

# RECLAMATION

*Managing Water in the West*

## DRAFT FINDING OF NO SIGNIFICANT IMPACT

### Three Delta Division and Five San Luis Unit Water Service Interim Renewal Contracts 2012 – 2014

**FONSI-11-049**

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# Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the South-Central California Area Office of the Bureau of Reclamation (Reclamation), has determined that the renewal of three Delta Division and five San Luis Unit interim renewal contracts (Table 1) for the contract period March 1, 2012 through February 29, 2014 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 draft Finding of No Significant Impact is supported by Reclamation's draft Environmental Assessment (EA) Number EA-11-049, *Three Delta Division and Five San Luis Unit Water Service Interim Renewal Contracts 2012 – 2014*, and is hereby incorporated by reference.

**Table 1 Contractors, Existing Contract Amounts, and Expiration Dates**

Contractor	Contract Number	Contract Quantity (acre-feet)	Expiration of Existing Interim Renewal Contract
<b>DELTA DIVISION CONTRACTS</b>			
City of Tracy (partial assignment from West Side Irrigation District)	14-06-200-4305A-IR12-B	2,500 <sup>1</sup>	2/29/2012
City of Tracy (partial assignment from Banta-Carbona Irrigation District)	7-07-20-W0045-IR12-B	5,000	2/29/2012
Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District DD # 1 (3-way assignment from Mercy Springs Water District)	14-06-200-3365A-IR12-B	6,260	2/29/2012
<b>SAN LUIS UNIT CONTRACTS</b>			
Westlands Water District	14-06-200-495-IR2	1,150,000	2/29/2012
Westlands Water District DD#1 (full assignment from Centinella Water District)	14-06-200-W0055-IR12-B	2,500	2/29/2012
Westlands Water District DD #1 (full assignment from Widren Water District)	14-06-200-8018-IR12-B	2,990	2/29/2012
Westlands Water District DD #1 (full assignment from Broadview Water District)	14-06-200-8092-IR12	27,000	2/29/2012
Westlands Water District DD #2 (partial assignment from Mercy Springs Water District)	14-06-200-3365A-IR12-C	4,198	2/29/2012
<sup>1</sup> With an option to acquire an additional 2,500 acre-feet			

## 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. When that directive is not yet satisfied, Reclamation shall renew water contracts for an interim period not to exceed three years and for

successive interim periods not to exceed two years. Interim renewal contracts are undertaken under the authority of the CVPIA to provide a bridge between the expiration of the original long-term water service contract and the execution of a new long-term water service contract. Because eight existing interim renewal contracts will expire on February 28, 2012 and Reclamation has not yet completed appropriate environmental review of a 25 year water service contract, Reclamation will execute eight interim water service contracts for the contractors listed in Table 1. In the event that a new long-term water contract is executed, the interim renewal contract will then expire.

In 1999, Mercy Springs Water Storage District (MSWD) assigned 6,260 AF per year of its Delta Division Central Valley Project (CVP) Water Service Contract (Contract No. 14-06-200-3365A-IR2) jointly to Pajaro Valley Water Management Area (PVWMA), Santa Clara Valley Water District (SCVWD), and Westlands Water District (WWD) Distribution District No. 1 (DD#1). At the time of the assignment, PVWMA did not have infrastructure in place to receive their portion of the CVP water. Consequently, an agreement was prepared between PVWMA, WWD, and SCVWD which allows SCVWD and WWD DD#1 to take delivery of the water on an interim basis until PVWMA is ready to take delivery of the CVP water for beneficial use in its service area. To date, conveyance facilities to transport the CVP water to PVWMA have not been constructed and PVWMA will not be able to take delivery of their portion of CVP water under Contract No. 14-06-200-3365A-IR2 unless or until a conveyance mechanism is in place for PVWMA to physically receive this water. Since it is highly unlikely that PVWMA will have the ability to take CVP water during the two-year interim renewal contract period, water deliveries under this contract will be analyzed under SCVWD and WWD DD#1 but not within PVWMA consistent with previous interim renewals for this contract.

## **Proposed Action**

The Proposed Action will continue the 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. 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 eight interim water service 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 will be implemented in the administration of the eight interim water service contracts listed in Table 1. As a result, by their express terms the interim renewal contracts analyzed in the EA will conform to any applicable requirements lawfully imposed under the federal Endangered Species Act (ESA) or other applicable environmental laws.

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 factors:

## **FINDINGS**

### **Water Resources**

Impacts to water resources associated with the Proposed Action will be comparable to those described under No Action Alternative although tiered pricing provisions are not included in these contracts. Renewal of the interim contracts, with only minor administrative changes to the contract provisions, will not result in a change in contract water quantities or a change in water use. Water delivery during the interim renewal contract period will not exceed historic quantities. Therefore, there will be no effect on surface water supplies or quality.

The renewal of interim contracts delivering the same quantities of water that have historically been put to beneficial use will not result in any growth-inducing impacts. In addition, no substantial changes in growth are expected to occur during the short timeframe of this renewal. Therefore, the Proposed Action will have no significant impacts on water resources.

### **Land Use**

Impacts to land use associated with the Proposed Action will be comparable to those described under the No Action Alternative. It is possible that conversion from agricultural uses to municipal and industrial (M&I) uses will occur during the term of the interim renewal contracts, but if such conversions occur it will not be a result of the interim renewal contracts due to their short terms. Renewal of these interim contracts will support existing land use. The pressures to convert are the same pressures that will have existed with the previous expiring long term contracts and with the No Action Alternative. The interim renewal of the eight contracts will not provide for additional water supplies that could act as an incentive for conversion of native habitat. Use of contract water for M&I use under the proposed interim renewal contracts will not change from the purpose of use specified in the eight existing contracts. Likewise, the eight interim renewal contracts will not change contract terms or conditions governing the allocation of CVP water during times of limited supply (i.e., drought), so will not provide additional water reliability. Given the two-year period of the interim renewal contracts, there will be no significant impact on land use.

### **Biological Resources**

CVP-wide impacts to biological resources were evaluated in the PEIS, and a U.S. Fish and Wildlife (USFWS) Biological Opinion addressing potential CVP-wide impacts was completed on November 21, 2000. The programmatic Biological Opinion and Essential Fish Habitat Conservation Recommendations prepared by the National Marine Fisheries Service (NMFS) for the CVPIA were completed on November 14, 2000.

Given the hardening of demand that has already occurred in response to chronic shortages in CVP contract supplies and ongoing trends toward increased irrigation efficiency and economic factors apart from the contract that influence crop selection, the lack of tiered pricing in the Proposed Action is unlikely to have any effect on water application for irrigation within the study area. In all other aspects, the effects of the proposed contracts are substantially similar to those under the No Action Alternative, so the Proposed Action will 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. Additionally, execution of interim

renewal contracts under the Proposed Action Alternative will not involve construction of new facilities or installation of structures.

Within the contractors' service area there will be no effects to salmonid species' designated critical habitat or green sturgeon since none inhabit or exist in the service areas. Additionally, impacts to salmonid species and green sturgeon in the Delta are solely the result of CVP operations, and are addressed in the CVP/State Water Project Coordinating Operations consultation.

Since SCVWD, City of Tracy and WWD do not have drainage that reaches the San Joaquin River, Reclamation has determined that there is no effect to federally listed salmonids, designated salmonid critical habitat, or green sturgeon due to renewal of these interim contracts.

Changes in crop patterns toward more permanent crops and increased fallowing of land could result in less habitat for the Swainson's hawk and western burrowing owl. Discing of fallowed lands near native lands that may be occupied by the blunt-nosed leopard lizard and San Joaquin woolly-threads could impact these species as they may overlap slightly with the adjoining fallowed lands. Although orchards may provide slightly better permeability for foraging to kit foxes than row crops (Warrick et al. 2007), management of orchards to reduce rodent damage (e.g., use of anticoagulant baits [Almond Board of California 2005]) could make orchards harmful to kit fox. Discing of fallowed land and resumed agricultural activities can destroy dens and reduce prey and force kit foxes into unfamiliar areas (Cypher 2006). High selenium levels in groundwater could adversely affect the California least tern and giant garter snake through accumulation in the food chain (they prey on small fish).

The City of Tracy has some suitable habitat for the San Joaquin kit fox, and this habitat may be adversely affected by continued urban development. However, the City of Tracy is a participant in the San Joaquin Multi-Species Habitat Conservation and Open Space Plan, for which a 10(a)(1)(B) permit was issued.

Reclamation is in the process of consulting with the USFWS on these interim renewal contract actions. The result of those ESA section 7 consultations, along with implementation of all applicable requirements (included in the project descriptions), will ensure that renewal of interim contracts will not result in jeopardy to threatened or endangered species. Reclamation will complete consultation with the USFWS on effects to species and critical habitats, including loss of habitat and reduced habitat values, resulting from on-going trends within the valley, under the jurisdiction of USFWS within the service areas. This draft EA will not be finalized until the section 7 consultations are complete. Biological Opinions are not provided at this time. Reclamation is not requesting any take coverage. Effects on Federally listed species are either the result of development projects (e.g. the City of Tracy) for which take is to be covered through section 10(a)(2) of the ESA, or the effects are related to farm practices such as pesticide use and choice of crops grown, which are not within the control or authority of Reclamation. As there will be no incidental take coverage, there will also be no reasonable and prudent measures and terms and conditions to be applied; all protective measures are contained up-front in the documents that will be sent to the USFWS.

**Cultural Resources**

Impacts to cultural resources associated with the Proposed Action will be comparable to those described under the No Action Alternative. No impacts to cultural resources are expected. The Proposed Action will not result in any changes in water delivery or in the construction of new delivery systems. The Proposed Action does not include any contract provisions that will result in “on-the-ground” changes proposed by the eight contract renewals. Given the lack of any possible impacts as a result of the Proposed Action, Reclamation concludes that there is no potential to affect historic properties.

**Indian Sacred Sites**

The Proposed Action involves the conveyance of water through existing facilities for established agricultural and M&I uses. Neither restriction of access to nor adverse effects to the physical integrity of any sacred sites will occur. As such, there will be no direct or indirect impacts to Indian sacred sites as a result of the Proposed Action.

**Indian Trust Assets**

Impacts to Indian Trust Assets (ITA) associated with the Proposed Action will be comparable to those described under the No Action Alternative. No physical changes to existing facilities are proposed and no new facilities are proposed. Continued delivery of CVP water to the contractors listed in Table 1 under an interim renewal contract will not affect any ITA because existing rights will not be affected.

**Environmental Justice**

Impacts to minority and disadvantaged populations associated with the Proposed Action will be comparable to those described for the No Action Alternative. Renewal of the interim renewal contracts, with only minor administrative changes to the contract provisions, will not result in a change in contract water quantities or a change in water use. The Proposed Action will not cause dislocation, changes in employment, or increase flood, drought, or disease. The Proposed Action will not disproportionately impact economically disadvantaged or minority populations. There will be no changes to existing conditions. Employment opportunities for low-income wage earners and minority population groups will be within historical conditions. Disadvantaged populations will not be subject to disproportionate impacts. Therefore, the Proposed Action will not differ from current conditions and is not expected to disproportionately affect minority or low income populations.

**Socioeconomic Resources**

Potential socioeconomic impacts associated with the Proposed Action will be comparable to those described under No Action Alternative; however, under the Proposed Action there is no potential for effects to occur due to tiered pricing. Thus, renewal of the interim contracts with only minor administrative changes to the contract provisions will not result in a change in contract water quantities or a change in water use. The renewal of the eight interim contracts will provide continued stability to the agricultural industry within the contractors’ service areas.

**Air Quality**

The Proposed Action is the execution of interim renewal contracts. Water delivery under these contracts will move through existing federal facilities via gravity and electrical pumps as it will

under the No Action Alternative. Consequently, there are no impacts to air quality as a result of the Proposed Action and a conformity analysis is not required.

