the maximum quantity of CVP water to be supplied. The long-term contract expired December 31, 2008 and has been succeeded by a series of interim renewal contracts. The most recent was the third interim renewal contract (Contract 14-06-200-7864A-IR3) issued March 1, 2013, which remains in effect until February 28, 2015. This contract is one of the interim renewal contracts analyzed in this EA as shown in Table 2.

**Other Available Water Supplies** In addition to its CVP water, PWD has entered into a long-term water supply contract with the Central California Irrigation District and Firebaugh Canal Water District. This agreement provides 3,000 AFY in supplemental water to PWD through 2033. PWD has also entered into an agreement with San Luis Canal Company. This agreement provides up to 5,000 AFY of supplemental water to PWD through December 31, 2021. Both sources supplement anticipated ongoing shortages in the CVP contract supply that are imposed as described in Section 2.3.2 and provide that total deliveries to PWD cannot exceed the CVP contract total quantity. The District acquires other water supplies when available through transfers with other contractors during years of shortages in their CVP contract allocations. Some groundwater is also used within PWD. There are 42 privately owned and operated groundwater wells in the district service area in addition to one district owned well. Because of its poor quality, groundwater is primarily used as a water shortage contingency water supply source.

### ***San Luis Water District's Water Use***

SLWD is located on the western side of the San Joaquin Valley near the City of Los Banos, in both Merced and Fresno Counties (Figure 1). SLWD's current distribution system consists of 52 miles of pipelines, 10 miles of lined canals, and

7.5 miles of unlined canals. About 20,000 acres within the district, referred to as the Direct Service Area, receive CVP water from 39 turnouts on the Delta-Mendota Canal and 23 turnouts on the San Luis Canal. In addition to the Direct Service Area, three improvement districts are also served through distribution systems branching off the San Luis Canal. Both Improvement Districts 1 and 2 are primarily located within Fresno County; Improvement District 3 is located primarily in Merced County.

**CVP Contracts** On February 25, 1959, SLWD entered into a long-term contract (Contract 14-06-200-7563) with Reclamation for 93,300 AF of CVP supply from the Delta-Mendota Canal (Reclamation 1959). This contract was superseded by a contract executed on June 19, 1974 (Contract 14-06-200-7773A) for a maximum of 125,080 AF of CVP supply from the Delta-Mendota Canal and San Luis Canal which was further amended on January 13, 1986 to modify certain contract terms but did not revise the maximum amount of CVP water to be supplied. This contract expired December 31, 2008 and has been succeeded by a series of interim renewal contracts. The most recent was a third interim renewal contract (Contract 14-06-200-7773A-IR3) issued March 1, 2013, which remains in effect until February 28, 2015. This contract is one of the interim renewal contracts analyzed in this EA as shown in Table 2.

**Other Available Water Supplies** CVP water is SLWD's only long-term water supply. The district does not own any groundwater wells and has no long-term contracts for surface water or groundwater supplies. Private groundwater sources are limited; there are approximately 20 privately owned and operated groundwater wells that provide water to 6,000 acres in SLWD, or only about 5 percent of the acreage within SLWD. The vast majority of the SLWD's water users do not have meaningful access to groundwater that can be used for irrigation, and therefore, supplementation of the CVP supply is nominal.

SLWD acquires other water supplies through transfers with other parties, including other CVP contractors during years of shortages when available; however, frequent water supply shortages have led to widespread fallowing in SLWD. On average, almost half the irrigable acreage in SLWD is fallowed. Increasingly, SLWD has shifted to higher value permanent crops as contract deliveries have declined over time. Available water supplies are applied to permanent crops and high value row crops. Generally, transfer water is too expensive to support row crops and animal feed crops acreages which expand and contract with changes in CVP allocation.

Although water deliveries by the SLWD historically have been almost exclusively used for agricultural use, in the mid 1990's development around the cities of Los Banos and Santa Nella resulted in a shift of some water supplies to M&I use. SLWD currently supplies approximately 800 AFY as a wholesaler (but not to end users) and approximately 40 AFY to end users as treated water. It is possible that

M&I demands could increase over time, but not during the term of the proposed interim renewal contracts.

### **Groundwater Resources**

The San Joaquin River Hydrologic Region covers approximately 9.7 million acres (15,200 square miles) and includes all of Calaveras, Tuolumne, Mariposa, Madera, San Joaquin, and Stanislaus counties, most of Merced and Amador counties, and parts of Alpine, Fresno, Alameda, Contra Costa, Sacramento, El Dorado, and San Benito counties (California Department of Water Resources 2003). Tulare Lake Hydrologic Region covers approximately 10.9 million acres (17,000 square miles) and includes all of Kings and Tulare Counties and most of Fresno and Kern Counties (California Department of Water Resources 2003). Conditions within each of the regions vary significantly from location to location. PWD and SLWD fall within the Delta-Mendota Canal and Westside subbasins within these two hydrologic regions.

The California Department of Water Resources (DWR) has estimated an annual overdraft of approximately 205,000 AF of groundwater within the San Joaquin Valley. This over-drafting of groundwater has caused ground subsidence since the mid-1920s. By 1970, 5,200 square miles of the valley were affected and maximum subsidence exceeded 28 feet in an area west of Mendota. Much of this area is now served by the CVP's San Luis Unit (California Department of Water Resources 2003; Reclamation 2005h). During the past 40 years, recharge increased dramatically as a result of imported irrigation water. Increased rates of recharge resulting from percolation of irrigation water, combined with the rapid post-1967 decrease in pumping, caused a rise in the height of the water table over much of the western valley (Belitz and Heimes 1990). However, given increased groundwater pumping under CVP shortages and extended drought conditions over the past several years and given new groundwater pumping for permanent crop development outside the CVP service area, U.S. Geological Survey now is documenting the return of overdraft and land subsidence within portions of the Delta Mendota and Westside Sub-Basins in which these contractors are located.

