

# RECLAMATION

*Managing Water in the West*

FINDING OF NO SIGNIFICANT IMPACT

## **Central Valley Project Interim Renewal Contract for Cross Valley Contractors 2016-2018**

FONSI-15-022



U.S. Department of the Interior  
Bureau of Reclamation

February 2016

## **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.

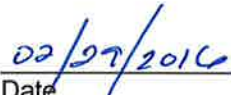
The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

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


**FONSI-15-022**


**Central Valley Project Interim Renewal  
Contract for Cross Valley Contractors  
2016-2018**

  
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# Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act of 1969, as amended, the South-Central California Area Office of the Bureau of Reclamation (Reclamation), has determined that the renewal of eight Central Valley Project (CVP) interim renewal contracts for Cross Valley Contractors and the approval of the Cross Valley Contractors' Article 5 exchange arrangements for the contract period March 1, 2016 through February 28, 2018 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) 15-022, *Central Valley Project Interim Renewal Contract for Cross Valley Contractors 2016-2018*, and is hereby incorporated by reference.

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA between October 16, 2015 and November 16, 2015. 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.

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. 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 EA-15-022. The PEIS analyzed the differences in the environmental conditions between existing contract requirements (signed prior to CVPIA) and the No Action Alternative described in EA-15-022 which is reflective of minimum implementation of the CVPIA.

## **Proposed Action**

In accordance with and as required by Section 3404(c) of the CVPIA, Reclamation will execute eight interim renewal contracts with the Cross Valley Contractors listed in Table 2 of EA-15-022. In addition, Reclamation will approve the Cross Valley Contractors' Article 5 exchange arrangements with individually proposed exchange partners to coincide with the interim renewal contracts. The interim renewal contracts and the Article 5 exchange arrangements will be for contract period March 1, 2016 through February 28, 2018 and will be implemented as described in Section 2.2 of EA-15-022.

## **Environmental Commitments**

Reclamation and the Cross Valley Contractors will implement the environmental protection measures included in Table 3 of EA-15-022 and in the concurrence memorandum from the U.S. Fish and Wildlife Service (Appendix E of EA-15-022). 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-15-022, 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: air quality, cultural resources, environmental justice, global climate change, Indian Sacred Sites, Indian Trust Assets, land use, or socioeconomic resources.

### **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 these contracts. 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. 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. Therefore, the Proposed Action would have no adverse impacts on water resources.

#### **Article 5 Exchanges**

The long-term operations of the CVP and SWP were addressed in the CVPIA PEIS (Reclamation 1999), the biological opinions for the continued long-term operation of the CVP and SWP (USFWS 2008, NMFS 2009), and the EIS for the coordinated long-term operation of the CVP and SWP (Reclamation 2016). The total Cross Valley Contractors' Delta water supply (128,300 AFY) was also addressed in these documents as the water was assumed to be pumped and conveyed in each year for deliveries via exchanges to the Cross Valley Contractors. Therefore, the proposed Article 5 exchanges would not result in any changes in diversion from the Delta or pumping and conveyance of water beyond what was already addressed.

The maximum amount of water exchanged would be up to 128,300 AFY and would be conveyed in the facilities described in Appendix D as capacity is available. The water involved in the proposed exchanges is already allocated, and no additional water supplies would be diverted from rivers or lakes. No new construction or points of diversions would be required. However, changes in timing and locations of when and where water is diverted may occur.

Conveyance of CVP water under Article 55 of the SWP contracts in the California Aqueduct could result in the Cross Valley Contractors receiving a higher rank on the SWP hierarchy for pumping. However, Reclamation policy limits the amount of Cross Valley Contractors' supplies conveyed under Article 55 to be that of each Cross Valley Contractors' south-of-Delta allocation, to prohibit impact to the CVP and SWP as a whole. This prevents impacts to other users of the delivery system from the exchanges being considered.

The value and timing of water supplies is considered in exchange agreements between the parties, since contractors' allocated water may not be available at the time when it is most valuable to them. In lieu of paying a higher price for water when it is exchanged and delivered at a more useful/valuable time, agreements commonly allow for an imbalanced exchange of the Cross Valley Contractors' water supplies to compensate for the differential value of the exchanged water when it is delivered. These imbalanced exchanges are allowed up to a maximum ratio of 2:1, meaning that half of the water volume exchanged would be delivered to a Cross Valley contractor, and the remaining half would be retained by the exchange partner. This results in Cross Valley Contractors receiving less than their contracted/allocated amount but provides better use and management of the water than they would have otherwise received.

Under the Proposed Action, Cross Valley Contractors would receive between 50 percent and 100 percent of their allocated CVP supply when it is needed, without needing case-by-case approval for each exchange. The Cross Valley Contractors would receive the benefit of having lower priced water with deliveries on a convenient schedule which allows for advanced planning of crops.

The Proposed Action would not contribute to or interfere with flood control management and operations. The Proposed Action and imbalanced exchanges would not increase or decrease the availability of flood water nor inhibit or contribute to decisions to accept or reject this source of water.

**Biological Resources**

CVP-wide impacts to biological resources were evaluated in the PEIS, and a USFWS biological opinion addressing potential CVP-wide impacts of the CVPIA was completed on November 21, 2000. In addition, the programmatic biological opinion and Essential Fish Habitat Conservation Recommendations prepared by NMFS for the CVPIA were completed on November 14, 2000. As with the No Action alternative, the Proposed Action would meet environmental commitments in existence as a result of existing biological opinions, including those for the CVPIA. As described previously, 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 six interim water service contracts considered in this EA. As a result, the interim renewal contracts analyzed would conform to any applicable requirements imposed under the federal ESA or other applicable environmental laws.

Under the Proposed Action, only minor indirect impacts would occur to biological resources. The species detailed in Section 3.3 may be subject to minor impacts due to routine farming activities. Critical habitat and other native lands would not be affected due to restrictions on land use, or because in some cases, the critical habitat lies outside the Proposed Action area.

The Proposed Action would not result in any change in existing water diversions from the Delta nor would it require construction of new facilities or modification of existing facilities for water deliveries. The CVP water supply for the Cross Valley Contractors would continue to be used for agricultural and M&I purposes within their respective CVP service areas as it has in the past. In addition, as described in Table 3 of EA-15-022, no native or untilled land (fallow for three consecutive years or more) may be cultivated with CVP water without additional environmental analysis and approval.

**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 eight interim renewal water service contracts between the United States and the Cross Valley Contractors under either the No Action Alternative or the Proposed Action. These contractors have existing interim renewal contracts as described in EA-15-022. 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.



# RECLAMATION

*Managing Water in the West*

Final Environmental Assessment

## **Central Valley Project Interim Renewal Contract for Cross Valley Contractors 2016-2018**

EA-15-022



U.S. Department of the Interior  
Bureau of Reclamation

February 2016

## **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.

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# 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 October 16, 2015 and November 16, 2015. 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 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 eight interim renewal contracts beginning March 1, 2016 (Table 1). These eight interim renewal contracts would be renewed for a two-year period from March 1, 2016 through February 28, 2018. In the event a new long-term renewal contract for water service is executed, the interim renewal contract then-in-effect would be superseded by the long-term renewal contract.