### **Global Climate Change**

The Proposed Action is the execution of interim renewal contracts without the stipulation of tiered pricing. Water delivery under these contracts will be the same as it will be under the No Action Alternative; therefore, the Proposed Action will have no direct or indirect effects to climate.

### **Cumulative Impacts**

Reclamation's action is the execution of eight interim renewal water service contracts between the United States and the CVP contractors listed in Table 1. All eight of these contracts have existing interim renewal contracts. It is likely that subsequent interim renewals will be needed in the future until long-term contract renewals are executed. The Proposed Action will, in essence maintain the environmental status quo, i.e., the same amount of water will go to the same areas for the same uses (albeit under a different legal arrangement). Because the renewals of interim contracts maintain the status quo of deliverable quantities and CVP operations, and in essence only change the legal arrangements of a continuing action, they do not contribute to cumulative impacts in any demonstrable manner.

Climate change is considered a cumulative impact and refers to changes in the global or a regional climate over time. 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. 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 will be addressed within Reclamation's operation flexibility and therefore surface water resource changes due to climate change will be the same with or without either alternative. Neither alternative will involve physical changes to the environment or construction activities that could result in greenhouse gas emissions. In addition, deliveries of CVP water to the contractors listed in Table 1 are part of existing baseline conditions, and will therefore, not impact global climate change.

# RECLAMATION

*Managing Water in the West*

**Draft Environmental Assessment**

## **Three Delta Division and Five San Luis Unit Water Service Interim Renewal Contracts 2012 – 2014**

**EA-11-049**



**U.S. Department of the Interior  
Bureau of Reclamation  
Mid Pacific Region  
South-Central California Area Office  
Fresno, California**

**December 2011**



## **Mission Statements**

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to 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.

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# List of Acronyms and Abbreviations

AF	acre-feet (the volume of water one foot deep and an acre in area)
AFY	acre-feet per year
APE	Area of Potential Effect
BAAQMD	San Francisco Bay Area Air Quality Management District
BCID	Banta-Carbona Irrigation District
BWD	Broadview Water District
CAA	Clean Air Act
CARB	California Air Resources Board
CFR	Code of Federal Regulations
CH <sub>4</sub>	Methane
CNDDB	California Native Diversity Data Base
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
Contract year	March 1 through February 28/29 of the following year
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CWA	Clean Water Act
CWD	Centinella Water District
DD#1	Distribution District #1
DD#2	Distribution District #2
Delta	Sacramento-San Joaquin River Delta
DMC	Delta-Mendota Canal
DWR	California Department of Water Resources
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ESA	Endangered Species Act
Feasibility Report	<i>San Luis Drainage Feature Re-Evaluation Feasibility Report</i>
FEIS	Final Environmental Impact Statement
FWCA	Fish & Wildlife Coordination Act
GHG	greenhouse gases
ITA	Indian Trust Assets
JJWTP	John Jones Water Treatment Plant
M&I	Municipal and Industrial
MSWD	Mercy Springs Water District
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NO <sub>2</sub>	Nitrogen dioxide
NO <sub>x</sub>	Nitrogen oxides
O <sub>3</sub>	Ozone
O&M	Operation and Maintenance
PEIS	Programmatic Environmental Impact Statement

PM <sub>10</sub>	Particulate matter between 2.5 and 10 microns in diameter
PM <sub>2.5</sub>	Particulate matter less than 2.5 microns in diameter
PVWMA	Pajaro Valley Water Management Agency
Reclamation	Bureau of Reclamation
ROD	Record of Decision
ROG	Reactive organic gases
SCVWD	Santa Clara Valley Water District
SIP	State Implementation Plan
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLC	San Luis Canal
SLDFR	San Luis Drain Feature Reevaluation
SO <sub>2</sub>	Sulfur dioxide
SOD	South-of-Delta
SWP	State Water Project
U.S.C.	U.S. Code
USFWS	U.S. Fish and Wildlife Service
VOC	Volatile organic compounds
Widren	Widren Water District
WSID	West Side Irrigation District
WWD	Westlands Water District

# Section 1 Purpose and Need for Action

## 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) that included Title 34, the Central Valley Project Improvement Act (CVPIA). In accordance with and as required by Section 3404(c) of the CVPIA, the Bureau of Reclamation (Reclamation) proposes to execute three Delta Division and five San Luis Unit interim renewal contracts beginning March 1, 2012.

Interim renewal contracts are undertaken under the authority of the CVPIA to provide a bridge between the expiration of the original long-term water service contract and the execution of a new long-term water service contract. The eight water service contracts proposed for interim renewal in 2012 are listed in Table 1-1. These eight interim renewal contracts would be renewed for a two-year period from March 1, 2012 through February 28, 2014. In the event a new long-term water service contract is executed, the interim water service contract then-in-effect would be superseded by the long-term water service contract.

**Table 1-1 Contractors, Existing Contract Amounts, and Expiration Dates**

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Westlands Water District DD #2 (partial assignment from Mercy Springs Water District)	14-06-200-3365A-IR12-C	4,198	2/29/2012
<sup>1</sup> With an option to acquire an additional 2,500 acre-feet (AF)			

Reclamation has prepared this Environmental Assessment (EA) to determine the environmental effect of any actions resulting from the execution of these eight interim renewal contracts for up to two years (March 1, 2012 through February 28, 2014). Previous interim renewal EAs have been prepared for these contracts and approved as follows:

- Two 2010 EAs (Reclamation 2010a and 2010b) which covered contract years<sup>1</sup> 2010 through 2012
- A 2008 EA (Reclamation 2008) which covered the contract years 2008 through 2010
- A 2007 EA (Reclamation 2007) which covered January 1, 2008 through February 28, 2010
- A 2006 Supplemental EA (Reclamation 2006a) which covered the years 2006 and 2007
- A 2004 Supplemental EA (Reclamation 2004a) which covered the contract years 2004 and 2005
- A 2002 Supplemental EA (Reclamation 2002a) which covered the contract years 2002 and 2003
- A 2001 Supplemental EA (Reclamation 2001a) which covered the contract year 2001
- A 2000 Supplemental EA (Reclamation 2000a) which covered the contract year 2000
- A 1998 Supplemental EA (Reclamation 1998) which covered the contract years 1998 and 1999,
- A 1994 Interim Renewal Contracts EA (Reclamation 1994) which covered the contract years 1994 through 1997

These 11 previous documents are incorporated by reference into this analysis. Information from the previous EAs and Supplemental EAs will be summarized and updated, as needed into this EA.

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 2011 EA and the incorporated EAs and Supplemental EAs finds in large part that the interim renewal of the contracts is in essence a continuation of the "status quo," that is, they continue the existing use and allocation of resources (i.e., the same amount of water is being provided to the same lands for existing/ongoing purposes).

### **1.1.1 CVPIA Programmatic Environmental Impact Statement**

Section 3409 of the CVPIA required that Reclamation prepare a programmatic environmental impact statement (PEIS) before renewing long-term Central Valley Project (CVP) water service contracts. The PEIS, completed October 1999, analyzed the implementation of all aspects of the CVPIA, contract renewal being one of many programs addressed by this Act. A Record of Decision (ROD) was signed January 9, 2001 and both the PEIS and ROD are hereby incorporated by reference (Reclamation 1999a).

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

CVPIA Section 3404(c) mandated that, upon request, all CVP existing contracts be renewed. Implementation of other sections of CVPIA mandated actions and programs that require modification of previous contract articles or new contract articles to be inserted into renewed contracts. These programs include water measurement requirements (Section 3405[b]), water pricing actions (Section 3405[d]), and water conservation (Section 3405[e]).

The analysis in the PEIS as it relates to the implementation of CVPIA through contract renewal and the environmental impacts of implementation of the PEIS preferred alternative 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 which is reflective of minimum implementation of the CVPIA. This document will focus on the environmental impacts of implementation of the two forms of contracts described in the Alternatives Section.

### **1.1.2 Long-Term Contract Renewals**

The PEIS did not analyze site specific impacts of contract renewal but rather CVP-wide impacts of long-term contract renewal. Consequently, as contract renewal negotiations were completed, Reclamation prepared environmental documents that tiered from the PEIS to analyze the local effects of long-term contract renewals at the division, unit, or facility level.

Reclamation completed long-term contract renewal environmental documentation in early 2001 for CVP contracts in the Friant Division, Hidden Unit, and Buchanan Unit of the CVP (Reclamation 2000b, 2001b). Twenty-five of the 28 Friant Division long-term contracts were executed between January and February 2001, and the Hidden Unit and Buchanan Unit long-term contracts were executed in February 2001. The Friant Division long-term contracts with the City of Lindsay, Lewis Creek Water District, and City of Fresno were executed in 2005. By December 2010, Reclamation entered into 24 Friant Division 9(d) Repayment Contracts.

A final environmental impact statement (EIS) analyzing effects of the long-term renewal of 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 of the Feather Water District water-service replacement contract was completed August 15, 2005 and the long-term 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 CVP contracts for the Shasta, Trinity and Sacramento River Divisions were executed between February and May 2005.

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

Reclamation completed long-term environmental documents for the majority of the American River Division (Reclamation 2005g). The ROD for the American River long-term contract renewal EIS was executed for five of the seven contractors<sup>2</sup>. Reclamation has executed contracts with four of the five contractors covered by the ROD. The remaining two not covered by the ROD are still undergoing Endangered Species Act (ESA) consultation and awaiting the completion of a Biological Opinion. The current contracts for the American River Division contractors that have not yet executed a long-term renewal contract expire in 2011. Reclamation is pursuing execution of these remaining long-term water service contract renewals within this interim period (March 1, 2010 to February 29, 2012).

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 contract renewal environmental documentation for the San Felipe Unit as well.

Cross Valley Contractors and San Luis Unit long-term environmental documentation and contract renewal is pending. Reclamation is pursuing completion of environmental compliance for the long-term contracts under separate environmental documents within the analysis period of this EA (March 1, 2012 to February 28, 2014).

### **1.1.3 Water Service Contracts within the Delta Division, San Felipe Division, and San Luis Unit**

CVP water service contracts in the Delta Division, San Felipe Division, and San Luis Unit 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. The purposes of a water service contract are to stipulate provisions under which a water supply is provided, to produce revenues sufficient to recover an appropriate share of capital investment, and to pay the annual operations and maintenance (O&M) costs of the CVP.

Reclamation has completed negotiating the provisions of the long-form of the interim renewal contract with the Delta Division, San Felipe Division, and San Luis Unit contractors. Reclamation recognizes that the capacity to deliver CVP water has been constrained in recent years because of several hydrologic, regulatory, and operational uncertainties, and that these uncertainties may exist or become more constraining in the future as competing demands for water resources intensify. Therefore, the likelihood of contractors receiving the amount of water set out in the long-term renewal contract and the interim renewal contracts in any given year is uncertain, but likely similar to, or less than levels of historic deliveries.

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<sup>2</sup> Although the American River Division has eight contractors, one is a water rights contract with no expiration and is not part of the contract renewal process,

## 1.2 Purpose and Need

The purpose of the Proposed Action is to execute eight interim contracts in order to extend the term of the contractors' existing interim renewal contracts for two years, beginning March 1, 2012 and ending February 28, 2014. Execution of these eight interim 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 contract can be executed.

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 agricultural production and municipal viability for these contractors.

## 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 1-1 under the proposed interim renewal contracts. The water would be delivered for agricultural or municipal and industrial (M&I) purposes within Reclamation's existing water right place of use. The water would be delivered within the current contractor service area boundaries using existing facilities for a period of up to two years. See Appendix A for contractor-specific service area maps.