The large-scale groundwater use during the 1960s and 1970s, combined with the introduction of imported surface water supplies, has modified the natural groundwater flow pattern in some areas. Flow largely occurs from areas of recharge toward areas of lower groundwater levels due to groundwater pumping (Bertoldi et al. 1991). The vertical movement of water in the aquifer has also been altered in this region as a result of thousands of wells constructed with perforations above and below the Corcoran clay layer, which, where present, provide a direct hydraulic connection (Bertoldi et al. 1991).

Both PWD and SLWD have approved groundwater management plans.

**General Impacts of Agriculture on Groundwater** In 1989, Dubrovsky and Deverel concluded that percolation of irrigation water past crop roots, pumping of groundwater from deep wells, and imported surface water used for irrigation have

combined to create large downward hydraulic-head gradients. The salts in the irrigation water, and soil salts leached from the unsaturated zone, increased salt and selenium concentrations in groundwater. In low-lying areas of the valley, and where the water table is within seven feet of land surface, evaporation from the shallow water table has further increased salt and selenium concentrations. A U.S. Geological Survey report indicated that irrigation had affected the upper 20 to 200 feet of the saturated groundwater zone (Dubrovsky and Deverel 1989). In some locations, this poor quality groundwater zone is moving downward in response to recharge from above the water table and pumping from deep wells.

**Groundwater Quality** Groundwater quality conditions vary throughout the San Joaquin Valley. Significant portions of the groundwater in the San Luis Unit exceed the California Regional Water Quality Control Board's recommended Total Dissolved Solids (TDS) concentration. Calcium, magnesium, sodium, bicarbonates, selenium, sulfates, and chlorides are all present in significant quantities as well (Reclamation 2005h). Groundwater zones commonly used along a portion of the western margin of the San Joaquin Valley have high concentrations of TDS, ranging from 500 milligrams per liter (mg/L) to greater than 2,000 mg/L (Bertoldi et al. 1991). The concentrations in excess of 2,000 mg/L commonly occur above the Corcoran clay layer. These high levels have impaired groundwater for irrigation and municipal uses in the western portion of the San Joaquin Valley.

The high TDS content of west side groundwater is due to recharge of stream flow originating from marine sediments in the Coast Range (California Department of Water Resources 2003). The high TDS content in the trough of the valley is the result of concentration of salts due to evaporation and poor drainage from naturally saline and high clay content soils, which restricts drainage. Nitrates may occur naturally or as a result of disposal of human and animal waste products and fertilizer. Boron and chloride are likely a result of concentration from evaporation near the valley trough (California Department of Water Resources 2003). Organic contaminants contributed by agriculture have been detected in groundwater throughout the region but primarily in areas east of the San Luis Unit where soil permeability is higher and depth to groundwater is shallower. In the central and west-side portions of the valley, where the Corcoran Clay confining layer exists, water quality is generally better beneath the clay than above it (California Department of Water Resources 2003).

Contractors in the San Luis Unit with drainage-impacted lands have developed aggressive programs to manage salts in the root zone and to minimize deep percolation through the use of high-efficiency irrigation techniques, such as sprinklers and advanced drip technologies, shortened rows, and the installation of groundwater monitoring wells. While PWD and the drainage-affected portions of SLWD have continued to have a drainage outlet, lack of a drainage outlet in some areas of the San Luis Unit has led to an increase in saline groundwater beneath some portions of the region.

**Production of Drainage Water within PWD and SLWD** The drainage impacted Northern Area of the San Luis Unit includes approximately 38,000 acres in PWD, 4,100 acres in Pacheco Water District and 3,882 acres of SLWD land located within Charleston Drainage District (Pacheco Water District is not included in the current interim renewal contract process as their contract does not expire until 2024). Approximately 30,000 acres within the Northern Area are presently improved with subsurface drainage systems (SLDFR Draft EIS Table C1-4) including approximately 24,000 acres between PWD and SLWD. Drainage water from irrigation within the Northern Area of the San Luis Unit is captured primarily through subsurface tile and deep drain collector systems which remove subsurface water from the plant root zones. Drainage produced within the Northern Area may also result from uncontrolled groundwater intrusion from upslope irrigation, subterranean flows from the Coastal Range, and seepage from the California Aqueduct. Such inputs may be diffuse or highly localized and the quantities and effects within particular areas have not been fully documented. Drainage captured in open drains or through the subsurface drainage system is reused for irrigation within the drainage service areas. Each of the districts in the Northern Area encourage on-farm drainage management through policies to control surface water discharges, programs to support on-farm irrigation efficiency improvements, and mandatory water conservation planning. Drainage is further managed through blending into the irrigation supply and application to salt-tolerant crops.

PWD and a portion of the SLWD are within the Grassland Drainage Area and participate in the GBP, which includes a total of 97,000 acres. At present, drainage that leaves each district's boundaries is reused on the 6,000-acre SJRIP and/or discharged through the GBP into the San Luis Drain, Mud Slough North and ultimately, the San Joaquin River. This is the only route for drainage disposal for these service areas. Table 6 below lists the amount of drainage discharged between 1986 and 2013 by Panoche Drainage District (which includes both PWD and an additional 4,000 acres) and a portion of SLWD (SLWD lands contained within Charleston Drainage District). Load reduction requirements for selenium and salts for the GBP are established in the 2009 Agreement for Use of the San Luis Drain and waste discharge requirements issued by the California Water Quality Control Board, Central Valley Region. Reductions continue through 2019. While there will continue to be annual variability based on water year types and load requirements, starting in 2016, the reductions become dramatic, with 2017 targets just 35 percent of the 2015 level. Thus, the districts anticipate overall decreased discharges from the Grassland Drainage Area as they continue to work towards "zero" discharge. For example, for 2013, a critically dry year, PWD's annual load of selenium leaving Panoche Drainage District (an area that contains all of PWD plus an additional 6,000 acres) is projected to be 283 pounds, compared to 1,003 in wet year 2011. Selenium reductions in 2014 through October have contributed to a decrease in selenium discharged from entire GBP of 48 percent from 2013 levels and has been 69 percent below the allowable

annual load requirements for 2014, a critically dry year (Grassland Basin Drainers Newsletter, October 2014).