Table 1 Contractors, Existing Contract Amounts, and Expiration Dates

Contractor	Contract Number	Contract Quantity (acre-feet per year)	Expiration of Existing Interim Renewal Contract
County of Fresno <sup>1</sup>	14-06-200-8292A-IR15	3,000	2/29/2016
County of Tulare <sup>2</sup>	14-06-200-8293A-IR15	5,308	2/29/2016
Hills Valley Irrigation District <sup>3</sup>	14-06-200-8466A-IR15	3,346	2/29/2016
Kern-Tulare Water District	14-06-200-8601A-IR15	40,000	2/29/2016
Kern-Tulare Water District (from Rag Gulch Water District) <sup>3,4</sup>	14-06-200-8367A-IR15	13,300	2/29/2016
Lower Tule River Irrigation District	14-06-200-8237A-IR15	31,102	2/29/2016
Pixley Irrigation District	14-06-200-8238A-IR15	31,102	2/29/2016
Tri-Valley Water District	14-06-200-8565A-IR15	1,142	2/29/2016
<sup>1</sup> County of Fresno includes Fresno County Service Area #34 <sup>2</sup> County of Tulare includes the following subcontractors: Alpaugh Irrigation District, Atwell Water District, Hills Valley Irrigation District, Saucelito Irrigation District <sup>4</sup> , Stone Corral Irrigation District <sup>4</sup> , City of Lindsay <sup>4</sup> , Strathmore Public Utility District, Styrotek, Inc., and City of Visalia <sup>3</sup> Lower Tule River Irrigation District, Saucelito Irrigation District, Stone Corral Irrigation District, Tri-Valley Water District, Kern-Tulare Water District, Hills Valley Irrigation District, and City of Lindsay receive CVP water under more than one contract, either as Friant Division and/or Cross Valley Contractors. <sup>4</sup> Kern Tulare Water District and Rag Gulch Water District consolidated on January 1, 2009.			

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 eight interim renewal contracts. Previous interim renewal EAs which tiered from the PEIS have been prepared for these contracts and approved as follows:

- A 2014 EA (Reclamation 2014) which covered March 1, 2014 through February 2016
- A 2012 EA (Reclamation 2012) which covered March 1, 2012 through February 2014
- A 2010 EA (Reclamation 2010) which covered March 1, 2010 through February 2012
- A 2008 EA (Reclamation 2008) which covered March 1, 2008 through February 28, 2010
- A 2006 Supplemental EA (Reclamation 2006) which covered March 1, 2006 through February 2008
- A 2004 Supplemental EA (Reclamation 2004a) which covered March 1, 2004 through February 2006
- A 2002 Supplemental EA (Reclamation 2002a) which covered March 1, 2002 through February 2004
- A 2001 Supplemental EA (Reclamation 2001a) which covered March 1, 2001 through February 2002
- A 2000 Supplemental EA (Reclamation 2000) which covered March 1, 2000 through February 2001

- A 1998 Supplemental EA (Reclamation 1998) which covered March 1, 1998 through February 2000
- A 1994 EA (Reclamation 1994) which covered March 1, 1994 through February 1998

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. Among other things, water service contracts stipulate provisions under which a water supply is provided, which produces 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 2001b). 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.



Reclamation completed long-term renewal contract environmental documents for the Cross Valley Contractors in 2001 (Reclamation 2001c). However, the biological opinion issued by the USFWS for Friant Division and Cross Valley long-term renewal contracts (USFWS 2001) did not cover transfers and/or exchanges or address certain species and critical habitats as their designations occurred after the biological opinion was issued. Consequently, the Cross Valley contractor's long-term renewal contracts were not executed as additional ESA compliance was deemed necessary.

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 2004b). 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 the original Sacramento River Settlement contracts did not strip Reclamation of all discretion at contract renewal, such that Reclamation was not obligated to consult under Section 7 of the ESA. The court also held that environmental plaintiffs have standing to challenge the renewal of the Delta Division contracts under Section 7 of the ESA, even though the contracts include shortage provisions that allow Reclamation to completely withhold project water for legal obligations. The court additionally found that Reclamation, even though full contract deliveries were analyzed in the 2008 delta smelt biological opinion, has yet to consult on specific contract terms to benefit delta smelt. The matter has been remanded to District Court, which has stayed the litigation for six months to allow Reclamation to reinitiate consultation with USFWS on the contract renewals' potential effect on delta smelt. The contracts remain effective.

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 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 and Reclamation issued a ROD for the coordinated long-term operation of the CVP/SWP (Reclamation 2016), Reclamation is pursuing completion of environmental compliance for the remaining long-term contracts under separate environmental documentation.

### **1.1.2 Cross Valley Contractors**

Cross Valley Contractors (Table 1) are CVP contractors that are geographically located within the Friant Division but receive their CVP supplies from the Delta. Due to direct conveyance hurdles, Cross Valley Contractors obtain their CVP supplies either by direct delivery from the Cross Valley Canal or via exchanges for water from Millerton Lake pursuant to Article 5(a) of their water service contracts (Figure 1).

The Cross Valley Canal is a locally-owned canal that was constructed in the mid-1970s through a collaborative effort of several local, state, and federal water agencies. The Cross Valley Canal allows water to be conveyed between the California Aqueduct (Aqueduct) and the Friant-Kern Canal. Beginning in 1975, the first Cross Valley Contractors entered into three-party contracts with Reclamation and the California Department of Water Resources (DWR). Pursuant to these contracts, Reclamation provided long-term water service and DWR provided conveyance for the Cross Valley Contractors.

Exchanges pursuant to Article 5(a) of the Cross Valley Contractors water service contracts (hereafter referred to as Article 5 exchanges) were previously analyzed separately from the Cross

Valley interim renewal contracts. In order to present a clearer explanation of the overall delivery of water to the Cross Valley Contractors, the environmental analysis for the approval of Article 5 exchanges and the execution of interim renewal contracts was combined for the first time in 2014 (Reclamation 2014).

## 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 and for the continued reimbursement to the federal government for costs related to the construction and operation of the CVP by the contractors. Additionally, CVP water is essential to continue 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 eight interim renewal contracts in order to extend the term of the contractors' existing interim renewal contracts for two years, beginning March 1, 2016 and ending February 28, 2018. Execution of these eight 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

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 under the proposed interim renewal contracts and Article 5 exchanges. 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 contractor service area boundaries using existing facilities for a period of up to two years.

The Article 5 exchange arrangements would be approved for a two-year period to coincide with the interim renewal contract. Up to 128,300 acre-feet (AF) per year (AFY) of the Cross Valley Contractors' contractual CVP water supply from the Delta would be allowed to be exchanged for Friant Division CVP supplies and other sources (other sources of water include rivers, streams, creeks, groundwater, and SWP water). The Cross Valley Contractors and potential exchange partners (other CVP contractors and non-CVP contractors) are all located within Fresno, Tulare, Kings, and Kern counties. This EA covers the broadest flexibility for Article 5 exchange arrangements known at this time. Proposals for new exchange arrangements not covered in this environmental review process would require additional, separate and/or tiered environmental review to cover the site specific proposal and analysis of environmental impacts to the human environment.

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 contractors was described in the PEIS (see Chapter III of the PEIS). In addition, on January 11, 2016, Reclamation issued a ROD

(Reclamation 2016) addressing the environmental effects of continued long-term operations of the CVP and SWP. 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.

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).
- The Coordinated Long-Term Operations of the CVP and SWP EIS and ROD (Reclamation 2016).

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 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.