In 1999, Mercy Springs Water Storage District (MSWD) assigned 6,260 AF per year (AFY) of its Delta Division CVP Water Service Contract (Contract No. 14-06-200-3365A-IR2) jointly to Pajaro Valley Water Management Area (PVWMA), Santa Clara Valley Water District (SCVWD), and Westlands Water District (WWD) Distribution District No. 1 (DD#1). At the time of the assignment, PVWMA did not have infrastructure in place to receive their portion of the CVP water. Consequently, an agreement was prepared between PVWMA, WWD, and SCVWD which allows SCVWD and WWD DD#1 to take delivery of the water on an interim basis until PVWMA is ready to take delivery of the CVP water for beneficial use in its service area. To date, conveyance facilities to transport the CVP water to PVWMA have not been constructed and PVWMA will not be able to take delivery of their portion of CVP water under Contract No. 14-06-200-3365A-IR2 unless or until a conveyance mechanism is in place for PVWMA to physically receive this water. Since it is highly unlikely that PVWMA will have the ability to take CVP water during the two-year interim renewal contract period, water deliveries under this contract will be analyzed under SCVWD and WWD DD#1 but not within PVWMA consistent with previous interim renewals for this contract.

## 1.4 Issues Related to CVP Water Use Not Analyzed

### 1.4.1 Contract Service Areas

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

compliance and documentation would be completed before Reclamation approves a land inclusion or exclusion to any contractor's service area.

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

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

#### **1.4.3 Contract Assignments**

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

#### **1.4.4 Warren Act Contracts**

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

#### **1.4.5 Purpose of Water Use**

Use of contract water for agricultural irrigation use 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.

#### **1.4.6 Drainage**

This EA acknowledges ongoing trends associated with the continued application of irrigation water and production of drainage related to that water. It does not analyze the effects of Reclamation's providing agricultural drainage service to the San Luis Unit. The provision of drainage service is a separate federal action that has been considered in a separate environmental document, the *San Luis Drainage Feature Re-Evaluation Final Environmental Impact Statement* [SLDFR-FEIS] (Reclamation 2005h). The SLDFR-FEIS evaluated seven action alternatives in addition to the no action alternative for implementing drainage service within the San Luis Unit. The ROD for the SLDFR-FEIS was signed March 9, 2007. Subsequently, Reclamation prepared the *San Luis Drainage Feature Re-Evaluation Feasibility Report* (Feasibility Report) to evaluate the feasibility of implementing the preferred alternative. As part of the Feasibility Report, Reclamation is preparing to construct a Demonstration Treatment Facility near Firebaugh, California within Panoche Drainage District's San Joaquin River Improvement Project reuse area a component of the Grasslands Drainage Area. An EA for the facility (EA-10-030) entitled *San Luis Drainage Feature Reevaluation Demonstration Treatment Facility at Panoche Drainage District* was prepared and released for public comment September 19, 2011. The primary

purpose of the facility is to demonstrate and operate the reverse osmosis and selenium biotreatment technologies described in the Feasibility Report in order to collect cost and performance data required for final design of the corresponding full-scale drainage service treatment components to be constructed in WWD as required by Public Law 86-488 and the *Sumner Peck Ranch v. Reclamation* Court Order. The actions considered in this EA would not alter or affect the analysis or conclusions in the SLDFR-FEIS or its ROD.

## 1.5 Potential Issues

Consistent with previous interim renewal contract EAs for other divisions of the CVP including the 2010 EA for 11 San Luis Unit contractors (Reclamation 2010a), the 2010 EA for 9 Cross Valley and Delta/San Felipe contractors (Reclamation 2010b), and the 2010 EA for San Luis Water District and Panoche Water District (Reclamation 2010c), all of which are hereby incorporated by reference, this EA considers the potential direct, indirect, and cumulative effects of these eight interim renewal contracts on the following resources:

- Water Resources
- Land Use
- Biological Resources
- Cultural Resources
- Indian Sacred Sites
- Indian Trusts Assets (ITA)
- Environmental Justice
- Socioeconomic Resources
- Air Quality
- Global Climate



## Section 2 Alternatives Including the Proposed Action

The No Action Alternative and the Proposed Action include the renewal of eight interim water service contracts. The eight interim contracts, their contract entitlements, and purpose of use under both alternatives can be found in Table 2-1 below.

**Table 2-1 Contracts, Contract Entitlements and Purpose of Use**

Contractor	Contract number	Contract Quantity (AF)	Purpose of Use
<b>DELTA DIVISION</b>			
City of Tracy (partial assignment from West Side Irrigation District)	14-06-200-4305A-IR12-B	2,500	M&I only
City of Tracy (partial assignment from Banta-Carbona Irrigation District)	7-07-20-W0045-IR12-B	5,000	M&I only
PVMWA, SCVWD, and WWD DD#1 (3-way assignment from MSWD)	14-06-200-3365A-IR12-B	6,260	Ag &/or M&I
<b>SAN LUIS UNIT</b>			
Westlands Water District	14-06-200-495A-IR2	1,150,000	Ag &/or M&I
Westlands Water District DD#1 (full assignment from Centinella Water District)	7-07-20-W0055-IR12-B	2,500	Ag &/or M&I
Westlands Water District DD #1 (full assignment from Widren Water District)	14-06-200-8018-IR12-B	2,990	Ag &/or M&I
Westlands Water District DD #1 (full assignment from Broadview Water District)	14-06-200-8092-IR12	27,000	Ag &/or M&I
Westlands Water District DD #2 (partial assignment from MSWD)	14-06-200-3365A-IR12-C	4,198	Ag &/or M&I

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

- A. Execution of each interim renewal contract is considered to be a separate action;
- B. A two year interim renewal period is considered in the analysis, though contracts may be renewed for a shorter period.
- C. The contracts would be renewed with existing contract quantities as reflected in Table 2-1;
- 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 1999a) adapted to apply for an interim period.

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

Section 3405(d) of the CVPIA requires tiered pricing to be included in contracts greater than three years in duration. Consequently, if at least 80 percent of the contract total is delivered in any year for contracts greater than three years, in such year incremental charges based on the 80/10/10 pricing structure would be collected and paid to the Restoration Fund.

### **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 also summarized in EA-07-56 (Reclamation 2007) and are incorporated by reference.

In addition, the No Action Alternative includes environmental commitments as described in the Biological Opinion for the CVPIA PEIS (Reclamation 2000c).

## **2.2 Proposed Action**

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 2-1. These are the same eight contracts included under the No Action Alternative. WWD's main contract (14-06-200-495A-IR2) is currently on its second interim renewal contract. The Proposed Action would be their third. The remaining seven interim renewal contracts listed in Table 2-1 are currently on their twelfth interim renewal contract. The Proposed Action would be their thirteenth. Drafts of the interim renewal contracts were released for public comment on December 6, 2011 and are available at the following:

[http://wwwpreview.its.mp.usbr.gov/cvpia/3404c/lt\\_contracts/2012\\_int\\_cts/index.html](http://wwwpreview.its.mp.usbr.gov/cvpia/3404c/lt_contracts/2012_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 that a new long-term water contract is executed, that interim renewal contract would then expire.

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 (see Appendix A for service area maps). The contract service area for the proposed interim renewal contracts have not changed from the existing interim renewal contracts. The proposed interim renewal contract quantities (Table 2-1) 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 terms and conditions of the 2010 interim renewal contracts analyzed within EA-09-101 and EA-09-126 (Reclamation 2010a and 2010b) are incorporated by reference into the Proposed Action.

The eight interim water service 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 a result, by their express terms the interim renewal contracts analyzed herein would conform to any applicable requirements lawfully imposed under the federal ESA or other applicable environmental laws.

### **2.2.1 Comparison of Alternative Differences**

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

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

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

Non-renewal of existing contracts is considered infeasible based on Section 3404(c) of the CVPIA which states that "...the Secretary **shall**, upon request renew any existing long-term repayment of water service contract for the delivery of water from the CVP..." (emphasis added). 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.

### **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 rejected from the analysis of the eight 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 interim renewal contractors in most years in order to comply with Section 3406(b)(2) of the CVPIA. 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 wetter years and is necessary to support investments for local storage, water conservation improvements and capital repairs.

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

## Section 3 Affected Environment and Environmental Consequences

This section describes the service area for the contractors listed in Table 2-1 which receive CVP water from the Sacramento-San Joaquin River Delta (Delta) via Delta Division, San Felipe Division, and San Luis Unit CVP facilities. The study area, shown in Figure 1-1, includes portions of Fresno, Kings, and San Joaquin Counties as well as all of Santa Clara County. Maps of individual contractor service areas can be found in Appendix A.

For ease of discussion in this document, the analysis will be addressed in groups of contracts related to one entity. For example, two of the interim renewal contracts that will be analyzed in this document are previous partial assignments to the City of Tracy from West Side Irrigation District (WSID) and Banta-Carbona Irrigation District (BCID). The service areas and thus the affected environment for both contracts is the City of Tracy; therefore, the City of Tracy's receipt of CVP water from both of these contracts will be addressed in the analysis based on an evaluation of these contract quantities in the City of Tracy service area. The same is true of the assignments and partial assignments to WWD DD#1 from Broadview Water District (BWD), Centinella Water District (CWD), Widren Water District (Widren), and the three-way partial assignment from MSWD shared with PVWMA and SCVWD as well as the partial assignment from MSWD to WWD Distribution District #2 (DD #2). These interim renewal contracts will be analyzed with the WWD interim renewal contract as a unified analysis of the total water quantity going to WWD and their affects in the WWD's service area.

### 3.1 Water Resources

#### 3.1.1 Affected Environment

All of the water supplied to the interim renewal contractors analyzed within this EA is pumped from the Delta and originates in the Sacramento and San Joaquin Rivers. CVP facilities provide for the transport of water through both the San Francisco Bay-Delta Estuary and the Sacramento and San Joaquin River systems and provide for the delivery of water to CVP contractors in both Santa Clara County and the San Joaquin Valley. CVP water is used for the irrigation of agricultural areas, for M&I uses, for the restoration of fisheries and aquatic habitat in the waterways that have been affected by water development, for wildlife refuges, and for other purposes. The largest use of CVP water is for agricultural irrigation. The greatest demand for irrigation water occurs in mid- to late summer, as crops mature and crop water use increases. During the winter, farmers also use water for frost control and pre-irrigation of fields to saturate the upper soil as well as irrigation of permanent crops.

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. 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.