Table 6 Discharges for PWD and SLWD from the Grassland Drainage Area

Year <sup>2</sup>	Charleston Drainage District (includes SLWD)			PWD as Panoche Drainage District		
	Discharge (AF)	Salt Load (tons)	Selenium Load (pounds)	Discharge (AF)	Salt Load (tons)	Selenium Load (pounds)
2013	33	164	6	3,066	21,675	283
2012	54	267	10	3,633	18,390	289
2011	125	545	24	8,345	40,276	1,003
2010	171	908	43	6,829	31,468	806
2009	310	1,123	69	6,615	29,780*	735
2008	213	372	45	6,298	28,353*	848
2007	1,482	8,218	423	6,583	29,638*	1,285
2006	1,748	8,381	330	8,189	36,868*	1,007
2005	2,056	10,890	554	13,825	62,236*	2,020
2004	1,180	6,111	399	9,003	40,531*	3,216
2003	943	5,172	271	9,928	44,694*	1,504
2002	1,179	6,653	327	9,351	42,097*	1,548
2001	533	3,370	205	11,436	51,484	1,882
2000	869	4,210	256	13,047	53,487	1,790
1999	983	4,787	233	12,823	55,483	1,771
1998	1,674	8,100	456	19,268	82,142	3,662
1997	1,509	6,676	349	17,028	76,824	3,250
1996	3,897	14,771	609	24,538	103,384	5,276
1995	4,316	19,376	971	28,533	121,128	5,942
1994	3,199	14,330	808	19,265	85,959	4,083
1993	1,858	8,412	425	19,774	90,696	4,779
1992	730	3,279	153	12,658	58,766	2,824
1991	781	3,161	227	14,092	60,414	2,558
1990	2,126	8,592	387	21,462	88,117	4,009
1989	2,799	12,068	519	24,075	92,633	4,032
1988	5,015	20,062	906	31,575	114,989	4,930
1987	4,769	19,023	946	35,229	111,435	4,990
1986	3,186	10,699	474	31,573	102,699	4,480
Average	1,705	7,490	372	15,287	73,072	2,672
Maximum	5,015	20,062	971	35,229	121,128	5,942
Minimum	33	164	6	3,066	18,390	283
*Amounts based on estimated values						
Source: Summers Engineering 2014 and San Francisco Estuary Institute 2013.						

As described previously, Reclamation issued the SLDFR FEIS and ROD analyzing the effects of implementing drainage service. The ROD reflects Reclamation's decision to implement the In-Valley/Water Needs Land Retirement alternative, which includes drainage reduction measures, drainage water reuse facilities, treatment systems, and evaporation ponds. It also includes retiring 194,000 acres of land from irrigated farming from the entire San Luis Unit.

Notwithstanding the requirements of the San Luis Act that the United States provide drainage service to the San Luis Unit and the issuance of the ROD, SLWD, PWD, Pacheco Water District and Westlands have district-specific

<sup>2</sup> These data are based on the October 1-September 30 water year, rather than a calendar year.



policies and methods for dealing with drainage (Pacheco Water District and Westlands are located in the San Luis Unit but not included in the Proposed Action). Lack of a drainage outlet has led to an increase in saline groundwater beneath some portions of the San Luis Unit, such as lands within Westlands that have now been retired. PWD and the Charleston Drainage District area of SLWD will continue to have a drainage outlet during the term of these interim renewal contracts and in addition, drainage is being managed to prevent an increase in saline groundwater under farmed acres.

Finally, in addition to the ongoing drainage management programs, it is expected that the California Water Quality Control Board, Central Valley Region, will adopt a general order under its Irrigated Lands Regulatory Program regulating both surface and groundwater discharges for lands within the GBP by the end of summer 2015, during the term of these contracts.

### **3.2.2 Environmental Consequences**

#### ***No Action***

Contract provisions under the No Action Alternative stipulate that a tiered pricing structure (80/10/10 tiered pricing) would be applied. Tiered pricing is mandated under the water conservation section of the CVPIA for contracts of more than three years. Due to chronic shortages in CVP contract deliveries for SOD contractors, modeling predicts that the number of years when tiered pricing is applicable would be limited to approximately 22 or 24 percent of the time [or one year out of four or five] (Figure 2) for interim contracts greater than three years. Water supplies do not typically meet demands for most contractors and many contractors are very active on the water market purchasing water supplies. Since much of the interim renewal contractors' service areas are planted in permanent crops and these contractors have paid more than tiered pricing rates in dry years on the water market to preserve their permanent crop planting investment, increasing water prices due to tiered pricing would not change water use trends.

For those areas where groundwater is of suitable quality and therefore available for irrigation, CVP water is considered to be a supplemental supply. Most agricultural contractors already rely on groundwater supplies where available and water transfers to meet on-farm needs during periods of CVP water shortage. Alternate surface water supplies frequently are expensive. Thus, tiered pricing is unlikely to cause a grower to switch to alternate supplies. Most interim renewal contractors have the option of switching to groundwater for a limited amount of time. This option would only be utilized if the cost/benefit ratio and the water quality were sufficient to warrant it. Due to continuing overdraft conditions, districts realize that when pumping groundwater above safe yield levels they are mining dry year supplies and that this supply cannot be relied on continually as it is not sustainable. Water users within the service area of these contractors have been installing high efficiency irrigation systems without the incentive of CVPIA tiered pricing in order to manage drainage and to maximize available supplies during times of shortage. Permanent crops are irrigated almost exclusively with

efficiency drip or micro systems, and many row crops are also irrigated with high efficiency drip systems. Given increased productivity and investment, such systems would not be abandoned even in years of full supplies. Much of PWD is drainage impacted, so high efficiency irrigation also is implemented as a mechanism for reducing deep percolation and subsurface drainage production.