#### **1.4.3 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.

#### **1.4.4 Purpose of Water Use**

Use of contract water for agricultural and/or 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. However, consistent with current conditions the amount and types of crops planted would vary according to the annual water allocation and farming practices, and a small quantity of irrigation use may be changed to M&I purposes where the existing contract and governing laws and regulations allow.

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## Section 2 Alternatives Including the Proposed Action

The No Action alternative and the Proposed Action include the execution of six interim renewal contracts. The eight 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 (AFY)	Purpose of Use
County of Fresno <sup>1</sup>	14-06-200-8292A-IR15	3,000	Agriculture and M&I
County of Tulare <sup>2</sup>	14-06-200-8293A-IR15	5,308	Agriculture and M&I
Hills Valley Irrigation District <sup>3</sup>	14-06-200-8466A-IR15	3,346	Agriculture and M&I
Kern-Tulare Water District	14-06-200-8601A-IR15	40,000	Agriculture and M&I
Kern-Tulare Water District (from Rag Gulch Water District) <sup>3,4</sup>	14-06-200-8367A-IR15	13,300	Agriculture and M&I
Lower Tule River Irrigation District	14-06-200-8237A-IR15	31,102	Agriculture and M&I
Pixley Irrigation District	14-06-200-8238A-IR15	31,102	Agriculture and M&I
Tri-Valley Water District	14-06-200-8565A-IR15	1,142	Agriculture and M&I
<sup>1</sup> County of Fresno includes Fresno County Service Area #34 <sup>2</sup> County of Tulare includes the following subcontractors: Alpaugh Irrigation District, Atwell Water District, Hills Valley Irrigation District, Saucelito Irrigation District <sup>4</sup> , Stone Corral Irrigation District <sup>4</sup> , City of Lindsay <sup>4</sup> , Strathmore Public Utility District, Styrotek, Inc., and City of Visalia <sup>3</sup> Lower Tule River Irrigation District, Saucelito Irrigation District, Stone Corral Irrigation District, Tri-Valley Water District, Kern-Tulare Water District, Hills Valley Irrigation District, and City of Lindsay receive CVP water under more than one contract, either as Friant Division and/or Cross Valley Contractors. <sup>4</sup> Kern Tulare Water District and Rag Gulch Water District consolidated on January 1, 2009.			

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.

### **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).

### **2.1.2 Article 5 Exchanges**

Under the No Action Alternative, historical exchanges between Arvin-Edison Water Storage District (Arvin-Edison) and the Cross Valley Contractors could continue as in the past. However, Cross Valley Contractors who do not have existing exchange agreements would have to transfer their water as in the past or develop new exchange arrangements, which may require separate Reclamation approval and environmental analysis. The delays caused by this process could make it difficult to deliver water in the time period in which it is most needed by the contractors.

## **2.2 Proposed Action**

The Proposed Action includes two components: 1) execution of up to eight interim renewal contracts with the Cross Valley Contractors listed in Table 2, and 2) approval of the Cross Valley Contractors' Article 5 exchange arrangements with individually proposed exchange partners to coincide with the interim renewal contracts.

### **2.2.1 Proposed Execution of Interim Renewal Contracts**

The Proposed Action evaluated in this document is the execution of eight interim renewal water service contracts between the United States and the contractors listed in Table 2 for a two year period (March 1, 2016 to February 28, 2018). These are the same eight contracts included under the No Action alternative. All of the Cross Valley Contractors (Table 2) are currently on their fifteenth interim renewal contract. The Proposed Action would be their sixteenth. Drafts of the eight interim renewal contracts were released for public comment on September 3, 2013 and are



available at the following website:

[http://www.usbr.gov/mp/cvpia/3404c/lt\\_contracts/2014\\_int\\_cts/index.html](http://www.usbr.gov/mp/cvpia/3404c/lt_contracts/2014_int_cts/index.html).

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 eight proposed interim renewal contracts can only be used within each designated contract service area. 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.

The eight 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 eight 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.

### **2.2.2 Proposed Approval of Article 5 Exchanges**

The Proposed Action also includes Reclamation's approval of the Cross Valley Contractors' exchange arrangements with individually proposed exchange partners for the same time period as the interim renewal contracts for up to the full Cross Valley Contractors' CVP contract supply (up to 128,300 AFY). In addition, the Proposed Action would include the continued historical exchanges between the Cross Valley Contractors and Arvin-Edison. See Appendix A for a description of the contractors and possible exchange contractors.

Due to varying hydrological conditions, loss due to evaporation and/or seepage, differences in the value of water, and/or timing, imbalanced exchanges could occur. Consistent with historical practices, imbalanced exchange arrangements (meaning that the volumes of water exchanged are not equal) would be permitted up to a maximum ratio of 2:1. Proposed exchange arrangements exceeding this volume ratio would require additional environmental review and approval. See Appendix B for a description of potential exchange mechanisms.

Article 55 of SWP contracts allows DWR to convey non-SWP water for SWP contractors within available capacity in the Aqueduct. Under this scenario, a SWP contractor could request DWR to convey a Cross Valley Contractor's CVP water, if capacity exists, in the Aqueduct.

CVP water is tracked from its origin to its final disposition (end use) and does not lose its Federal characteristics under California water rights permits. Water supplies would be used in

compliance with the applicable water rights permits and would conform to the applicable purpose and place-of-use of the associated water rights permit.

### 2.2.3 Environmental Commitments

Reclamation and the proponents shall implement the environmental protection measures included in Table 3. Environmental consequences for resource areas assume the measures specified would be fully implemented.

Table 3 Environmental Protection Measures and Commitments

Resource	Protection Measure
Water Resources	No changes in the point of diversion or places-of-use would be allowed without prior approvals from the State Water Resources Control Board, Reclamation, and/or DWR as applicable.
Water Resources	Exchanges must not alter the quality of water, or the hydrological regime of natural waterways or natural watercourses such as rivers, streams, creeks, lakes, ponds, pools, or wetlands, etc., in a way that may have a detrimental effect on fish or wildlife or their habitat.
Water Resources	Reclamation would review each exchange proposal for compliance prior to approval and execution of the exchange.
Water Resources	Imbalanced exchanges shall not exceed a 2:1 ratio by water volume.
Biological Resources	No 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 for the Interim Renewal Contracts

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. 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.

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## Section 3 Affected Environment and Environmental Consequences

This section identifies the potentially affected environment and the environmental consequences involved with the Proposed Action and the No Action Alternative, in addition to environmental trends and conditions that currently exist.

### 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
Air Quality	Neither the No Action nor Proposed Action alternative would require construction or modification of facilities. Water would be moved either via gravity or electric pumps 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 either alternative is water that would be delivered from existing facilities 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 neither alternative would 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.
Cultural Resources	There would be no impacts to cultural resources under either alternative as conditions would remain the same. Both alternatives 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 C for Reclamation's determination.
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.
Global Climate	Neither alternative includes construction of new facilities or modification to existing facilities. While pumping would be necessary to deliver water to the Cross Valley Contractors, neither alternative would require additional electrical production beyond baseline conditions and would therefore not contribute to additional greenhouse gas emissions. 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.