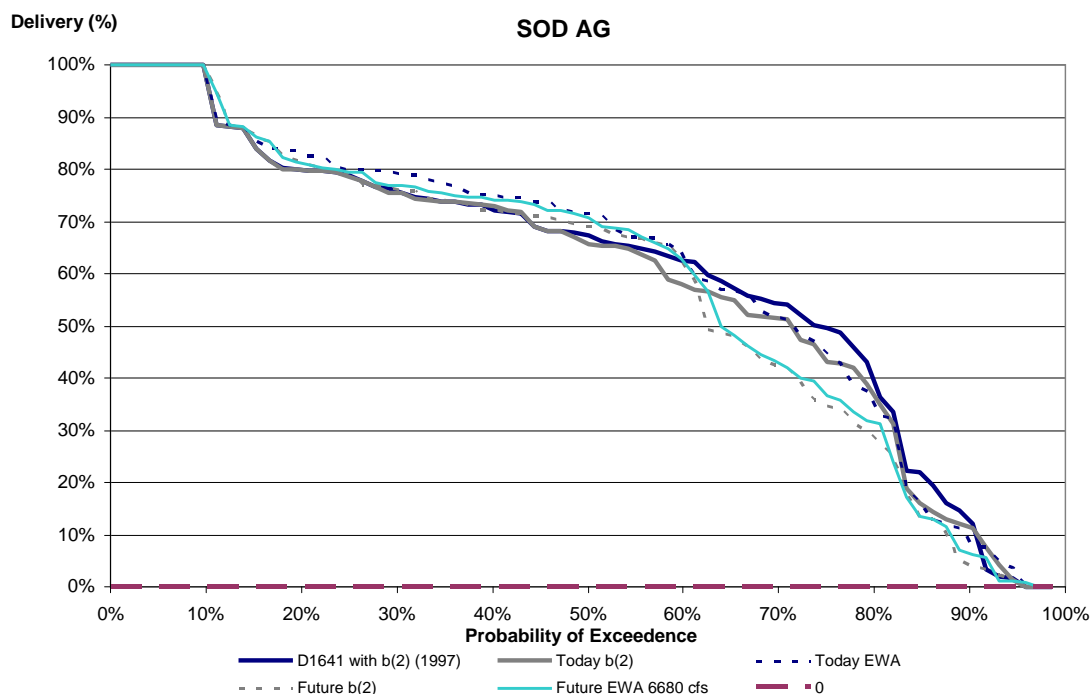
### Water Delivery Criteria

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 (SOD) water deliveries (Reclamation 1999a), and this information has been incorporated into the modeling for the current CVP/State Water Project (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, SOD CVP agricultural water service contractors would receive an average of 59 percent of their current total contract amounts (Reclamation 1999a). These conditions would result in the delivery of total contract amounts to agricultural water service contractors located SOD approximately 15 percent of the time. Minimum deliveries of zero would occur only in critically dry years.

Additionally, tables from the CVP/SWP Coordinated Operations Plan (Reclamation 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 3-1). Under these conditions, modeling predicts that tiered pricing (if it were required) would apply once every fourth or fifth year.

**Figure 3-1 CVP SOD Agricultural Allocation Exceedance Chart**



Source: Reclamation 2004a.

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

In 2007, a Water Needs Assessment was developed in order to identify the beneficial and efficient future water needs and demands for each interim renewal contractor (Appendix B). The 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 analysis for the Water Needs Assessment did not consider that the CVP's ability to deliver CVP water has been constrained in recent years and may be constrained in the future because of many factors including hydrologic conditions and implementation of federal and state laws. The likelihood of contractors actually receiving the full contract amount in any given year is uncertain. No new water needs assessments are anticipated.

### ***City of Tracy***

The City of Tracy, a Delta Division contractor, receives its CVP supply from a turnout on the Delta-Mendota Canal (DMC). Because the CVP water is used for M&I purposes, it must be treated before delivery. The treatment process for the CVP supply consists of chemical oxidation, coagulation, flocculation, filtration, and chlorination. In addition, chloramines (the combination of chlorine and a small amount of ammonia) are used as the residual disinfectant in the water distribution system. The CVP water is transferred by pipeline to the water treatment plant and, after treatment, transferred by pipeline to M&I users. The City of Tracy provides water service to all of its approximately 78,000 residents and to approximately 400 residents of the Larch-Clover County Services District. The City also provides water service to the unincorporated Patterson Business Park. The City currently delivers approximately 18,000 AFY within its service territory and expects that demand will grow to 27,000 AFY by the year 2020 (Tracy 2005).

**CVP Contracts** On July 22, 1974 the City of Tracy signed a long-term contract (Contract 14-06-200-7858A) with Reclamation for 10,000 AFY of CVP water (Reclamation 1974). Renewal of this contract is not part of the Proposed Action since the long-term water service contract with Reclamation does not expire until February 28, 2014. At present, the City of Tracy and Reclamation are in ongoing negotiations for long-term contract renewal which includes combining the two assignments described below under this contract for a total allocation of 17,500 AFY. Renewal of the long-term contract will require separate environmental analysis and approval from Reclamation.

**Assignments** In 2004, Reclamation approved two assignments to the City of Tracy: (1) an assignment from WSID for 2,500 AFY (Contract No. 14-06-200-4605A-IR13-B) and (2) an assignment from BCID for 5,000 AFY (Contract No. 7-07-20-W0045-IR13-B). The assignments from BCID and WSID increased the City's CVP water supply from 10,000 AF to 17,500 AF and converted the use of these water supplies from agricultural to M&I. The conversions and assignments of these two contracts were previously analyzed under EA-01-064

and EA-01-063 and are hereby incorporated by reference (Reclamation 2003a, 2003b). The twelfth interim renewal contracts for these assignments were issued in 2010 and remain in effect until February 29, 2012 (Reclamation 2010a). These two assignments are the two interim renewal contracts analyzed within this EA as shown in Table 2-1.

**Water Needs Analysis** The City of Tracy's water needs analysis completed by Reclamation in May 2006 estimated that there would be no unmet demand for 2025 dependent on continuation of transfers from other water districts such as BCID and WSID (see Appendix B).

**Groundwater Resources in the City of Tracy** The Tracy groundwater storage basin underlying the city is 600 square miles with a safe yield reported to be 9,000 AFY (Tracy 2002 and 2005). Safe yield, or current perennial yield, is the maximum quantity of water that can be annually withdrawn from a groundwater basin over a long period of time (during which water supply conditions approximate average conditions) without developing an overdraft condition. The City of Tracy pumps an annual maximum of 6,700 AFY from nine groundwater wells. Five of the nine wells are located in the main portion of Tracy. Water from these wells is pumped directly into the primary water main after chlorination and mixed with treated water from the John Jones Water Treatment Plant (JJWTP). The remaining four wells are located at the JJWTP and pump directly into the JJWTP clear wells, where the groundwater is blended with treated surface water after chlorination. The long-term objectives of the City of Tracy are to only utilize groundwater for emergency and peak demand needs and to utilize the aquifer for water storage to improve water quality and increase water system reliability for Tracy's water customers (Tracy 2005 and 2006).

**Other Available Water Supplies** Since 2005, the City of Tracy has received a supplemental supply from the Stanislaus River through the South County Water Supply Program, which is a cooperative effort of the South San Joaquin Irrigation District and the Cities of Manteca, Escalon, Lathrop, and Tracy (South San Joaquin Irrigation District 2009).

On May 26, 2011, Reclamation approved the long-term (through contract year 2035) groundwater banking of up to 10,500 AFY of the City of Tracy's available CVP surface water supplies within Semitropic Water Storage District. The approval of this banking program was analyzed under EA-09-164 and is hereby incorporated by reference (Reclamation 2009).

#### ***Santa Clara Valley Water District***

SCVWD, a San Felipe Division contractor, is a water supply wholesaler who conserves, imports, treats, distributes, and is responsible for the quality of water within Santa Clara County for M&I and agricultural purposes. CVP water is conveyed from San Luis Reservoir through the Pacheco Tunnel and Conduit. Water is then conveyed from the Pacheco Conduit into the Santa Clara Conduit to serve SCVWD. Total annual water use in Santa Clara County is currently estimated to be 400,000 AF. Approximately 10 percent of this is for agricultural purposes. Most of the remaining use is for M&I purposes, which includes residential, commercial, industrial, and institutional water use. Water is also used to meet environmental needs, such as maintenance of minimum stream flows to meet fishery needs.

SCVWD owns and operates 17.3 miles of canals, 8.4 miles of tunnels, 142 miles of pipelines, 3 pumping stations and 3 treatment plans as part of the overall water treatment, distribution and recharge systems.

**CVP Contracts** In 1977, SCVWD entered into a long-term contract with Reclamation for 152,000 AFY (Contract No. 7-07-20-W0023) of CVP water. This contract was amended to incorporate Repayment options and to address CVPIA provisions. Renewal of this contract is not part of the Proposed Action since the long-term water service contract with Reclamation does not expire until December 28, 2017.

*Assignments* In 1999, Reclamation approved the three-way partial assignment (Contract No. 14-06-200-3365A-IR2) of 6,260 AFY to SCVWD, WWD DD#1, and PVWMA from MSWD as described previously (Reclamation 1999b). The twelfth interim renewal contract was issued for this assignment in 2010 and remains in effect until February 29, 2012 (Reclamation 2010b). This assignment is one of the interim renewal contracts analyzed in this EA as shown in Table 2-1.

**Water Needs Analysis** SCVWD's water needs analysis (Appendix B) completed by Reclamation in May 2006 estimated that there would be an unmet demand of 156,874 AF for 2025.

**Groundwater Resources in SCVWD** The three major groundwater basins in the SCVWD service area, which are interconnected and occupy nearly 30 percent of the total county area, are Santa Clara Valley, Coyote and Llagas Basins. Groundwater supplies nearly half of the total water used in Santa Clara County and nearly all of that use is in the Coyote and Llagas basins.

Historically, Santa Clara County has experienced as much as 13 feet of subsidence caused by excessive groundwater withdrawal. The rate of subsidence slowed in 1967 when imported water was obtained to replenish groundwater supplies. SCVWD was created partially to protect groundwater resources and minimize land subsidence. SCVWD operates a comprehensive groundwater management program, including onstream and offstream recharge facilities and extensive monitoring. Recharge to the groundwater basins consists of both natural groundwater recharge and artificial recharge through local surface and imported water. SCVWD owns and operates more than 30 recharge facilities and six major recharge systems with nearly 400 acres in recharge ponds. These facilities percolate both local and imported water into the groundwater aquifer. SCVWD does not have its own groundwater extraction facilities, but does levy a charge for all groundwater extractions by local retailers and individual users overlying the Santa Clara Valley Groundwater Basin.

In 2000, about 165,000 AF of groundwater was used (Santa Clara County 2003). Today, SCVWD reduces the demand on groundwater and minimizes subsidence through conjunctive use of surface water and groundwater. SCVWD monitors land subsidence through benchmark surveying, groundwater elevation monitoring, and data from compaction wells.

**Other Available Water Supplies** SCVWD owns and operates 11 storage reservoirs with a combined storage capacity of 170,000 AF. These reservoirs are located on most of the major

streams in the SCVWD service area. Local surface water supplies include the stream flows that feed into and out of SCVWD's reservoirs, stream flows that are not captured by reservoirs, and water that flows overland into reservoirs. SCVWD also has a contract with the California Department of Water Resources (DWR) for 100,000 AFY from the SWP. Water is delivered via the Banks pumping plant in the southern Delta and the South Bay Aqueduct to a terminal tank at the Penitencia Water Treatment Plant in east San Jose. In addition, SCVWD has established rights to 35 percent of the existing Semitropic Groundwater Banking Program in Kern County which is used to offset shortfalls in annual water supplies. The agreement reserves for SCVWD up to 350,000 AF of storage, and improves SCVWD's supply reliability by enabling storage of wet-year water for use during future dry years.

On April 18, 2006, Reclamation approved the long-term (through contract year 2027) groundwater banking of up to 100,000 AFY of SCVWD's available CVP surface water supplies within Semitropic Water Storage District. The approval of this banking program was analyzed under EA-05-126 and is hereby incorporated by reference (Reclamation 2005i).

### ***Westlands Water District***

WWD, a San Luis Unit contractor, receives CVP water both from the DMC and the San Luis Canal (SLC) with the majority diverted from the SLC. The DMC delivers Delta water to the west side of the San Joaquin Valley, ending at the Mendota Pool, 30 miles west of the city of Fresno. The SLC, which originates at O'Neill Forebay, is a joint use facility with the SWP. Facilities utilized to convey water to WWD include the O'Neil Pumping-Generating Plant and Intake Canal, San Luis Dam and Reservoir (for storage as needed), Dos Amigos Pumping Plant, Coalinga Canal, the Pleasant Valley Pumping Plant, and the SLC from O'Neil Forebay to Kettleman City.