The contract provisions under the No Action Alternative also stipulate how a definition of M&I water would be applied. Having water use on a less than five acre parcel defined as M&I would not result in a change in water use but would have an impact on the rates Reclamation collects. It is unlikely with the small number of parcels involved, the small size of the parcels, and the small quantities of water involved that changing this definition would have any effects on water resources.

Each of the contractors for which interim renewal contracts are proposed would continue to operate and maintain facilities related to their individual water delivery activities on terms substantially the same as the existing long-term contracts. These activities relate to already constructed facilities on federal rights-of-way with no anticipated changes in activity level or use.

### ***Proposed Action***

Impacts to water resources associated with the Proposed Action would be comparable to those described under the No Action Alternative although tiered pricing provisions are not included in the contracts under the Proposed Action. Execution of interim renewal contracts, with only minor administrative changes to the contract provisions, would not result in a change in contract water quantities or a change in water use. Water delivery during the interim renewal contract period would not exceed historic quantities pursuant to their respective interim renewal contracts. The execution of interim renewal contracts delivering the same quantities of water that have historically been put to beneficial use would not result in any growth-inducing impacts. In addition, no substantial changes in growth due to the execution of these interim renewal contracts are expected to occur during the short timeframe of this renewal.

### ***Cumulative Impacts***

Cumulative impacts relating to diversion of water and CVP operations were considered in the CVPIA PEIS. Reclamation's action is the execution of interim renewal water service contracts between the United States and the contractors listed in Table 2 under either the No Action Alternative or the Proposed Action. These contractors have existing interim renewal contracts as described above. It is likely that subsequent interim renewals would be needed in the future pending the execution of long-term renewal contracts. As both the Proposed Action and the No Action Alternative would, in essence, maintain the environmental status quo, i.e., the same amount of water would go to the same areas for the same uses (albeit under different legal arrangements), they do not contribute to cumulative impacts in any demonstrable manner.

### 3.3 Biological Resources

#### 3.3.1 Affected Environment

By the mid-1940s, most of the Central Valley's native habitat had been altered by man, and as a result, was predominately converted to agricultural lands. It has been estimated that more than 85 percent of the valley's wetlands had been lost by 1939 (Dahl and Johnson 1991). According to the CVPIA PEIS, over 30 percent of all natural habitats in the Central Valley and surrounding foothills had been converted to urban and agricultural land use when the CVP began operations (Reclamation 1999). Prior to widespread agriculture, land within the Proposed Action area provided habitat for a variety of plants and animals. With the advent of irrigated agriculture and urban development over the last 100 years, many species have become threatened and endangered because of habitat loss. Of the approximately 5.6 million acres of valley grasslands and San Joaquin saltbrush scrub, the primary natural habitats across the valley, less than 10 percent remains today. Much of the remaining habitat consists of isolated fragments supporting small, highly vulnerable populations (Reclamation 1999).

PWD's and SLWD's service areas are dominated by agricultural habitat that includes field crops, orchards, and pasture (California Department of Conservation 2013). The ongoing intensive management of agricultural lands, including repetitive activities such as soil preparation, planting, irrigation, applying various chemicals, and harvesting disturbs the land surface and reduces the value of these habitat for wildlife.

Interim renewal contract deliveries may have indirect effects from land use activities associated with the Districts using CVP water, and thus potentially on listed species (e.g., effects from agricultural drainage management and disposal, and changes to land use and cropping patterns, etc.). The effects of agricultural drainage management to species under USFWS' jurisdiction have been addressed in other consultations (e.g., the USFWS' consultation on the GBP (USFWS File No. 2009-F-1036), SLDFR (USFWS File No. 2006-F-0027), and the SLDFR Demonstration Treatment Facility at Panoche Drainage District (USFWS File No. 2011-I-0855). The GBP Biological Opinion provided reasonable and prudent measures, and terms and conditions to address project effects for San Joaquin kit fox and giant garter snake. The execution of interim renewal contracts for PWD and SLWD are, and will remain, subjected to those terms and conditions to the extent applicable within their respective service areas. Consequently, Reclamation has requested concurrence from the USFWS that affects to listed species and their critical habitat have already been addressed. In contrast, NMFS considers the management of agricultural drainage impacts to listed anadromous fish species and fish habitat under their jurisdiction as part of this Proposed Action and not the GBP (NMFS 2009a).

Reclamation requested an official species list from the USFWS on August 15, 2014 via the Sacramento Field Office's website:

[http://www.fws.gov/sacramento/ES\\_Species/Lists/es\\_species\\_lists-form.cfm](http://www.fws.gov/sacramento/ES_Species/Lists/es_species_lists-form.cfm)

(Document Number 140815095654). The list includes species protected under ESA, as identified from the following U.S. Geological Survey 7½ minute quadrangles that overlap the Proposed Action area including: Chounet Ranch, Dos Palos, Hammonds Ranch, Broadview Farms, Charleston School, Ortigalita Peak NW, Laguna Seca Ranch, Los Banos Valley, Volta, Los Banos, and San Luis Dam. Reclamation further queried the California Department of Fish and Wildlife, California Natural Diversity Database (CNDDDB) for records of protected species within 10 miles of the project location as well as protected species records present downstream of the contractors' service area (CNDDDB 2014). The two lists, in addition to other information within Reclamation's files were combined to create the following list (Table 7).