<b>Resource</b>	<b>Reason Eliminated</b>
Indian Sacred Sites	No impact to Indian sacred sites would occur under the No Action alternative as conditions would remain the same as existing conditions. 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 impact to Indian Trust Assets would occur under either alternative as conditions would remain the same. No physical changes to existing facilities are proposed and no new facilities are proposed. Continued delivery of CVP water to the Cross Valley Contractors under an interim renewal contract and Article 5 exchange 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.
Land Use	The interim renewal contracts for the contractors listed in Table 2 under either alternative would not provide for additional water supplies that could act as an incentive for conversion of native habitat. Use of contract water for agriculture and/or M&I under the proposed interim renewal contracts would not change from the purpose of use specified in their existing contracts. 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 impacts to land use as a result of the Proposed Action or No Action alternative.
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 impact socioeconomic resources within the contractor's service area.

## 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 with other contractors. Alternative supplies from groundwater pumping and/or transfers are accessed as supply sources when CVP surface water deliveries become more expensive than pumping or transfer costs.

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

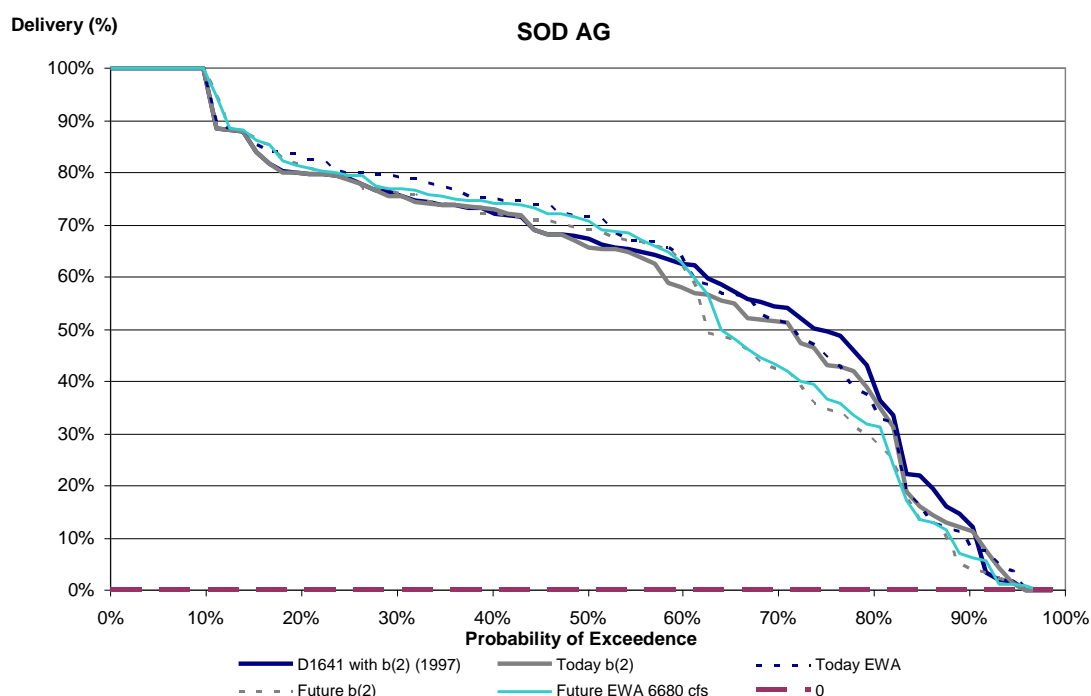
The amount of CVP water available each year for contractors is based, among other considerations, on the storage of winter precipitation and the control of spring runoff in the Sacramento and San Joaquin River basins. Reclamation's delivery of CVP water diverted from these rivers is determined by state 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 south-of-Delta water deliveries (Reclamation 1999), and this information has been incorporated into the modeling for the current CVP/SWP Coordinated Operations of the Delta (Reclamation 2004c).

**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, south-of-Delta 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 south-of-Delta 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 2004c) 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 1). Under these conditions, modeling predicts that tiered pricing (if it were required) would apply once every fourth or fifth year.

Figure 1 CVP South-of-Delta Agricultural Allocation Exceedance Chart



Source: Reclamation 2004c.

### **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 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 south-of-Delta water service contractors. 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. A summary of the Water Needs Assessments for Cross Valley Contractors are included in Table 5. No new water needs assessments are required for these contractors.

Table 5 Water Needs Assessment

<b>Contractor</b>	<b>2025 Project Unmet Demand (AF)</b>
County of Fresno	1,122
County of Tulare	Water Needs Assessment not required <sup>1</sup>
Hills Valley Irrigation District	3,092
Kern-Tulare Water District	7,517
Lower Tule River Irrigation District	23,318
Pixley Irrigation District	112,507
Tri-Valley Water District	Water Needs Assessment not required <sup>2</sup>
<sup>1</sup> The ten subcontractors for the County of Tulare each have less than the minimum irrigable acreage required for completion of a Water Needs Assessment	
<sup>2</sup> Tri-Valley Water District has less than the minimum irrigable acreage required for completion of a Water Needs Assessment	

### **Cross Valley Contractors**

Annual Cross Valley Contractors' water supply allocations are based on Reclamation's south-of-Delta CVP allocations, which are a percentage of each CVP contractors' respective contract total. Water deliveries to the Cross Valley Contractors are made available by Reclamation in the Delta, and are diverted through the Banks Pumping Plant of the SWP or the Jones Pumping Plant of the CVP. These deliveries can be unpredictable due to operational constraints in the Delta.

The Cross Valley Canal delivers water from the California Aqueduct near Taft, California, through a series of six pump lifts to the east side of the San Joaquin Valley near the city of Bakersfield. The Cross Valley Contractors' Delta CVP water supply was designed to be delivered to Arvin-Edison in exchange for a portion of Arvin-Edison's Friant Division CVP water supply from Millerton Lake. However, in order for the Cross Valley Contractors to obtain their Delta supplies through an exchange with Friant Division contractors, including Arvin-Edison, the runoff on the San Joaquin River must be sufficient to declare a full Class 1 allocation and a minimum percent of Class 2 water supply. If these conditions are not met, the Cross Valley Contractors do not have the ability to exchange their Delta water supplies. These conditions result in higher overall costs of water for the Cross Valley Contractors compared to neighboring Friant Division contractors.

### **Friant Division CVP Contractors and non-CVP Contractors**

Friant Division CVP contractors are located on the eastern side of the San Joaquin Valley and are included in this EA as potential exchange partners under the Article 5 exchanges. CVP water for these contractors comes from Millerton Lake via the Friant-Kern Canal or the Madera Canal. Water conveyed to these contractors is categorized as Friant Class 1 or Class 2 water depending



on its reliability and allocation circumstances. There are 32 Friant Division CVP contractors located on the eastern side of the San Joaquin Valley in Merced, Madera, Fresno, Tulare, Kings, and Kern Counties (Table 6). Of the 32 Friant Division CVP contractors, 23 have been identified as potential exchange partners, although others may be added later if additional contract assignments are executed. A description of the Cross Valley Contractors and possible exchange partners are included in Appendix A.