All water is metered at the point of delivery through more than 3,200 agricultural and 250 M&I meter locations. WWD's permanent distribution system consists of 1,034 miles of closed, buried pipeline. The district also operates and maintains the 12-mile-long, concrete-lined, Coalinga Canal, the Pleasant Valley Pumping Plant, and the laterals that supply CVP water to the communities of Coalinga and Huron.

**CVP Contracts** On June 5, 1963 WWD entered into a long-term contract (Contract No. 14-06-200-495A) with Reclamation for 1,008,000 AF of CVP supply from the SLC, Coalinga Canal, and Mendota Pool (Reclamation 1963). In a stipulated agreement dated September 14, 1981, the contractual entitlement to CVP water was increased to 1.15 million AF. The long-term contract expired December 31, 2007. The second interim renewal contract for this contract was issued in 2010 and remains in effect until February 29, 2012 (Reclamation 2010a). This contract is one of the interim renewal contracts analyzed in this EA as shown in Table 2-1.

**Assignments** In 1999, Reclamation approved the three-way partial assignment (Contract No. 14-06-200-3365A-IR2) of 6,260 AFY to SCVWD, WWD DD#1, and PVWMA from MSWD as described previously (Reclamation 1999b). Between 2004 and 2006, Reclamation approved three other contract assignments from DMC contractors to DD#1. These include: (1) 27,000 AFY from BWD (Contract No. 14-06-200-8092-IR8), (2) 2,990 AFY from Widren (Contract No. 14-06-200-8018-1R7), and (3) 2,500 AFY from CWD [Contract No. 7-07-20-W0055] (Reclamation 2006b, 2005j, 2004d). In 2003, Reclamation approved the partial assignment of

4,198 AFY from MSWD (Contract Number 14-06-200-3365A) to WWD DD#2 (Reclamation 2002b). The twelfth interim renewal contract for these assignments were issued in 2010 and remains in effect until February 29, 2012 (Reclamation 2010b). These assignments are included as interim renewal contracts analyzed in this EA as shown in Table 2-1.

**Water Needs Analysis** WWD's water needs analysis (Appendix B) completed by Reclamation in May 2006 estimated that there would be an unmet demand of 1,224,287 AF for 2025.

**Groundwater Resources in WWD** The groundwater basin underlying WWD is comprised generally of two water-bearing zones: (1) an upper zone above a nearly impervious Corcoran Clay layer containing the Coastal and Sierran aquifers and (2) a lower zone below the Corcoran Clay containing the sub-Corcoran aquifer (DWR 2003). These water-bearing zones are recharged by subsurface inflow primarily from the west and northeast, and percolation of groundwater, and imported and local surface water. The Corcoran Clay separates the upper and lower water-bearing zones in the majority of WWD but is not continuous in the western portion of WWD.

Groundwater pumping started in this portion of the San Joaquin Valley in the early 1900's. Prior to delivery of CVP water, the annual groundwater pumpage in WWD ranged from 800,000 to 1,000,000 AF during the period of 1950-1968. The majority of this pumping was from the aquifer below the Corcoran Clay, causing the sub-Corcoran groundwater surface to reach the average elevation of more than 150 feet below mean sea level by 1968. The large quantity of groundwater pumped prior to delivery of CVP water caused a significant amount of land subsidence in some areas (DWR 2003). WWD has implemented a groundwater management program to reduce the potential for future extreme subsidence.

After delivery of CVP water supplies into WWD began, groundwater pumping declined to about 200,000 AFY, or less, in the 1970's (DWR 2003). The reduction in groundwater pumping stabilized groundwater depths and in most portions of WWD, groundwater levels significantly recovered. During the early 1990's, groundwater pumping greatly increased because of the reduced CVP water supplies caused by an extended drought, and regulatory actions related to the CVPIA. Groundwater pumping quantities are estimated to have reached 600,000 AFY during 1991 and 1992 when WWD received only 25 percent of its contractual entitlement of CVP water. The increase in pumping caused a decline in groundwater levels which have since recovered. Normal or near normal CVP water supplies from 1995 to 1999 have reduced the estimated annual quantity of groundwater pumped to approximately 60,000 AFY, resulting in an increase in water surface elevations. However, since 2000, WWD's water supply has been significantly reduced once again resulting in groundwater pumping to over 200,000 AFY.

WWD has an approved groundwater management plan. WWD estimates the current safe yield of groundwater underneath the district to be approximately 175,000 to 200,000 AFY. However, this quantity of groundwater is generally only pumped when other supplemental supplies are not available. This is due to the poorer quality of the groundwater compared to surface water. WWD supplies groundwater to some district farmers and owns some groundwater wells, with the remaining wells privately owned by water users in the district.



**Other Available Water Supplies** Other water supply sources in the district include flood flows from the Kings River, which are available periodically and diverted from the Mendota Pool as well as transfers of supplemental water from other sources.

### **3.1.2 Environmental Consequences**

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

Contract provisions under the No Action Alternative stipulate that a tiered pricing structure (80/10/10 tiered pricing) would be applied. Tiered pricing is mandated under the water conservation section of the CVPIA for contracts of more than three years. Due to chronic shortages in CVP contract deliveries for SOD contractors, modeling predicts that the number of years when tiered pricing is applicable would be limited to approximately 22 or 24 percent of the time [or one year out of four or five] (Figure 3-1) 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. Water users within the service area of these contractors have been installing high efficiency irrigation systems without the incentive of CVPIA tiered pricing in order to manage drainage and to maximize available supplies during times of shortage. The systems are frequently utilized to sustain permanent crops, and it is unlikely that the systems would be abandoned on such crops even in years of full supplies. Much of the WWD is drainage impacted, so high efficiency irrigation is implemented as a mechanism for reducing deep percolation and subsurface drainage production.

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.

### ***Proposed Action***

Impacts to water resources associated with the Proposed Action would be comparable to those described under No Action Alternative although tiered pricing provisions are not included in these contracts. Renewal of the interim 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. Therefore, there would be no effect on surface water supplies or quality.

The renewal of interim 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 are expected to occur during the short timeframe of this renewal. Therefore, the Proposed Action would have no adverse impacts on water resources.

### ***Cumulative Impacts***

Reclamation's South-Central California Area Office has completed environmental analysis on a total of 154 water service related actions out of 182 proposed between 2007 and 2011 (Table 3-1). These actions include: water assignments, water banking activities, water contracts including renewals, amendments and extensions, water exchanges, land exclusions, land inclusions, execution of contracts for surplus water, water transfers, and Warren Act contracts for conveyance and/or storage of non-CVP water in federal facilities.

**Table 3-1 Reclamation's Completed Water Service Related Actions 2006-2011**

<b>Proposed Water Service Related Projects</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>Pending</b>
Assignments	0	1	0	0	5	5
Banking	2	5	10	1	4	3
Contracts	2	0	2	3	4	2
Exchanges	5	7	9	4	3	5
Exclusion	2	0	3	3	0	0
Inclusion	4	2	1	3	0	2
Surplus Water	4	3	2	3	2	0
Transfers	5	10	10	7	1	3
Warren Act Contracts	11	8	21	5	5	8
<b>SOD Proposed Water Service Projects</b>	<b>9</b>	<b>15</b>	<b>26</b>	<b>16</b>	<b>11</b>	<b>9</b>
<b>Pending Water Service Projects</b>	<b>1</b>	<b>2</b>	<b>7</b>	<b>2</b>	<b>15</b>	<b>27</b>
<b>Total Proposed Projects<sup>1</sup></b>	<b>141</b>	<b>109</b>	<b>181</b>	<b>113</b>	<b>57</b>	<b>100</b>
<sup>1</sup> Includes all projects proposed for a particular year, not just water service related projects.						

Seventy-seven of the total projects proposed between 2006 and 2011 were specific to SOD contractors. A total of 27 proposed water service projects are still pending from the past five years including the 15 water service projects proposed for 2011 (Table 3-1). Nine of the pending projects, including this EA, are specific to SOD contractors. All of the pending actions are currently undergoing environmental analysis and any future proposed activities would require

environmental review prior to implementation. It is likely more districts will request additional water service actions in 2011, similar to previous years. The Proposed Action is not likely to cumulatively impact this trend.

Reclamation's action is the execution of eight interim renewal water service contracts between the United States and the CVP contractors listed in Table 2-1. All eight of these contracts have existing interim renewal contracts. It is likely that subsequent interim renewals will be needed in the future until long-term contract renewals are executed. The Proposed Action 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 a different legal arrangement). Because the renewals of interim contracts maintain the status quo of deliverable quantities and CVP operations, and in essence only change the legal arrangements of a continuing action, they do not contribute to cumulative impacts in any demonstrable manner.

## **3.2 Land Use**

The following discussion provides information on land uses within each interim renewal contractor's service area and includes a discussion of current agriculture and future trends in agriculture as applicable. While this information is indicative of land use and growth trends in the interim renewal contractor's service areas, it is not intended to be a comprehensive list of every development project planned or proposed.

### **3.2.1 Affected Environment**

#### ***City of Tracy***

The City of Tracy is located in San Joaquin County about 60 miles east of San Francisco and 60 miles south of Sacramento. Tracy city limits encompasses 21 square miles and is entirely classified as urban use (Tracy 2005).

#### ***Santa Clara Valley Water District***

The SCVWD, which has the same boundaries as Santa Clara County, covers about 1,300 square miles from San Francisco Bay south to the Pajaro River. The Santa Clara Valley runs the entire length of Santa Clara County from north to south, bounded by the Diablo Range to the east and the Santa Cruz Mountains to the west. The valley is bounded to the northwest by the southern reaches of San Francisco Bay and to the south by the Pajaro River. Most of the development and water use occurs in the 350 square mile valley floor. SCVWD encompasses 15 cities, including San Jose, Mountain View, Palo Alto, Santa Clara, Sunnyvale, and Gilroy and includes much of the area known as the "Silicon Valley".

#### ***Westlands Water District***

WWD covers almost 950 square miles of prime farmland within between the California Coast Range and the trough of the San Joaquin Valley in western Fresno and Kings Counties. It averages 15 miles in width and stretches 70 miles in length from Mendota on the north to Kettleman City on the south. Interstate 5 is located near the district's western boundary.

Currently WWD's district boundaries encompass 604,000 acres with an irrigable acreage of 567,800 acres. More than 60 different crops are grown commercially in WWD. The cropping patterns have changed over the years depending upon water availability, water quality, the agricultural economy, and market factors. The acreage trend is toward planting of vegetable and permanent crops while cotton and grain acreage have decreased. Unlike many other key growing areas of California, urbanization is not a direct threat to productivity. The major community entirely within WWD is Huron. Three Rocks and Five Points are smaller communities within WWD. The communities of Firebaugh, Mendota, Kerman, Tranquillity, San Joaquin, Lemoore, and Stratford lie just outside the district's eastern edge.

### **3.2.2 Environmental Consequences**

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

The renewal of contracts, with only minor administrative changes to the contract provisions, would not provide for additional water supplies that could act as an incentive for increased acreage of agricultural production. Generally, lands within the interim renewal contractor's service area that are productive are farmed or have maximized M&I development with the CVP water available. Uncertainty of supply due to the short-term duration of the renewal could act as a disincentive for farmers to preserve their lands from urban developments. However, most areas within the interim renewal contractor's service area are not near current M&I growth. Also, for those limited areas that are near such growth, the short terms of the interim renewal contracts do not provide sufficient certainty to permit the M&I development of land now in agricultural production, meaning that the No Action Alternative is not likely to have impacts on conversion of irrigated land to other uses.

Contract provisions stipulating the pricing structure for delivered water (80/10/10 tiered pricing) are not likely to result in changes in water use as the interim renewal contractors are water short even in high allocation years. Land would continue to be used for existing purposes. Also because this is an interim renewal process, it is unlikely that the uncertainty of the water supply would result in any changes in agricultural practices that would influence land use.