Table 7 Species List for the Proposed Action, Including Fish Downstream

<b>Species</b>	<b>Status<sup>1</sup></b>	<b>Effects<sup>2</sup></b>	<b>Potential to occur and summary basis for ESA determination<sup>3</sup></b>
<b>Amphibians</b>			
California red-legged frog ( <i>Rana draytonii</i> )	T, X	NE	<b>Absent.</b> No CNDDDB <sup>4</sup> -recorded occurrences in Proposed Action area. Not within areas designated as critical habitat.
California tiger salamander ( <i>Ambystoma californiense</i> )	T, X	NE	<b>Absent.</b> No CNDDDB-recorded occurrences in Proposed Action area. Not within areas designated as critical habitat.
<b>Fish</b>			
Central Valley spring-run Chinook salmon, Evolutionarily Significant Unit (ESU) ( <i>Oncorhynchus tshawytscha</i> )	T NMFS	NLAA	<b>Present.</b> Suitable habitat and species are present downstream of the contractors service area and could be affected by agricultural drainage.
Central Valley spring-run Chinook salmon, experimental population ( <i>Oncorhynchus tshawytscha</i> )	C NMFS	MA	<b>Present.</b> Suitable habitat and species are present downstream of the contractors service area and could be affected by agricultural drainage.
Central Valley steelhead, distinct population segment (DPS) ( <i>Oncorhynchus mykiss</i> )	T, X NMFS	MA	<b>Present.</b> San Joaquin River is designated critical habitat. Suitable habitat and species are present downstream of the contractors service area and could be affected by agricultural drainage.
Delta smelt ( <i>Hypomesus transpacificus</i> )	T, X	NE	<b>Present.</b> Suitable habitat and species are present downstream of the contractors service area and could be affected by agricultural drainage. Natural waterways within the species' range and designated critical habitat have been addressed in CVP/SWP Coordinated Operations Biological Opinion <sup>5</sup> and all Terms and Conditions will be followed. No additional effects that are unaccounted for would occur from the Proposed Action.
Sacramento River winter-run Chinook salmon, ESU ( <i>Oncorhynchus tshawytscha</i> )	E NMFS	NLAA	<b>Present.</b> Suitable habitat and species are present downstream of the contractors service area and could be affected by agricultural drainage.

<b>Species</b>	<b>Status<sup>1</sup></b>	<b>Effects<sup>2</sup></b>	<b>Potential to occur and summary basis for ESA determination<sup>3</sup></b>
Southern DPS of North American green sturgeon ( <i>Acipenser medirostris</i> )	T, X NMFS	MA	<b>Present.</b> Portion of San Joaquin River is designated critical habitat. Suitable habitat and species are present downstream of the contractors service area and could be affected by agricultural drainage.
<b>Invertebrates</b>			
Longhorn fairy shrimp ( <i>Branchinecta longiantenna</i> )	E	NE	<b>Absent.</b> No records or vernal pools in area of effect.
Valley elderberry longhorn beetle ( <i>Desmocerus californicus dimorphus</i> )	T	NE	<b>Absent.</b> No records in area of effect. No elderberry shrubs will be impacted by the Proposed Action.
Vernal pool fairy shrimp ( <i>Branchinecta lynchi</i> )	T	NE	<b>Absent.</b> No records or vernal pools in area of effect.
Vernal pool tadpole shrimp ( <i>Lepidurus packardii</i> )	E	NE	<b>Absent.</b> No records or vernal pools in area of effect.
<b>Mammals</b>			
Fresno kangaroo rat ( <i>Dipodomys nitratooides exilis</i> )	E	NE	<b>Unlikely.</b> No CNDDDB-recorded occurrences and managed agricultural lands are not expected to provide suitable habitat. No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
Giant kangaroo rat ( <i>Dipodomys ingens</i> )	E	NE	<b>Unlikely.</b> No CNDDDB-recorded occurrences and managed agricultural lands are not expected to provide suitable habitat. No land use changes would occur as a result of this action, no conversion of habitat, and no new facilities.
San Joaquin kit fox ( <i>Vulpes macrotis mutica</i> )	E	NLAA	<b>Present.</b> Several CNDDDB-occurrence records exist within portions of the Proposed Action area and this species could rarely move through or forage in this area. Potential impacts have been addressed in GBP Biological Opinion <sup>6</sup> and all terms and conditions will be followed. No land use changes would occur because of this action, no conversion of habitat, and no new facilities. Any potential impacts associated with development of the Santa Nella Community would be addressed by the lead agency, Merced County.
<b>Plant</b>			
San Joaquin woolly-threads ( <i>Monolopia congdonii</i> )	E	NE	<b>Absent.</b> No CNDDDB-recorded occurrences in Proposed Action area.
<b>Reptiles</b>			
Blunt-nosed leopard lizard ( <i>Gambelia sila</i> )	E	NLAA	<b>Possible.</b> CNDDDB-occurrence records exist in SLWD primarily west of Interstate-5 where grazing land remains once existed pre-CVPIA. Agricultural lands in the District do not provide suitable habitat. No land use changes would occur as a result of this action, there would be no conversion of habitat,

<b>Species</b>	<b>Status<sup>1</sup></b>	<b>Effects<sup>2</sup></b>	<b>Potential to occur and summary basis for ESA determination<sup>3</sup></b>
			and no new facilities developed.
Giant garter snake ( <i>Thamnophis gigas</i> )	T	NLAA	<b>Possible.</b> Occurrence records from CNDDDB are approximately 4 miles east of San Luis WD and east of the Delta-Mendota Canal; suitable habitat virtually lacking in the Proposed Action Area. Potential impacts downstream of Mud Slough are currently accounted for under the GBP Biological Opinion; water quality objectives in San Joaquin River provide protection to other downstream habitats.
<p>1 Status = Status of federally protected species protected under the Endangered Species Act (ESA).  C: Candidate for listing  E: Listed as Endangered  NMFS: Species under the Jurisdiction of the National Oceanic &amp; Atmospheric Administration Fisheries Service  T: Listed as Threatened  X: Critical Habitat designated for this species</p> <p>2 Effects = ESA Effect determination  MA: Proposed Action may Adversely Affect federally listed species and/or designated critical habitat  NE: No Effect anticipated from the Proposed Action to federally listed species or designated critical habitat  NLAA: Proposed Action Not Likely to Adversely Affect federally listed species</p> <p>3 Definition Of Occurrence Indicators  Present: Species recorded in area and suitable habitat present.  Possible: Species recorded in area and habitat suboptimal.  Unlikely: Species recorded in area but habitat marginal or lacking entirely.  Absent: Species not recorded in study area and suitable habitat absent.</p> <p>4 CNDDDB = California Natural Diversity Database, Department 2014  5 CVP/SWP Coordinated Operations Biological Opinion = USFWS 2008b  6 GBP Biological Opinion = USFWS 2009</p>			