Table 6 Friant Division Contractors

<b>Contractor</b>	<b>Class 1 (AFY)</b>	<b>Class 2 (AFY)</b>
Arvin-Edison Water Storage District	40,000	311,675
City of Fresno	60,000	0
<sup>2</sup> City of Lindsay	2,500	0
City of Orange Cove	1,400	0
Delano-Earlimart Irrigation District	108,800	74,500
Exeter Irrigation District	11,100	19,000
Fresno Irrigation District	0	75,000
Garfield Water District	3,500	0
Gravelly Ford Water District	0	14,000
<sup>2</sup> Hills Valley Irrigation District	1,250	0
International Water District	1,200	0
Ivanhoe Irrigation District	6,500	500
<sup>1</sup> Kaweah Delta Water Conservation District	1,200	7,400
<sup>2</sup> Kern-Tulare Irrigation District	0	5,000
Lewis Creek Water District	1,200	0
Lindmore Irrigation District	33,000	22,000
Lindsay-Strathmore Irrigation District	27,500	0
<sup>2</sup> Lower Tule River Irrigation District	61,200	238,000
Orange Cove Irrigation District	39,200	0
Porterville Irrigation District	15,000	30,000
<sup>2</sup> Saucelito Irrigation District	21,500	32,800
Shafter-Wasco Irrigation District	50,000	39,600
Southern San Joaquin Municipal Utility District	97,000	45,000
<sup>2</sup> Stone Corral Irrigation District	10,000	0
Tea Pot Dome Water District	7,200	0
Terra Bella Irrigation District	29,000	0
<sup>2</sup> Tri-Valley Water District	400	0
Tulare Irrigation District	30,000	141,000
<sup>1</sup> Kaweah Delta Water Conservation District is comprised of four districts: Lakeside Irrigation Water District, Kings County Water District, Corcoran Irrigation District, and Tulare Irrigation District.		
<sup>2</sup> Lower Tule River ID, Saucelito ID, Stone Corral ID, Tri-Valley, Kern-Tulare, Hills Valley and City of Lindsay receive CVP water under more than one contract, either as a Friant Division and/or Cross Valley Contractor/Sub-Contractor.		

### ***Groundwater Resources***

Usable groundwater storage capacity has been estimated to be approximately 24 million AF for the San Joaquin River Hydrologic Region and 28 million AF for the Tulare Lake Hydrologic Region, the two hydrologic regions overlain by the CV contractors and most of the potential exchange partners.

Recharge of the area's aquifers is primarily derived from streams and canals, infiltration of applied water, subsurface inflow and, to a limited extent, precipitation in the valley floor. In wetter years the groundwater stores are recharged, and in dry years groundwater levels drop. Groundwater levels, available supplies and safe yield are difficult to quantify due to variances in soil types, geography and subsurface groundwater gradients. Generally the groundwater safe yield is estimated to be approximately 1 AF per acre of land, but under certain conditions, some locations may have a safe yield as low as 0 AF. Over the long term, DWR has estimated the total safe perennial yield to be approximately 3.3 million AF for the San Joaquin River Hydrologic Region and 4.6 million AF for the Tulare Lake Hydrologic Region (DWR 2003). Overdraft of groundwater is a region-wide problem throughout the lower San Joaquin Valley and although ameliorated to some extent by the import of surface water, all hydrologic basins in the San Joaquin Valley continue to be overdrafted.

### ***Conveyance Facilities and Waterways***

Facilities and waterways involved with the exchanges under consideration include: the Banks and Jones Pumping Plants, the Friant-Kern Canal, the San Luis Canal/Aqueduct, the Cross Valley Canal, the Kern Water Bank Canal, the O'Neill Forebay, the Kings, St. Johns, Tule, Kaweah and Kern Rivers, various small local creeks and streams, and various facilities within each exchange partner's internal distribution system. More information on these facilities is available in Appendix D. The proposed exchanges would not involve any modifications to these existing facilities and waterways

## **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 south of Delta 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 and in some cases water transfers to meet on-farm needs. 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 (as stated above) 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.

In certain years, the Cross Valley Contractors purchase or exchange additional water supplies beyond what is allocated in accordance with historic water rights. These additional supplies could come from San Luis Reservoir, the Delta, or Friant. The purchases or exchanges do not represent a new water source, but rather, part of the water supply described and evaluated in the PEIS. No diversions beyond the contract totals are authorized under either alternative.

The contract provisions under the No Action alternative also stipulate that 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.

**Article 5 Exchanges** Under the No Action Alternative, exchanges would be reviewed and approved on a case-by-case basis. Each exchange would undergo individual environmental and administrative review. The same volume of water could theoretically be exchanged as under the Proposed Action, but the individual administrative review of each exchange would delay delivery of water and increase cost to the Cross Valley Contractors.

### ***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 these contracts. 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. 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. Therefore, the Proposed Action would have no adverse impacts on water resources.

**Article 5 Exchanges** The long-term operations of the CVP and SWP were addressed in the CVPIA PEIS (Reclamation 1999), the biological opinions for the continued long-term operation

of the CVP and SWP (USFWS 2008, NMFS 2009), and the EIS for the coordinated long-term operation of the CVP and SWP (Reclamation 2016). The total Cross Valley Contractors' Delta water supply (128,300 AFY) was also addressed in these documents as the water was assumed to be pumped and conveyed in each year for deliveries via exchanges to the Cross Valley Contractors. Therefore, the proposed Article 5 exchanges would not result in any changes in diversion from the Delta or pumping and conveyance of water beyond what was already addressed.

The maximum amount of water exchanged would be up to 128,300 AFY and would be conveyed in the facilities described in Appendix D as capacity is available. The water involved in the proposed exchanges is already allocated, and no additional water supplies would be diverted from rivers or lakes. No new construction or points of diversions would be required. However, changes in timing and locations of when and where water is diverted may occur.

Conveyance of CVP water under Article 55 of the SWP contracts in the California Aqueduct could result in the Cross Valley Contractors receiving a higher rank on the SWP hierarchy for pumping. However, Reclamation policy limits the amount of Cross Valley Contractors' supplies conveyed under Article 55 to be that of each Cross Valley Contractors' south-of-Delta allocation, to prohibit impact to the CVP and SWP as a whole. This prevents impacts to other users of the delivery system from the exchanges being considered.

The value and timing of water supplies is considered in exchange agreements between the parties, since contractors' allocated water may not be available at the time when it is most valuable to them. In lieu of paying a higher price for water when it is exchanged and delivered at a more useful/valuable time, agreements commonly allow for an imbalanced exchange of the Cross Valley Contractors' water supplies to compensate for the differential value of the exchanged water when it is delivered. These imbalanced exchanges are allowed up to a maximum ratio of 2:1, meaning that half of the water volume exchanged would be delivered to a Cross Valley contractor, and the remaining half would be retained by the exchange partner. This results in Cross Valley Contractors receiving less than their contracted/allocated amount but provides better use and management of the water than they would have otherwise received.

Under the Proposed Action, Cross Valley Contractors would receive between 50 percent and 100 percent of their allocated CVP supply when it is needed, without needing case-by-case approval for each exchange. The Cross Valley Contractors would receive the benefit of having lower priced water with deliveries on a convenient schedule which allows for advanced planning of crops.

The Proposed Action would not contribute to or interfere with flood control management and operations. The Proposed Action and imbalanced exchanges would not increase or decrease the availability of flood water nor inhibit or contribute to decisions to accept or reject this source of water.