Having water used on a less than five acre parcel defined as M&I would not result in a change in land use but would only 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 this changing definition would have any effects on land use resources.

#### ***Proposed Action***

Impacts to land use associated with the Proposed Action would be comparable to those described under the No Action Alternative. Tiered pricing with its potential price increases is not included as part of the Proposed Action. For reasons discussed above, the lack of tiered pricing would have no impact on land use. It is possible that conversion from agricultural uses to M&I uses would occur during the term of the interim renewal contracts, but if such conversions occur it would not be a result of the interim renewal contracts due to their short terms. Renewal of these interim contracts would support existing land use. The pressures to convert are the same pressures that would have existed with the previous expiring long term contracts and with the No Action Alternative. The interim renewal of the eight contracts would not provide for additional water supplies that could act as an incentive for conversion of native habitat. Use of contract

water for M&I use under the proposed interim renewal contracts would not change from the purpose of use specified in the eight existing contracts. Likewise, the eight 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. Given the two-year period of the interim renewal contracts, there would be no adverse impact on land use.

### ***Cumulative Impacts***

In recent years, land use changes within the San Joaquin Valley have involved the urbanization of agricultural lands. These types of changes are typically driven by economic pressures and are as likely to occur with or without the Proposed Action; therefore, no cumulative effects to land use are expected as a result of the Proposed Action.

## **3.3 Biological Resources**

### **3.3.1 Affected Environment**

Table 3-2 was prepared using a list obtained on August 4, 2011 by accessing the U.S. Fish and Wildlife Service (USFWS) Database: [http://www.fws.gov/sacramento/es/spp\\_list.htm](http://www.fws.gov/sacramento/es/spp_list.htm) (Document No. 110804023340).

The following 7 ½ minute U.S. Geological Survey quadrangles specific to the interim renewal contractor's service areas were queried: Tracy, Union Island, Crevison Peak, Castle Rock Ridge, Mt. Boardman, Gilroy, Gilroy Hot Springs, Lick Observatory, Mt. Stakes, Mustang Peak, Cupertino, Palo Alto, Mindogo Hill, Los Gatos, Mariposa Peak, Loma Prieta, Eylar Mountain, Mt. Day, Mississippi Creek, Calaveras Reservoir, San Jose West, Isabel Valley, Mt. Sizer, Watsonville East, Three Sisters, Pacheco Pass, Santa Teresa Hills, San Felipe, Morgan Hill, Mt. Madonna, San Jose East, Mountain View, Chittenden, Pacheco Pass, Laurel, Milipitas, Stratford, Westhaven, Kettleman City, Huron, Gujarral Hills, Avenal, La Cima, Coalinga, Tumey Hills, Burrel, Vanguard, Lemoore, Five Points, Westside, Harris Ranch, Calflax, Tres Pecos Farms, Lillis Ranch, Domengine Ranch, San Joaquin, Helm, Tranquillity, Coit Ranch, Levis, Cantua Creek, Chaney Ranch, Chounet Ranch, Monocline Ridge, Firebaugh, Hammonds Ranch, and Broadview Farms. The California least tern has also been added to Table 3-2 because a few nesting least terns have been documented at evaporation basins at Kettleman City in the San Joaquin Valley at the southern boundary of WWD and a few foraging least terns have been observed in 1997 and 1998 at some sewage ponds at Lemoore Naval Air Station, which is within the district boundaries of WWD.

In addition to the Federally listed species shown in Table 3-2, the western burrowing owl, protected by the Federal Migratory Bird Treaty Act and a California Species of Special Concern, and the Swainson's hawk, also protected by the Migratory Bird Treaty Act and listed as threatened under the California ESA both likely occur in parts of the affected environment.

**Table 3-2 Federal Listed Threatened and Endangered Species**

<b><u>Species</u></b>	<b><u>Status<sup>1</sup></u></b>
California red-legged frog ( <i>Rana aurora draytonii</i> )	T, X
California tiger salamander ( <i>Ambystoma californiense</i> )	T, X
California brown pelican ( <i>Pelecanus occidentalis californicus</i> )	E
California clapper rail ( <i>Rallus longirostris obsoletus</i> )	E
California condor ( <i>Gymnogyps californianus</i> )	E
California least tern ( <i>Sternula antillarum browni</i> )	E
Least Bell's vireo ( <i>Vireo bellii pusillus</i> )	E
Marbled murrelet ( <i>Brachyramphus marmoratus</i> )	T, X
Western snowy plover ( <i>Charadrius alexandrinus nivosus</i> )	T
Central California Coastal steelhead ( <i>Oncorhynchus mykiss</i> )	T, X (NMFS)
Central Valley steelhead ( <i>Oncorhynchus mykiss</i> )	T, X (NMFS)
Central Valley spring-run Chinook salmon ( <i>Oncorhynchus tshawytscha</i> )	T (NMFS)
Coho salmon, central California coast ( <i>Oncorhynchus kisutch</i> )	E, X (NMFS)
Delta smelt ( <i>Hypomesus transpacificus</i> )	T, X
Green sturgeon ( <i>Acipenser medirostris</i> )	T (NMFS)
South Central California steelhead ( <i>Oncorhynchus mykiss</i> )	T (NMFS)
Tidewater goby ( <i>Eucyclogobius newberryi</i> )	E
Winter-run Chinook salmon ( <i>Oncorhynchus tshawytscha</i> )	E (NMFS)
Bay checkerspot butterfly ( <i>Euphydryas editha bayensis</i> )	T, X
Conservancy fairy shrimp ( <i>Branchinecta conservatio</i> )	E
Valley elderberry longhorn beetle ( <i>Desmocerus californicus dimorphus</i> )	T
Vernal pool fairy shrimp ( <i>Branchinecta lynchi</i> )	T
Vernal pool tadpole shrimp ( <i>Lepidurus packardii</i> )	E, X
Fresno kangaroo rat ( <i>Dipodomys nitratooides exilis</i> )	E, X
Giant kangaroo rat ( <i>Dipodomys ingens</i> )	E
Riparian brush rabbit ( <i>Sylvilagus bachmani riparius</i> )	E
Salt marsh harvest mouse ( <i>Reithrodontomys raviventris</i> )	E
San Joaquin kit fox ( <i>Vulpes macrotis mutica</i> )	E
Tipton kangaroo rat ( <i>Dipodomys nitratooides nitratooides</i> )	E
California jewelflower ( <i>Caulanthus californicus</i> )	E
California sea blight ( <i>Suaeda californica</i> )	E
Contra Costa goldfields ( <i>Lasthenia conjugens</i> )	E, X

<u><b>Species</b></u>	<u><b>Status<sup>1</sup></b></u>
Coyote ceanothus ( <i>Ceanothus ferrisae</i> )	E
Large-flowered fiddleneck ( <i>Amsinckia grandiflora</i> )	E
Metcalf Canyon jewelflower ( <i>Streptanthus albidus</i> ssp. <i>albidus</i> )	E
Palmate-bracted bird's-beak ( <i>Cordylanthus palmatus</i> )	E
San Joaquin woolly-threads ( <i>Monolopia congdonii</i> )	E
San Mateo woolly sunflower ( <i>Eriophyllum latilobum</i> )	E
Santa Clara Valley dudleya ( <i>Dudleya setchellii</i> )	E
Santa Cruz tarplant ( <i>Holocarpha macradenia</i> )	T, X
Tiburon paintbrush ( <i>Castilleja affinis</i> ssp. <i>neglecta</i> )	E
Alameda whipsnake ( <i>Masticophis lateralis euryxanthus</i> )	T, X
Blunt-nosed leopard lizard ( <i>Gambelia sila</i> )	E
Giant garter snake ( <i>Thamnophis gigas</i> )	T
San Francisco garter snake ( <i>Thamnophis sirtalis tetrataenia</i> )	E
Source: USFWS 2011	
1 Status= Listing of Federally special status species E: Listed as Endangered T: Listed as Threatened X: Critical Habitat designated for this species within the Proposed Action area NMFS: Species under the jurisdiction of the National Marine Fisheries Service	

None of the area subject to any effects contains critical habitat. The species that may be adversely affected are the western burrowing owl, Swainson's hawk, San Joaquin kit fox, blunt-nosed leopard lizard, California least tern, San Joaquin woolly-threads, and giant garter snake. As a result, the rest of this section focuses on those species.

Most of the lands in the action area are either croplands or in urban development. Few special-status species can use these lands except for the western burrowing owl, Swainson's hawk, and San Joaquin kit fox.

Within WWD, a variety of permanent, row, and field crops are grown. Over time, there has been a trend toward an increasing proportion of WWD planted in permanent crops [orchards and vineyards] (Phillips 2006; WWD 2004-2010 at [www.westlandswater.org](http://www.westlandswater.org)), particularly on the western, non-drainage-impaired portion of the district (Phillips 2006). Phillips (2006) estimated that acreage of permanent crops in the Fresno County portion of the San Luis Unit has increased nearly eightfold between 1977 and 2000 and nearly fourfold between 1994 and 2000. Most of these permanent crops were planted in the western third of WWD. Annual crop reports from WWD from 2005 through 2009 (available at: [www.westlandswater.org](http://www.westlandswater.org)) indicate that permanent crop acreage has continued to increase since 2005. Further, although there was a slight decrease in producing nut-bearing trees in 2009, the overall acreage of permanent crops in WWD increased.

Burrowing owls need low-stature vegetation, usually grasslands or arid shrubland habitat and generally the area needs to be open without too much tree or shrub cover (DFG 1995). They require burrows dug by mammals such as ground squirrels or badgers, or they may use man-made cavities that provide similar refuge (DFG 1995). Western burrowing owls sometimes use canal rights-of-way, which may have ground squirrel burrows and are often bare of vegetation.

More than 85 percent of Swainson's hawk territories in the Central Valley are in riparian systems adjacent to suitable foraging habitats (DFG 2005). Swainson's hawks often nest next to riparian systems of the valley and also use lone trees or groves of trees in agricultural fields. Suitable nest sites may be found in mature riparian forest, lone trees or groves of oaks, other trees in agricultural fields, and mature roadside trees (DFG 2005). Swainson's hawks require large, open grasslands with abundant prey in association with suitable nest trees (DFG 2005). Suitable foraging areas include native grasslands or lightly grazed pastures, alfalfa and other hay crops, and certain grain and row croplands.

Most of the suitable and most of the sub-optimal San Joaquin kit fox habitats (Cypher et al. 2007) remained between the western boundary of WWD and Interstate 5, a fairly narrow band of land. Many of the habitat conversions are outside the control of Reclamation or the contractors. The acreage of fallowed lands has also generally increased in the last few years within WWD (WWD 2004-2010 at [www.westlandswater.org](http://www.westlandswater.org)). Fallowed lands may provide habitat for the San Joaquin kit fox, particularly if left fallow for more than one year and located near natural lands.

Other special-status species that may occur in the affected environment include the California least tern, known to use sewage ponds at Lemoore Naval Air Station, blunt-nosed leopard lizards and San Joaquin woollythreads, which may occur in small areas of native lands along the western edge of WWD, and the giant garter snake. A portion of the San Luis Drain is used to convey drainage from the Grassland Bypass Project. WWD is not served by the Grassland Bypass Project. However, a portion of the San Luis Drain does run through WWD and the species that may use that area are unknown, but could include the California least tern. Some groundwater may seep into the San Luis Drain from WWD drainage-impaired lands (although not much, or the lands would not have a drainage problem) and enter areas that may be used by the giant garter snake.

Effects of contract water deliveries within the SCVWD to federally listed species were addressed in the USFWS's 2000, 2002, 2004, 2006 and 2008 biological opinions on interim renewal of CVP contracts. Those opinions are incorporated by reference, and the effects to listed species within SCVWD are therefore not discussed any further in this EA.