### **Special-Status Species**

Federally protected species that may occur in the Proposed Action area include: San Joaquin kit fox, blunt-nosed leopard lizard, giant garter snake; and federally protected species that may occur downstream of the contractors service area including: Delta smelt, Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, and Southern DPS of North American green sturgeon (Table 7). Critical habitat for fish species is also designated downstream of PWD and SLWD (Table 7). In addition to compliance with ESA, Reclamation complies with the Magnuson-Stevens Fishery Conservation and Management Act if activities may adversely impact the essential fish habitat (EFH). EFH for Pacific salmon occurs downstream of the contractors service area.

**Listed Anadromous Fish Species and Fish Habitat** Waterways downstream from the contractors service area (San Joaquin River from convergence with Merced River to the Delta) functions primarily as a migratory corridor for Central

Valley steelhead (NMFS 2005). All adult Central Valley steelhead originating in the San Joaquin River watershed will have to migrate through at least a portion of this corridor in order to reach their spawning grounds and to return to the ocean following spawning. Likewise, all Central Valley steelhead smolts from the San Joaquin River watershed will have to pass through at least a portion of this corridor during their emigration to the ocean. The waterways in this corridor also are expected to provide some rearing benefit to emigrating steelhead smolts as they move downstream (NMFS 2005).

In addition, the San Joaquin River corridor downstream of the Merced River functions as a migratory corridor and rearing habitat for juvenile Sacramento River winter-run Chinook salmon and Central Valley spring-run Chinook salmon, as well as Central Valley steelhead from the Sacramento River watershed, that are drawn into the Central and south Delta by the actions of the CVP and SWP water diversion facilities, and must therefore emigrate towards the ocean through the lower San Joaquin River system (NMFS 2011). The Delta and lower San Joaquin River also function as migratory, holding, and rearing habitat for adult and juvenile Southern DPS of North American green sturgeon (NMFS 2009b).

***Documents Addressing Potential Impacts of Actions of the CVP (Excluding the Proposed Action) to Listed Species***

**Biological Opinions for Coordinated Operation of the CVP and SWP** In December 2008, USFWS issued a Biological Opinion analyzing the effects of the coordinated long-term operation of the CVP and SWP in California (USFWS 2008a). The USFWS Biological Opinion concluded that “the coordinated operation of the CVP and SWP, as proposed, was likely to jeopardize the continued existence of the Delta smelt” and “adversely modify Delta smelt critical habitat.” The USFWS Biological Opinion included Reasonable and Prudent Alternatives (RPA) for CVP and SWP operations designed to allow the projects to continue operating without causing jeopardy or adverse modification. On December 15, 2008, Reclamation provisionally accepted and then implemented the USFWS RPA.

NMFS issued its biological opinion analyzing the effects of the coordinated long-term operation of the CVP and SWP on listed salmonids, Southern DPS North American green sturgeon, and Southern Resident killer whale in June 2009 (NMFS 2009c). The NMFS biological opinion concluded that the long-term operation of the CVP and SWP, as proposed, was likely to jeopardize the continued existence of Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, Southern DPS of North American green sturgeon, and Southern Resident killer whales. Also the NMFS biological opinion concluded that the CVP/SWP Coordinated Operations, as proposed, was likely to destroy or adversely modify critical habitat for Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead and the Southern DPS of North American green sturgeon. The NMFS biological opinion included an RPA designed to allow the

projects to continue operating without causing jeopardy or adverse modification. On June 4, 2009, Reclamation provisionally accepted and then implemented the NMFS RPA.

As described in Section 1.1.1, the USFWS and NMFS biological opinions were remanded without *vacatur* by the Eastern District Court in 2010 and 2011, respectively. In 2014, the U.S. Court of Appeals for the Ninth Circuit reversed the components of the district court's ruling that invalidated the biological opinions.

**Operation and Maintenance Program for the South-Central California Area Office** Reclamation has consulted under the ESA on the *Operation and Maintenance Program Occurring on Bureau of Reclamation Lands within the South-Central California Area Office*, resulting in a Biological Opinion issued by USFWS on February 17, 2005 (USFWS 2005). The opinion considers the effects of routine O&M of Reclamation's facilities used to deliver water to the study area, as well as certain other facilities within the jurisdiction of the South-Central California Area Office, on California tiger salamander, vernal pool fairy shrimp, valley elderberry longhorn beetle, blunt-nosed leopard lizard, vernal pool tadpole shrimp, San Joaquin woolly-threads, California red-legged frog, giant garter snake, San Joaquin kit fox, and on proposed critical habitat for the California red-legged frog and California tiger salamander.

### 3.3.2 Environmental Consequences

#### **No Action**

Under the No Action Alternative, CVP water would continue to be delivered to the contractors and conditions of special status species and habitats would be the same as current conditions described in the Affected Environment. No additional effects to special status species or critical habitats under USFWS' jurisdiction are associated with this alternative. Existing and future environmental commitments addressed in biological opinions, including the CVPIA Biological Opinion (USFWS 2000) would be met under the No Action Alternative, including continuation of ongoing species conservation programs.

Drainage from the contractors' service area would continue under current management program as the GBP work towards fully meeting selenium objectives. Until those levels are reached there is potential for effects to occur to listed anadromous fish species and fish habitat downstream of the contractors' service area through exposure to selenium (see effects discussion under the Proposed Action below). Regardless of which alternative is chosen, Reclamation consulted with NMFS for effects to fish species and their habitat to comply with the federal ESA and the Magnuson-Stevens Fishery Conservation and Management Act for EFH.