### ***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

Due to the size of the Proposed Action's Action area, the list of endangered, threatened and sensitive species includes species that may occur within the Counties of Fresno, Kings, Tulare and Kern (San Joaquin Valley portion). The species list was obtained from the USFWS's website at <http://ecos.fws.gov/ipac/> on July 6, 2015. Additional data was obtained in July 2015 from the California Department of Fish and Wildlife's California Natural Diversity Database (CNDDB). Table 7 below contains the above list and includes common and scientific names, current federal listing status, and critical habitats. The list also includes species addressed in the LTRC Opinion such as the riparian brush rabbit and riparian woodrat. Critical habitat exists in the affected environment for the following species: Buena Vista Lake shrew, California condor, California tiger salamander, Hoover's spurge, San Joaquin Valley Orcutt grass, succulent owl's-clover, vernal pool fairy shrimp, and vernal pool tadpole shrimp.

Table 7 Federally Threatened and Endangered Species and Critical Habitat

Species	Status <sup>1</sup>	Effects
<b>AMPHIBIANS</b>		
arroyo toad ( <i>Anaxyrus californicus</i> )	E, X	No effect determination; Proposed Action area is outside species' range.
California red-legged frog ( <i>Rana draytonii</i> )	T, X	No effect determination; Proposed Action area is outside species' current range.
California tiger salamander, central population ( <i>Ambystoma californiense</i> )	T, X	No effect determination; native lands and lands fallowed and untilled for three or more years would not be brought into production as part of the Proposed Action.
Mountain yellow-legged frog ( <i>Rana muscosa</i> )	E, PX	No effect determination; Proposed Action area is outside species' range.
Sierra Nevada yellow-legged frog ( <i>Rana sierrae</i> )	E, PX	No effect determination; Proposed Action area is outside species' range.
Yosemite toad ( <i>Anaxyrus canorus</i> )	T, PX	No effect determination; Proposed Action area is outside species' range.
<b>BIRDS</b>		
California Clapper Rail ( <i>Rallus longirostris obsoletus</i> )	E	No effect determination; Proposed Action area is outside species' range.
California Condor ( <i>Gymnogyps californianus</i> )	E	No effect determination; native lands and lands fallowed and untilled for three or more years would not be brought into production as part of the Proposed Action.
Least Bell's Vireo ( <i>Vireo bellii pusillus</i> )	E, X	This species could fly over during migration but nesting habitat is absent.

Species	Status <sup>1</sup>	Effects
Southwestern Willow Flycatcher ( <i>Empidonax traillii extimus</i> )	E, X	This species could fly over during migration but nesting habitat is absent.
Western Snowy Plover ( <i>Charadrius alexandrinus nivosus</i> )	T, X	This species could fly over during migration but nesting habitat is absent.
Western Yellow-billed Cuckoo ( <i>Coccyzus americanus occidentalis</i> )	T, PX	This species could fly over during migration but nesting habitat is absent.
<b>FISH</b>		
Central Valley steelhead ( <i>Oncorhynchus mykiss</i> )	T, X (NMFS)	Effects of pumping in the San Joaquin-Sacramento Delta have been/are being addressed separately.
Central Valley spring-run chinook salmon ( <i>Oncorhynchus tshawytscha</i> )	T, X (NMFS)	Effects of pumping in the San Joaquin-Sacramento Delta have been/are being addressed separately.
delta smelt ( <i>Hypomesus transpacificus</i> )	T, X	Effects of pumping in the San Joaquin-Sacramento Delta have been/are being addressed separately.
Lahontan cutthroat trout ( <i>Oncorhynchus clarki henshawi</i> )	T	No effect determination; Proposed Action area is outside species' range.
Little Kern golden trout ( <i>Oncorhynchus mykiss whitei</i> )	T, X	No effect determination; Proposed Action area is outside species' range.
Mojave tui chub ( <i>Gila bicolor ssp. mohavensis</i> )	E	No effect determination; Proposed Action area is outside species' range.
North American green sturgeon ( <i>Acipenser medirostris</i> )	T, X (NMFS)	Effects of pumping in the San Joaquin-Sacramento Delta have been/are being addressed separately.
Owens pupfish ( <i>Cyprinodon radiosus</i> )	E	No effect determination; Proposed Action area is outside species' range.
Owens tui chub ( <i>Gila bicolor snyderi</i> )	E, X	No effect determination; Proposed Action area is outside species' range.
Paiute cutthroat trout ( <i>Oncorhynchus clarki seleniris</i> )	T	No effect determination; Proposed Action area is outside species' range.
Sacramento River winter-run chinook salmon ( <i>Oncorhynchus tshawytscha</i> )	E, X	Effects of pumping in the San Joaquin-Sacramento Delta have been/are being addressed separately.
<b>INVERTEBRATES</b>		
Conservancy fairy shrimp ( <i>Branchinecta conservatio</i> )	E	No effect determination; native lands and lands fallowed and untilled for three or more years would not be brought into production as part of the Proposed Action.
Kern primrose sphinx moth ( <i>Euproserpinus euterpe</i> )	T	No effect determination; Proposed Action area is outside species' range.
Valley elderberry longhorn beetle ( <i>Desmocerus californicus dimorphus</i> )	T, X	No effect determination; although suitable habitat may be present in Fresno County (Kings, Kern, and Tulare Counties are outside the species' range), no land use change, conversion of habitat, construction or modification of existing facilities would occur as a result of the Proposed Action.
vernal pool fairy shrimp ( <i>Branchinecta lynchi</i> )	T, X	No effect determination; native lands and lands fallowed and untilled for three or more years would not be brought into production as part of the Proposed Action.
vernal pool tadpole shrimp ( <i>Lepidurus packardii</i> )	E, X	No effect determination; native lands and lands fallowed and untilled for three or more years would not be brought into production as part of the Proposed Action.
<b>MAMMALS</b>		

Species	Status <sup>1</sup>	Effects
Buena Vista Lake shrew ( <i>Sorex ornatus relictus</i> )	E, X	May affect, not likely to adversely affect. Potentially present within the action area. May be subject to minor impacts due to routine farming activities.
fisher ( <i>Martes pennanti</i> )	C	No effect determination; Proposed Action area is outside species' range
Fresno kangaroo rat ( <i>Dipodomys nitratoideis exilis</i> )	E, X	No effect determination; Proposed Action area is outside species' range
giant kangaroo rat ( <i>Dipodomys ingens</i> )	E	No effect determination; suitable habitat not present.
riparian brush rabbit ( <i>Sylvilagus bachmani riparius</i> )	E	No effect determination; Proposed Action area is outside species' range
riparian woodrat ( <i>Neotoma fuscipes riparia</i> )	E	No effect determination; Proposed Action area is outside species' range
San Joaquin kit fox ( <i>Vulpes macrotis mutica</i> )	E	May affect, not likely to adversely affect. Potentially present within the action area. May be subject to minor impacts due to routine farming activities.
Sierra Nevada bighorn sheep ( <i>Ovis canadensis californiana</i> )	E, X	No effect determination; Proposed Action area is outside species' range
southern resident killer whale ( <i>Orcinus orca</i> )	E, X (NMFS)	Effects of pumping in the San Joaquin-Sacramento Delta have been/are being addressed separately.
Tipton kangaroo rat ( <i>Dipodomys nitratoideis nitratoideis</i> )	E	May affect, not likely to adversely affect. Potentially present within the action area. May be subject to minor impacts due to routine farming activities.
<b>PLANTS</b>		
Bakersfield cactus ( <i>Opuntia treleasei</i> )	E	No effect determination; suitable habitat not present.
California jewelflower ( <i>Caulanthus californicus</i> )	E	No effect determination; suitable habitat not present.
hairy Orcutt grass ( <i>Orcuttia pilosa</i> )	E, X	No effect determination; suitable habitat not present.
Hartweg's golden sunburst ( <i>Pseudobahia bahiifolia</i> )	E	No effect determination; suitable habitat not present.
Hoover's spurge ( <i>Chamaesyce hooveri</i> )	T, X	No effect determination; native lands and lands fallowed and untilled for three or more years would not be brought into production as part of the Proposed Action.
Keck's checker-mallow ( <i>Sidalcea keckii</i> )	E, X	No effect determination; suitable habitat not present.
Kern mallow ( <i>Eremalche kernensis</i> )	E	May affect, not likely to adversely affect. Potentially present within the action area. May be subject to minor impacts due to routine farming activities.
Mariposa pussy-paws ( <i>Calyptidium pulchellum</i> )	T	No effect determination; Proposed Action area is outside species' range.
marsh sandwort ( <i>Arenaria paludicola</i> )	E	No effect determination; Proposed Action area is outside species' range.
palmate-bracted bird's-beak ( <i>Cordylanthus palmatus</i> )	E	No effect determination; suitable habitat not present.
Ramshaw Meadows sand-verbena ( <i>Abronia alpina</i> )	C	No effect determination; Proposed Action area is outside species' range
San Benito evening-primrose ( <i>Camissonia benitensis</i> )	T	No effect determination; Proposed Action area is outside species' range
San Fernando Valley spineflower ( <i>Chorizanthe parryi</i> var. <i>fernandina</i> )	C	No effect determination; Proposed Action area is outside species' range.