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

Reclamation (lead federal agency) and DWR (lead state agency) have completed endangered species consultations and compliance to address the combined long-term operations of the CVP and SWP. Compliance activities are ongoing.

The interim water service 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 a result, the interim renewal contracts analyzed would conform to any applicable requirements imposed under the federal ESA or other applicable environmental laws.

In addition, Reclamation has consulted under the ESA on the *Operation and Maintenance Program Occurring on Bureau of Reclamation Lands within the South-Central California Area Office*, resulting in a Biological Opinion issued by the USFWS on February 17, 2005 (1-1-04-0368). 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. Environmental commitments in existence as a result of existing and future Biological Opinions, including the CVPIA Biological Opinion (Reclamation 2000c) would be met under the No Action Alternative, including continuation of ongoing species conservation programs.

Execution of interim renewal contracts would not involve construction of new facilities or installation of structures. Based on existing trends, caused by the implementation of regional projects, separate from the interim renewal contracts, that increase irrigation efficiency and utilization of reuse areas for the application of drainwater to salt tolerant plants in accordance with existing permits, Reclamation anticipates that drainage production from the study area during the interim period would continue to decrease, as would discharges to the San Joaquin River and these discharges may affect biological resources; the reduction in these discharges resulting from ongoing actions such as the Grassland Bypass Project would benefit biological resources. The interim renewal contracts themselves do not require the continuance of those regional projects, which are undertaken under separate authorities, and under separate consultations.

Ongoing trends in irrigation methods are toward higher efficiency systems and related changes in cropping, generally away from row crops and toward permanent crops. Reclamation anticipates that those trends would continue under the No Action Alternative, because those trends are spurred in part by water shortages from the implementation of laws and regulations that reduced the quantity of CVP water available for delivery to SOD contractors. Therefore, species inhabiting orchards and other permanent crops would benefit and those preferring row crops would be adversely affected under the No Action Alternative, but over the short interim period, these changes are not likely to be substantial.

For irrigation, these trends are clear enough to support the conclusion that other economic considerations would outstrip the effects of tiered pricing for irrigation water under the No Action Alternative, so no effects on biological resources is expected from its implementation. With regard to M&I development, the short term of the contracts does not provide the long-term water supply required for conversions from agriculture to M&I uses. Tiered pricing under San Luis Unit, Delta Division, and San Felipe M&I interim renewal contracts has the potential to cause additional conservation or to limit development within the service areas of cities with these contracts. Lack of new development would not, itself, affect species and habitats.

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 study area.

### ***Proposed Action***

CVP-wide impacts to biological resources were evaluated in the PEIS, and a USFWS Biological Opinion addressing potential CVP-wide impacts was completed on November 21, 2000. The programmatic Biological Opinion and Essential Fish Habitat Conservation Recommendations prepared by NMFS for the CVPIA were completed on November 14, 2000.

Given the hardening of demand that has already occurred in response to chronic shortages in CVP contract supplies and ongoing trends toward increased irrigation efficiency and economic factors apart from the contract that influence crop selection, the lack of tiered pricing in the Proposed Action is unlikely to have any effect on water application for irrigation within the study area. In all other aspects, the effects of the proposed contracts are substantially similar to those under the No Action Alternative, so the Proposed Action 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. Additionally, execution of interim renewal contracts under the Proposed Action Alternative would not involve construction of new facilities or installation of structures.

Within the contractors' service area there would be no effects to salmonid species' designated critical habitat or green sturgeon since none inhabit or exist in the service areas. Additionally, impacts to salmonid species and green sturgeon in the Delta are solely the result of CVP operations, and are addressed in the CVP/SWP Coordinating Operations consultation.

Since SCVWD, City of Tracy and WWD do not have drainage that reaches the San Joaquin River, Reclamation has determined that there is no effect to federally listed salmonids, designated salmonid critical habitat, or green sturgeon due to renewal of these interim contracts.

Changes in crop patterns toward more permanent crops and increased fallowing of land could result in less habitat for the Swainson's hawk and western burrowing owl. Discing of fallowed lands near native lands that may be occupied by the blunt-nosed leopard lizard and San Joaquin woolly-threads could impact these species as they may overlap slightly with the adjoining fallowed lands. Although orchards may provide slightly better permeability for foraging to kit foxes than row crops (Warrick et al. 2007), management of orchards to reduce rodent damage

(e.g., use of anticoagulant baits [Almond Board of California 2005]) could make orchards harmful to kit fox. Discing of fallowed land and resumed agricultural activities can destroy dens and reduce prey and force kit foxes into unfamiliar areas (Cypher 2006). High selenium levels in groundwater could adversely affect the California least tern and giant garter snake through accumulation in the food chain (they prey on small fish).

The City of Tracy has some suitable habitat for the San Joaquin kit fox, and this habitat may be adversely affected by continued urban development. However, the City of Tracy is a participant in the San Joaquin Multi-Species Habitat Conservation and Open Space Plan, for which a 10(a)(1)(B) permit was issued.

Reclamation is in the process of consulting with the USFWS on these interim renewal contract actions. The result of those ESA section 7 consultations, along with implementation of all applicable requirements (included in the project descriptions), will ensure that renewal of interim contracts would not result in jeopardy to threatened or endangered species. Reclamation will complete consultation with the USFWS on effects to species and critical habitats, including loss of habitat and reduced habitat values, resulting from on-going trends within the valley, under the jurisdiction of USFWS within the service areas. This draft EA will not be finalized until the section 7 consultations are complete. Biological Opinions are not provided at this time. Reclamation is not requesting any take coverage. Effects on Federally listed species are either the result of development projects (e.g. the City of Tracy) for which take is to be covered through section 10(a)(2) of the ESA, or the effects are related to farm practices such as pesticide use and choice of crops grown, which are not within the control or authority of Reclamation. As there would be no incidental take coverage, there would also be no reasonable and prudent measures and terms and conditions to be applied; all protective measures are contained up-front in the documents that will be sent to the USFWS.

### ***Cumulative Impacts***

Interim renewal contracts obligate the delivery of the same contractual amount of water to the same lands without the need for additional facility modifications or construction. Thus, the interim renewal contracts, together with reasonably foreseeable future actions, would not incrementally contribute to any physical impacts to biological resources within interim renewal contractors' service areas. However, cumulative effects include routine agricultural practices, such as the use of pesticides on crops.

Also, interim renewal contracts would occur within the context of implementation of the CVPIA by the U.S. 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 2002c), 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, interim renewal contracts would be subject to regulatory constraints imposed pursuant to Section 7 of the ESA, regardless of whether those constraints exist today. Therefore, there would be no adverse cumulative impacts to biological resources due to the Proposed Action.

### **3.4 Cultural Resources**

Cultural resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The National Historic Preservation Act (NHPA) of 1966 is the primary Federal legislation that outlines the Federal Government's responsibility to cultural resources. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking on cultural resources listed on or eligible for inclusion in the National Register of Historic Places (National Register). Those resources that are on or eligible for inclusion in the National Register are referred to as historic properties.

The Section 106 process is outlined in the Federal regulations at 36 Code of Federal Regulations (CFR) Part 800. These regulations describe the process that the Federal agency (Reclamation) takes to identify cultural resources and the level of effect that the proposed undertaking will have on historic properties. In summary, Reclamation must first determine if the action is the type of action that has the potential to affect historic properties. If the action is the type of action to affect historic properties, Reclamation must identify the area of potential effects (APE), determine if historic properties are present within that APE, determine the effect that the undertaking will have on historic properties, and consult with the State Historic Preservation Office, to seek concurrence on Reclamation's findings. In addition, Reclamation is required through the Section 106 process to consult with Indian Tribes concerning the identification of sites of religious or cultural significance, and consult with individuals or groups who are entitled to be consulting parties or have requested to be consulting parties.

#### **3.4.1 Affected Environment**

Cultural resources in this area are generally prehistoric in nature and include remnants of native human populations that existed before European settlement. Prior to the 18th Century, many Native American tribes inhabited the Central Valley. It is possible that many cultural resources lie undiscovered across the valley. The San Joaquin Valley supported extensive populations of Native Americans, principally the Northern Valley Yokuts, in the prehistoric period. Cultural studies in the San Joaquin Valley have been limited. The conversion of land and intensive farming practices over the last century has probably destroyed many Native American cultural sites (Reclamation 2006a).

The CVP is being evaluated for the National Register. Facilities related to this study area include facilities associated with the Delta Division, San Luis Unit, and San Felipe Division of the CVP. These resources are considered a component of the built environment. Components of the CVP have been determined eligible for inclusion in the National Register and is currently being reviewed by the Keeper of the National Register for Inclusion on the National Register.

### **3.4.2 Environmental Consequences**

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

Under the No Action Alternative, Reclamation would renew interim water contracts with the contractors listed in Table 2-1 as prescribed by the CVPIA Preferred Alternative. Contract provisions under the No Action Alternative stipulate the implementation of a tiered pricing structure (80/10/10 tiered pricing). This pricing structure is unlikely to result in changes in agricultural land uses, such as land fallowing. Water would be conveyed through existing conveyance features and would not result in land use change, disturbance, or modification of existing features, or construction of new features. The No Action Alternative is administrative in nature and has no potential to affect historic properties pursuant to the regulations at 36 CFR Part 800.3(a)(1). The No Action Alternative would have no impact to cultural resources as a result.

#### ***Proposed Action***

Impacts to cultural resources associated with the Proposed Action would be comparable to those described under the No Action Alternative. No impacts to cultural resources are expected. The Proposed Action would not result in any changes in water delivery or in the construction of new delivery systems. The Proposed Action does not include any contract provisions that would result in “on-the-ground” changes proposed by the eight contract renewals. Given the lack of any possible impacts as a result of the Proposed Action, Reclamation concludes that there is no potential to affect historic properties. See Appendix C for Reclamation’s determination.

#### ***Cumulative Impacts***

Since there would be no potential to affect historic properties, there would be no cumulative effects to cultural resources.

### **3.5 Indian Sacred Sites**

Executive Order 13007 requires Federal land managing agencies to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and to avoid adversely affecting the physical integrity of such sacred sites. “Sacred Sites” means any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian Tribe, or Indian individual determined to be an appropriate authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion.

Both alternatives involve the conveyance of water through existing facilities for established agricultural and M&I uses. Under both the No Action and Proposed Action alternatives, neither restriction of access to nor adverse effects to the physical integrity of any sacred sites would occur. As such, there will be no direct, indirect, or cumulative impacts to Indian sacred sites as a result of either the No Action or Proposed Action alternatives.

### **3.6 Indian Trust Assets**

ITA are legal interests in assets that are held in trust by the United States Government for federally recognized Indian tribes or individuals. The trust relationship usually stems from a

treaty, executive order, or act of Congress. The Secretary of the interior is the trustee for the United States on behalf of federally recognized Indian tribes. “Assets” are anything owned that holds monetary value. “Legal interests” means there is a property interest for which there is a legal remedy, such a compensation or injunction, if there is improper interference. Assets can be real property, physical assets, or intangible property rights, such as a lease, or right to use something. ITA cannot be sold, leased or otherwise alienated without United States’ approval. Trust assets may include lands, minerals, and natural resources, as well as hunting, fishing, and water rights. Indian reservations, rancherias, and public domain allotments are examples of lands that are often considered trust assets. In some cases, ITA may be located off trust land.

Reclamation shares the Indian trust responsibility with all other agencies of the Executive Branch to protect and maintain ITA reserved by or granted to Indian tribes, or Indian individuals by treaty, statute, or Executive Order.

### **3.6.1 Affected Environment**

The nearest ITA is Santa Rosa Rancheria approximately six miles east of the project location.