**Proposed Action**

Under the Proposed Action, conditions of special status species and habitats would be the same as current conditions described in the Affected Environment and under the No Action Alternative. Existing and future environmental commitments addressed in Biological Opinions, including the CVPIA Biological Opinion (USFWS 2000), the continuation of ongoing species conservation programs, and compliance with permits for the GBP would continue to be met under the Proposed Action.

Reclamation's biological impacts determination also takes into account PWD and SLWD compliance with applicable requirements of existing Biological Opinions, as described above in Section 3.3.1. The Proposed Action would not result in substantial changes in natural and semi-natural communities, other land uses that have the potential to occur within the study area, and other portions of the San Luis Unit. Additionally, execution of interim renewal contracts under the Proposed Action would not involve construction of new facilities or installation of structures.

On December 29, 2014, Reclamation received a memorandum from the USFWS Sacramento Field Office concurring with Reclamation that effects of the Proposed Action are not likely to adversely affect San Joaquin kit fox, giant garter snake, and blunt-nosed leopard lizard and habitat (see Appendix C).

**Effects to Listed Anadromous Fish Species and Fish Habitat** Potential effects to listed anadromous fish species and their habitat may result from changes in water quality resulting from agricultural drainage that originates from within PWD and SLWD. Sacramento River winter-run Chinook salmon and Central Valley spring-run Chinook salmon from the Sacramento River watershed migrate through the lower portion of the Action area, and could be exposed, although only briefly, to project-related agricultural drainage. Therefore, the proposed action may effect, but is unlikely to adversely affect Sacramento River winter-run Chinook salmon and Central Valley spring-run Chinook salmon from the Sacramento River watershed.

The experimental population of Central Valley spring-run Chinook salmon and any Central Valley steelhead originating from the San Joaquin River watershed would also migrate through the Action area, but would travel through the mainstem of the San Joaquin River. Exposure to project-related effects would occur during upstream and/or downstream migration periods through the Action area and may adversely affect some Central Valley spring-run Chinook salmon and Central Valley steelhead.

However, the waterways downstream of PWD and SLWD to the lower portion of the Delta functions as migratory, holding, and rearing habitat for Southern DPS of North American green sturgeon adults and juveniles throughout the year. This long-lived species may remain within the action area for several months to years.

Therefore, the proposed action may adversely affect Southern DPS of North American green sturgeon.

Reclamation consulted with NMFS on potential impacts from the Proposed Action to Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, and Southern DPS of North American green sturgeon, designated critical habitat, and EFH. On January 20, 2015, a Biological Opinion was issued by NMFS for the effects of agricultural drainwater entering the San Joaquin River as a result of issuing interim renewal contracts to PWD and SLWD (see Appendix D). They concluded the execution of these interim renewal contracts would not jeopardize the continued existence of the federally listed endangered Sacramento River winter-run Chinook salmon, threatened Central Valley spring-run Chinook salmon, threatened Central Valley steelhead, the threatened Southern DPS of North American green sturgeon, nor would it result in the destruction or adverse modification of designated critical habitat of Central Valley steelhead and the Southern DPS of North American green sturgeon. NMFS also transmitted EFH conservation recommendations for Pacific salmon, as required by the Magnuson-Stevens Fisher Conservation and Management Act. Reclamation will comply with the requirements of the Biological Opinion and EFH conservation recommendations issued by NMFS.

### ***Cumulative Impacts***

The Proposed Action, when added to other past, present, and reasonably foreseeable future actions, represent a continuation of existing conditions which are unlikely to result in cumulative impacts on the biological resources of the study area and other portions of the San Luis Unit. The Proposed Action obligates the delivery of the same contractual amount of water to the same lands without the need for additional facility modifications or construction. As discussed in other sections of this EA, through local and on-farm activities, through the implementation of regional projects that increase irrigation efficiency and continued use of reuse areas for the application of drainwater to salt tolerant plants in accordance with existing permits, Reclamation expects that drainage production within the study area during the Proposed Action would continue to be reduced, and discharges to the San Joaquin River would decrease. Information in Table 6 demonstrates the trend of reductions as the GBP works to reduce selenium loads as required by 2019. Thus, the Proposed Action, together with reasonably foreseeable future actions, would not incrementally contribute to any physical impacts to study area biological resources.

Proposed Action occurs within the context of implementation of the CVPIA by the United States Department of the Interior, including Reclamation and USFWS. Reclamation and the USFWS explained the CVPIA in a report entitled *CVPIA, 10 Years of Progress* (Reclamation 2002), as follows:

The CVPIA has redefined the purposes of the CVP to include the protection, restoration, and enhancement of fish, wildlife, and associated habitats; and to contribute to the State of California's

interim and long-term efforts to protect the San Francisco Bay/Sacramento-San Joaquin River Delta Estuary. Overall, the CVPIA seeks to “achieve a reasonable balance among competing demands for use of [CVP] water, including the requirements of fish and wildlife, and agricultural, municipal and industrial, and power contractors.”

Finally, as explained above, the Proposed Action would be subject to regulatory constraints imposed pursuant to the ESA, regardless of whether those constraints exist today. Consequently, there would be no cumulative adverse impacts as a result of the Proposed Action.

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## Section 4 Consultation and Coordination

### 4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA between November 7, 2014 and December 8, 2014. No comments were received.

### 4.2 Endangered Species Act (16 U.S.C. § 1531 et seq.)

Section 7 of the ESA requires Federal agencies, in consultation with the Secretary of the Interior and/or Commerce, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species.

The Proposed Action would support existing uses and conditions. No native lands would be converted or cultivated with CVP water. The water would be delivered to existing homes or farmlands, through existing facilities, as has been done under existing contracts, and would not be used for land conversion.