Species	Status <sup>1</sup>	Effects
San Joaquin adobe sunburst ( <i>Pseudobahia peirsonii</i> )	T	No effect determination; suitable habitat not present.
San Joaquin Valley Orcutt grass ( <i>Orcuttia inaequalis</i> )	T, X	No effect determination; native lands and lands fallowed and untilled for three or more years would not be brought into production as part of the Proposed Action.
San Joaquin woolly-threads ( <i>Monolopia congdonii</i> )	E	May affect, not likely to adversely affect. Potentially present within the action area. May be subject to minor impacts due to routine farming activities.
San Mateo thornmint ( <i>San Mateo thornmint</i> )	E	No effect determination; Proposed Action area is outside species' range.
Springville clarkia ( <i>Clarkia springvillensis</i> )	T	No effect determination; Proposed Action area is outside species' range
succulent owl's-clover ( <i>Castilleja campestris</i> ssp. <i>succulenta</i> )	T, X	No effect determination; native lands and lands fallowed and untilled for three or more years would not be brought into production as part of the Proposed Action.
<b>REPTILES</b>		
blunt-nosed leopard lizard ( <i>Gambelia sila</i> )	E	No effect determination; suitable habitat not present.
desert tortoise ( <i>Gopherus agassizii</i> )	T, X	No effect determination; Proposed Action area is outside species' range.
giant garter snake ( <i>Thamnophis gigas</i> )	T	No effect determination; suitable habitat not present.
<sup>1</sup> Status= Listing of Federally special status species. Note that lists were for the entire county or counties that encompass the districts. E: Listed as Endangered T: Listed as Threatened PE: Proposed for listing as Endangered PT: Proposed for listing as Threatened C: Candidate for listing X: Critical Habitat designated for this species PX: Critical Habitat proposed for this species. NMFS: Species under the jurisdiction of the National Marine Fisheries Service		

Most of the lands in the affected environment are agricultural lands. Of the federally listed species included in Table 7, only a few can use this type of land. Although lands adjacent to natural habitats may be used for occasional foraging by San Joaquin kit foxes (Warrick et al. 2007), agricultural lands are generally not suitable for long-term occupation. It may be possible for Tipton kangaroo rats to colonize fallowed lands within as little as eight months when they occur on adjacent habitat. Evidence for this exists with other kangaroo rat species; the Fresno kangaroo rat has been reported as being able to colonize fallowed agricultural lands (Culbertson 1946) and Stephens' kangaroo rats have been observed to recolonize land after discing was stopped (Thomas 1975), even within as little as eight months (Moore-Craig 1984). Ornate shrews (which may be Buena Vista Lake shrews or another subspecies) were found on actively farmed ground, where they either were residing and/or dispersing across (Williams and Harpster 2001). There are two instances in which San Joaquin woolly-threads were found in low densities in areas that had been previously disced, which were adjacent to undisturbed populations (Lewis 1993); the species' primary dispersal method is probably by wind. The Kern mallow, while not an aggressive disperser, has been known to occasionally reinvade disturbed sites, when the species is found on adjacent land (Mitchell 1989 as cited in USFWS 1998). Kern mallow seeds



may be carried by dust devils, which do not seem to necessarily move in the direction of the prevailing wind (E. Cypher, pers. comm.). In 2005, the species was seen at the edges of fallow agricultural fields at the northern edge of Lokern, approximately a meter into the fields, north of occupied habitat; the interiors of the fields were not surveyed (E. Cypher, pers. comm.).

The delta smelt, the Sacramento River winter run Chinook salmon, the Central Valley spring run Chinook salmon, and their critical habitats did not appear on the list but are relevant due to their occurrence in the Delta. Also relevant is Essential Fish Habitat for fall run and late fall run Chinook salmon. All of these species and habitats are addressed by the biological opinions on coordinated long-term operations of the CVP and SWP and associated documents. Listed salmonids are not expected to return to the upper San Joaquin during this interim renewal period and so don't require consultation/conferencing.

Within the Action Area the existing critical habitat consists of undeveloped lands. Reclamation has determined that no delivery of CVP water to these lands would be allowed unless and until the landowner demonstrates existing compliance with the ESA, including consultation with the USFWS for critical habitat.

The biological opinions described below contain more detailed descriptions of biological resources in the contractors' service areas and boundaries. The CVP contractors associated with this Action have already undergone consultation with the USFWS and NMFS and are implementing the measures in the applicable biological opinions. In addition, Kern County has an existing Habitat Conservation Plan for portions of its service area (specifically for the Kern Water Bank and the Metropolitan Bakersfield area).

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

**Programmatic Biological Opinion on Implementation of the CVPIA and Continued Operation and Maintenance of the CVP** The USFWS issued a Programmatic Biological Opinion on Implementation of the CVPIA and Continued Operation and Maintenance of the CVP (Programmatic BO) (File Number 1-1-98-F-0124) in November 2000 (USFWS 2000). The Programmatic BO presumed the renewal of all existing CVP contracts, and documented nine major areas of commitment covering such considerations such as facility operations, water conveyance, habitat augmentation and others. These commitments and other considerations were the basis of a Programmatic BO finding of "No Jeopardy" to protected species. In addition, the Programmatic BO outlined processes to streamline ESA compliance and manage circumstances where insufficient information is available to estimate take or make an impact determination.

**Biological Opinion on Bureau of Reclamation Long-Term Contract Renewal of Friant Division and Cross Valley Unit Contractors** USFWS issued a biological opinion in October 1991, amended in May 1992, which stated that renewal of the 28 long-term Friant Division CVP contracts would not likely jeopardize the continued existence of 15 threatened and endangered species in the affected portions of the Friant service area (USFWS 1991, 1992). This determination was predicated on Reclamation implementing short- and long-term conservation programs to mitigate the adverse impacts of continued CVP water delivery to the Friant Division. The program also committed the USFWS to participate by providing technical

assistance and developing the revised recovery plans needed for the timely resolution of listed species concerns.

In 2001, the USFWS issued a biological opinion (File Number 1-1-01-F-0027; Long-Term Contract Renewal BO), which concluded that the 25-year renewal of water service contracts for Friant Division and Cross Valley Units of the CVP by Reclamation was not likely to jeopardize 34 listed species. However, transfers and/or exchanges involving Friant Division or Cross Valley Contractors were not addressed by the Long-Term Contract Renewal BO. In addition, the Long-Term Contract Renewal BO did not address some of the species and critical habitats covered in this EA, because their listings/designations occurred after the biological opinion was issued. These species and critical habitats include: vernal pool fairy shrimp, vernal pool tadpole shrimp, all critical habitats for vernal pool species, and critical habitat for the California tiger salamander.

**Coordinated Operations of the CVP and SWP** The effects of CVP and SWP pumping on federally listed fishes and their critical habitat have been addressed by Biological Opinions issued to Reclamation for the Coordinated Long-Term Operations of the CVP and SWP (NMFS 2009, USFWS 2008). The biological opinion issued by the USFWS to Reclamation for the Coordinated Long-Term Operations of the CVP and SWP found that operations as proposed were likely to jeopardize the continued existence of delta smelt and adversely modify its critical habitat. The USFWS provided a Reasonable and Prudent Alternative (RPA) with five components. On December 15, 2008, Reclamation submitted a memo provisionally accepting the RPA. The memo also indicated that Reclamation would immediately begin implementing the RPA. The provisional acceptance of the RPA was conditioned upon the further development and evaluation of the two RPA components directed at aquatic habitats. Reclamation stated that the two RPA components, RPA Component 3 – the fall action, and RPA Component 4 – the tidal habitat restoration action, both need additional review and refinement before Reclamation would be able to determine whether implementation of these actions by the CVP and SWP is reasonable and prudent.

The biological opinion issued by NMFS determined that long term SWP and CVP operations were likely to jeopardize several species and result in adverse modification of their critical habitat. NMFS also developed an RPA and included it in the Biological Opinion. On June 4, 2009, Reclamation sent a provisional acceptance letter to NMFS, citing the need to further evaluate and develop many of the longer-term actions, but also stating that Reclamation would immediately begin implementing the near-term elements of the RPA.

Reclamation also consulted under the Magnusson-Stevens Fishery Conservation and Management Act with NMFS on the impacts to Essential Fish Habitat for Chinook salmon as a result of the pumping (NMFS 2009).

However, following their provisional acceptance, both biological opinions were subsequently challenged in Court, and following lengthy proceedings, the United States District Court for the Eastern District of California remanded the biological opinions, and Reclamation was ordered by the Court to comply with NEPA before accepting the RPAs. In March and December 2014, the Biological Opinions issued by the USFWS and NMFS, respectively, were upheld by the Ninth Circuit Court of Appeals, although certain requirements (such as an obligation for Reclamation

to follow a NEPA process) were left in place. Reclamation has completed environmental documentation (Reclamation 2016) to comply with the Court's decisions and continues to comply with the biological opinions associated with coordinated long-term operations of the CVP and SWP.

**O&M Program for the South-Central California Area Office** Reclamation consulted with the USFWS under the ESA for O&M activities occurring on Reclamation lands under the jurisdiction of the South-Central California Area Office. The USFWS issued a biological opinion 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**

The No Action alternative is the renewal of existing contracts as required by non-discretionary CVPIA provisions addressed in the CVPIA PEIS. The No Action Alternative would only continue, for an interim period, water deliveries that accommodate current land uses. No construction of new facilities or modification of existing facilities would occur as water deliveries would be from existing infrastructure. No change in water diversions from the Delta would occur. In addition, as described in Table 2, no native or untilled land (fallow for three consecutive years or more) may be cultivated with CVP water without additional environmental analysis and approval. Environmental commitments in existence as a result of existing and future biological opinions, including the CVPIA Biological Opinion (USFWS 2000) would be met under the No Action Alternative, including continuation of ongoing species conservation programs.

The No Action Alternative is similar to the Proposed Action. The same amounts of water would be diverted from rivers and reservoirs based on hydrological conditions. Deliveries would occur in existing facilities. The operations of the CVP and SWP would continue as in the past within constraints and limitations. Croplands would remain the same. Decisions to fallow or not fallow lands would be based on hydrological and agricultural marketing conditions. Renewal of the existing contracts would not provide the long-term water supply reliability required for conversion from agriculture to M&I uses.

For these reasons, the No Action alternative would not result in substantial changes in natural and semi-natural communities and other land uses that have the potential to occur within the interim renewal contractor's service area. The area of use and types of use are expected to fall within historic ranges. As a result, the No Action alternative would not result in adverse effects on fish, vegetation, or wildlife resources located in the Action area.

### ***Proposed Action***

CVP-wide impacts to biological resources were evaluated in the PEIS, and a USFWS biological opinion addressing potential CVP-wide impacts of the CVPIA was completed on November 21, 2000. In addition, the programmatic biological opinion and Essential Fish Habitat Conservation Recommendations prepared by NMFS for the CVPIA were completed on November 14, 2000. As with the No Action alternative, the Proposed Action would meet environmental commitments in existence as a result of existing biological opinions, including those for the CVPIA and the coordinated long-term operations of the CVP and SWP. As described previously, 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 eight interim water service contracts considered in this EA. As such, the Proposed Action would not impact the efforts of the San Joaquin River Restoration and would conform to any applicable requirements imposed under the federal ESA or other applicable environmental laws.

Under the Proposed Action, only minor indirect impacts would occur to biological resources. The species detailed in Section 3.3 may be subject to minor impacts due to routine farming activities. Critical habitat and other native lands would not be affected due to restrictions on land use, or because in some cases, the critical habitat lies outside the Proposed Action area.

The Proposed Action would not result in any change in existing water diversions from the Delta nor would it require construction of new facilities or modification of existing facilities for water deliveries. The CVP water supply for the Cross Valley Contractors would continue to be used for agricultural and M&I purposes within their respective CVP service areas as it has in the past. In addition, as described in Table 3, no native or untilled land (fallow for three consecutive years or more) may be cultivated with CVP water without additional environmental analysis and approval.

### ***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. 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.

The 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 2002b), 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 during a 30-day public review period. 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.

Effects to Delta species and critical habitats, such as the Delta smelt, salmonids, and green sturgeon which are the result of CVP operations, are addressed in the CVP/SWP Coordinated Operations consultation. As such, Reclamation has determined that there would be no effects to species and critical habitats for the Proposed Action under the jurisdiction of NMFS.

Reclamation coordinated with NMFS on the Proposed Action on September 22, 2015 and both agencies agreed that no consultation was necessary.

On November 19, 2015, Reclamation initiated section 7 consultation with the USFWS for the Proposed Action. On February 25, 2016, the USFWS provided concurrence with Reclamation's determination that the Proposed Action may affect, but is not likely to adversely affect the Buena Vista lake shrew, San Joaquin kit fox, Tipton kangaroo rat, blunt-nosed leopard lizard, Kern mallow, San Joaquin woolly-threads, or critical habitat designated for these species (see Appendix E).

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