In 2007, Reclamation initiated consultation with the USFWS on the issuance of the first interim renewal contracts for the San Luis Unit contractors, including PWD and SLWD (Reclamation 2008b). USFWS concurred with Reclamation's determination that the issuance of interim renewal contracts for 26 months to PWD and SLWD were not likely to adversely affect (NLAA) the San Joaquin kit fox and the giant garter snake, with specific restrictions relating to drainage water (USFWS 2008b). Species impacts due to discharge of drainage water containing more than 2 parts per billion selenium from PWD and SLWD were addressed in the GBP Biological Opinion (USFWS 2009) and SLDFR Biological Opinion (USFWS 2006). The GBP Biological Opinion concluded that the GBP was likely to adversely affect, but not jeopardize the continued existence of the giant garter snake and the San Joaquin kit fox, and not likely to adversely affect the Delta smelt (including Critical Habitat). The GBP Biological Opinion provided an RPA, and execution of interim renewal contracts for PWD and SLWD are subject to the terms and conditions as specified in the GBP Biological Opinion.

In 2010, Reclamation re-consulted with USFWS for the renewal of PWD and SLWD interim renewal contracts for a period of 24 months, beginning March 1, 2011 and going through February 28, 2013 (Reclamation 2010b). USFWS concurred with Reclamation's NLAA determination for San Joaquin kit fox, giant

garter snake, and Delta smelt, including Delta smelt designated critical habitat (USFWS 2010).

In 2012, Reclamation re-consulted a third time for the renewal of PWD and SLWD interim renewal contracts to cover the 24-month period from March 1, 2013 through February 28, 2015 (Reclamation 2012b). The previous request for concurrence included Delta smelt and its designated critical habitat. Based upon the November 28, 2012 conference call with the USFWS and further species review, Reclamation recognizes that Delta smelt have existing coverage under the 2008, *Biological Opinion on the Coordinated Operations of the Central Valley Project and State Water Project* (USFWS 2008a). In addition, USFWS recommended informal consultation for blunt-nosed leopard lizard because of historical occurrences within the boundaries of SLWD and potential habitat along the western border of SLWD. USFWS concurred with Reclamation's NLAA determination for San Joaquin kit fox, giant garter snake, and blunt-nosed leopard lizard.

On December 29, 2014, Reclamation received a concurrence letter from USFWS Sacramento Field Office concurring with Reclamation that effects of the Proposed Action are not likely to adversely affect San Joaquin kit fox, giant garter snake, and blunt-nosed leopard lizard (Appendix C). The execution of interim renewal contracts for PWD and SLWD will be subject to the terms and conditions as specified in the 2009 GBP Biological Opinion (USFWS 2009).

In 2008, Reclamation initiated consultation with NMFS for potential impacts to Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, Central Valley steelhead, Southern DPS of North American green sturgeon, and their designated or proposed critical habitat from approving the PWD and SLWD first interim renewal contracts (Reclamation 2008c). NMFS issued a biological opinion that concluded interim renewal contracts were likely to adversely affect, but not jeopardize listed anadromous fish species and their designated critical habitat (NMFS 2008). The 2008 NMFS biological opinion provided reasonable and prudent measures, and terms and conditions to implement those measures. The execution of PWD and SLWD interim renewal contracts were subject to those terms and conditions. NMFS also acknowledged the beneficial impact of the GBP to listed fish species and their habitat by reducing drainage water into the San Joaquin River (NMFS 2009a).

In 2010, Reclamation re-consulted with NMFS for the renewal of PWD and SLWD interim renewal contracts (Reclamation 2011), and NMFS issued a biological opinion for the effects to listed anadromous fish species and fish habitat resulting from drainage water entering the San Joaquin River (NMFS 2011). NMFS concluded the execution of interim renewal contracts would neither jeopardize the continued existence of listed anadromous fish species, nor destroy or adversely modify designated critical habitat. Reclamation has continued to comply with requirements of the Biological Opinion (NMFS 2011).

For a third time, Reclamation consulted with NMFS for issuing PWD and SLWD interim renewal contracts (Reclamation 2012c). NMFS provided a biological opinion for the PWD and SLWD interim renewal contracts (NMFS 2013). The NMFS 2013 biological opinion basically followed the previous biological opinion, requiring PWD and SLWD to incorporate reasonable and prudent measures, and terms and conditions for implementing those measures.

On January 20, 2015, NMFS issued a Biological Opinion which concluded that the execution of interim renewal contracts to PWD and SLWD were not likely to jeopardize the continued existence on federally listed endangered Sacramento River winter-run Chinook salmon, threatened Central Valley spring-run Chinook salmon, threatened Central Valley steelhead, the threatened Southern DPS of North American green sturgeon, nor will it result in the destruction or adverse modification of designated critical habitat of Central Valley steelhead and the Southern DPS of North American green sturgeon (Appendix D). The Biological Opinion includes non-discretionary terms and conditions of the incidental take statement, which the execution of interim renewal contracts for PWD and SLWD will be subject to.

### **4.3 Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq.)**

The Magnuson-Stevens Fishery Conservation and Management Act established a management system for national marine and estuarine fishery resources. This legislation requires that federal agencies consult with NMFS regarding actions or proposed actions permitted, funded, or undertaken that may adversely affect EFH. EFH is defined as “waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity.” The Magnuson-Stevens Fishery Conservation and Management Act states that migratory routes to and from anadromous fish spawning grounds are considered EFH. The phrase “adversely affect” refers to the creation of any impact that reduces the quality or quantity of EFH. Federal activities that occur outside of EFH but may have an impact on EFH must be considered in the consultation process. The Magnuson-Stevens Fishery Conservation and Management Act apply to Pacific salmon, groundfish, and several pelagic species found in the Pacific.

EFH for Pacific salmon occurs within the Action area. Reclamation consulted with NMFS for potential effects of agricultural drainage from SLWD and PWD on EFH. NMFS concluded that the Proposed Action would adversely affect the EFH of Pacific salmon in the Action area and provided certain conservation recommendations. Reclamation would comply with the requirements of NMFS’ EFH consultation (Appendix D).

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