### **3.6.2 Environmental Consequences**

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

Under the No Action Alternative, continuous delivery of project water to existing contractors would not affect any ITA. Existing rights would not be affected, no physical changes to existing facilities and no new facilities are proposed.

#### ***Proposed Action***

Impacts to ITA associated with the Proposed Action would be comparable to those described under the No Action Alternative. No physical changes to existing facilities are proposed and no new facilities are proposed. Continued delivery of CVP water to the contractors listed in Table 2-1 under an interim renewal contract would not affect any ITA because existing rights would not be affected. See Appendix C for Reclamation’s determination.

#### ***Cumulative Impacts***

As there would be no impacts from the Proposed Action, there would be no cumulative effects to ITA.

## **3.7 Environmental Justice**

Executive Order 12898 (February 11, 1994) mandates Federal agencies to identify and address disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority and low-income populations.

### **3.7.1 Affected Environment**

The agricultural industry significantly contributes to the overall economic stability of the San Joaquin Valley. The CVP allocations each year allow farmers to plan for the types of crops to grow and to secure loans to purchase supplies. The economic variances may include fluctuating agricultural prices, insect infestation, changing hydrologic conditions, increased fuel and power costs. The market for seasonal workers on local farms draws thousands of migrant workers,

commonly of Hispanic origin from Mexico and Central America. The population of some small communities typically increases during late summer harvest. The Hispanic community within Fresno, Kings, and San Joaquin Counties is greater and Santa Clara County is lower than the California average (Table 3-3).

**Table 3-3 2005-2009 Community Characteristics**

<b>Economic Characteristic</b>	<b>Fresno County</b>	<b>Kings County</b>	<b>San Joaquin County</b>	<b>Santa Clara County</b>	<b>California</b>
Average household size	3.12	3.30	3.10	2.90	2.91
Median household income	\$45,219	\$46,595	\$54,540	\$85,569	\$60,392
Individuals below poverty level	21.5%	19.1%	15.3%	8.6%	13.2%
Median age	30.3	30.0	32.0	35.5	34.6
High school graduates	72.6%	70.5%	76.0%	58.8%	80.5%
Bachelor's degree or higher	19.4%	11.5%	17.1%	43.9%	29.7%
White	62.1%	69.5%	60.6%	52.0%	61.3%
Black or African American	5.1%	7.7%	7.3%	2.6%	6.2%
American Indian	1.0%	1.5%	0.9%	0.5%	0.8%
Asian	8.8%	3.3%	13.7%	30.2%	12.3%
Native Hawaiian/Pacific Islander	0.1%	0.1%	0.5%	0.4%	0.4%
Hispanic	48.1%	48.4%	36.4%	25.7%	36.1%
Some other race	19.1%	14.9%	11.9%	10.8%	15.5%

Source: U.S. Census 2011

### 3.7.2 Environmental Consequences

#### **No Action**

Contract provisions under the No Action Alternative include the tiered pricing structure. Implementation could, but is not likely to, result in changes in agricultural practices, including cropping patterns and land fallowing. It would, however, during the circumstances when tiered pricing increased rates apply, increase the cost of water, which could reduce farming revenues and decrease land values. M&I users would also be impacted by changes in water supply costs placing increased pressure on low income households.

Tiered pricing impacts would occur only when allocations are above 80 percent which occurs infrequently. Over the last few years, California has been experiencing drought and allocations were well below 80 percent. Reduced farming revenue and land values would be detrimental to farm workers, especially to migrant workers who tend to be from minority and low-income populations. However, this impact would have a low likelihood of occurring as there would not be major shifts in agricultural production in a two-year period. Any changes would likely be within the normal range of annual or seasonal variations. No disproportionate impacts to minority or low-income populations are expected.

Factors contributing to population change, employment, income levels, and unemployment rates in the affected area are closely tied to CVP water contracts through either agricultural or M&I dependence. Because no changes in water supplies or CVP operations would occur under this alternative, no changes in population and the various indicators of social well-being are expected. Additionally, the No Action Alternative would support continued agricultural production and would not directly result in changes to employment of minority and low-income populations.

***Proposed Action***

Impacts to minority and disadvantaged populations associated with the Proposed Action would be comparable to those described for the No Action Alternative. Renewal of the 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. There would be no changes to existing conditions. Employment opportunities for low-income wage earners and minority population groups would be within historical conditions. Disadvantaged populations would not be subject to disproportionate impacts. Therefore, the Proposed Action would not differ from current conditions and is not expected to disproportionately affect minority or low income populations.

***Cumulative Impacts***

Employment opportunities for low-income wage earners and minority population groups would be within historical conditions. Disadvantaged populations would not be subject to disproportionate impacts. Therefore, the Proposed Action would not differ from current or historical conditions and would not be expected to disproportionately affect minority or low income populations in the future.

**3.8 Socioeconomic Resources****3.8.1 Affected Environment**

Agriculture is a very important industry in the area surrounding the interim renewal contractors' service areas. If taken together, the farm and agricultural services sectors are important to all four counties. Agriculture takes on additional significance because it is generally considered a "primary" industry (along with mining and manufacturing). Santa Clara is the only county in the interim renewal contractors' service where agriculture is not the "primary industry." A reasonably large portion of activity in non-primary industries can be attributed to support for primary industry activity in an area. Changes in primary industry activity, therefore, usually precipitate additional changes in non-primary or support industries. Unemployment for Fresno and Kings Counties ranged from 9.0 to 9.5 percent in 2006 but increased to 16.5 to 16.8 percent in 2010 (EDD 2011). Statewide unemployment was 4.9 percent in 2006 but increased to 12.2 percent in 2010 (Table 3-4).

Santa Clara County and the City of Tracy have a different socioeconomic setting than other predominantly agricultural based CVP contractors, such as WWD. Santa Clara County's economy is tied more to high tech markets than to the agricultural sector and the City of Tracy is an urban city located near the Bay Area of California. Santa Clara County's and the City of Tracy's 2009 median household income (\$84,990 and \$82,072, respectively) were well above the state average of \$58,925 for the same time period (U.S. Census 2011). In addition, Santa Clara County has a highly educated workforce with 43.9 percent of the population having a college education while State-wide less than 30 percent are college educated (Table 3-3). In 2006, unemployment ranged between 4.5 and 5.3 percent for the City of Tracy and Santa Clara County but increased to 9.7 and 11.1 percent in 2010, below the state average of 12.2 percent (Table 3-4).



**Table 3-4 2010 County Level Annual Average Socioeconomic Data**

Data	Fresno County	Kings County	City of Tracy <sup>1</sup>	Santa Clara County	California
Population estimate	930,450	152,982	54,814	1,781,642	37,253,956
Labor Force	438,600	61,400	38,794	874,300	18,145,000
Employment	365,000	51,200	35,030	776,900	15,927,000
Unemployment rate	16.8%	16.5%	9.7%	11.1%	12.2%
2006 unemployment rate	9.0%	9.5%	4.5%	5.3%	4.9%
Source: U.S. Census 2011, EDD 2011					
<sup>1</sup> Data based on estimates from the 2005-2009 American Community Survey estimates from U.S. Census Bureau					

### 3.8.2 Environmental Consequences

#### **No Action**

The No Action Alternative is the renewal of existing interim renewal 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. Contract provisions under the No Action Alternative stipulate that a tiered pricing structure would be applied. Tiered pricing is mandated under the water conservation section of the CVPIA for contracts of more than three years. While contractors would likely receive the same quantity of water under the No Action Alternative, the tiered pricing structure stipulated in the contract would result in higher water prices for both agricultural and M&I contractors when second or third tier water is provided. These provisions under the No Action Alternative would increase the cost of water. Local and regional economies could be directly affected as a result of losses in farming revenues, decreased value of land dependent on water supplies, increased costs to consumers of agricultural products or M&I water, and increased water conservation or measurement costs. It may also put additional pressures on low income households to pay for water supplies at higher rates.

Although there is a potential for these effects to occur, considering the short duration of the two years of the contract renewal period, and the low frequency of allocations above 80 percent, no effects to socioeconomic resources are expected over the scope of this project related to tiered pricing contract provisions.

Historic water deliveries and CVP facility operations would continue under the No Action Alternative. No changes in power generation, recreational opportunities, or agricultural economics are expected. Thus, no economic impacts are anticipated under the period of renewal.

#### **Proposed Action**

Potential socioeconomic impacts associated with the Proposed Action would be comparable to those described under No Action Alternative; however, under the Proposed Action there is no potential for effects to occur due to tiered pricing. Thus, renewal of the interim 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 renewal of the eight interim contracts would provide continued stability to the agricultural industry within the contractors' service areas.

### **Cumulative Impacts**

As both the No Action Alternative and the Proposed Action 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), neither alternative would contribute to adverse cumulative impacts.

## **3.9 Air Quality**

Section 176 (C) of the Clean Air Act [CAA] (42 U.S. Code [U.S.C.] 7506 (C)) requires any entity of the federal government that engages in, supports, or in any way provides financial support for, licenses or permits, or approves any activity to demonstrate that the action conforms to the applicable State Implementation Plan (SIP) required under Section 110 (a) of the Federal CAA (42 U.S.C. 7401 (a)) before the action is otherwise approved. In this context, conformity means that such federal actions must be consistent with SIP's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards and achieving expeditious attainment of those standards. Each federal agency must determine that any action that is proposed by the agency and that is subject to the regulations implementing the conformity requirements would, in fact conform to the applicable SIP before the action is taken.

On November 30, 1993, the Environmental Protection Agency (EPA) promulgated final general conformity regulations at 40 CFR 93 Subpart B for all federal activities except those covered under transportation conformity. The general conformity regulations apply to a proposed federal action in a non-attainment or maintenance area if the total of direct and indirect emissions of the relevant criteria pollutants and precursor pollutant caused by the Proposed Action equal or exceed certain *de minimis* amounts thus requiring the federal agency to make a determination of general conformity.

### **3.9.1 Affected Environment**

WWD and the City of Tracy lie within the San Joaquin Valley Air Basin (SJVAB) under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The pollutants of greatest concern in the San Joaquin Valley are carbon monoxide (CO), ozone (O<sub>3</sub>), O<sub>3</sub> precursors such as volatile organic compounds (VOC) or reactive organic gases (ROG), and inhalable particulate matter between 2.5 and 10 microns in diameter (PM<sub>10</sub>) and particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>). The SJVAB has reached Federal and State attainment status for CO, nitrogen dioxide (NO<sub>2</sub>), and sulfur dioxide (SO<sub>2</sub>). Federal attainment status has been reached for PM<sub>10</sub> but is in non-attainment for O<sub>3</sub>, PM<sub>2.5</sub>, and VOC/ROG (SJVAPCD 2011). There are no established standards for nitrogen oxides (NO<sub>x</sub>); however, NO<sub>x</sub> does contribute to NO<sub>2</sub> standards (SJVAPCD 2011).

Santa Clara County falls under the jurisdiction of the San Francisco Bay Area Air Quality Management District (BAAQMD). The San Francisco Bay Area has been designated as attainment for CO, NO<sub>x</sub>, SO<sub>2</sub>, and lead. The area is in non-attainment for O<sub>3</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> (BAAQMD 2011).

### **3.9.2 Environmental Consequences**

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

Under the No Action Alternative, water delivery would continue through existing federal facilities via gravity and electrical pumps. Air quality emissions from electrical power have been considered in environmental documentation for the generating power plant. There are no emissions from electrical engines and therefore a conformity analysis is not required under the CAA and there would be no impact on air quality.

#### ***Proposed Action***

The Proposed Action is the execution of interim renewal contracts. Water delivery under these contracts would move through existing federal facilities via gravity and electrical pumps as it would under the No Action Alternative. Consequently, there are no impacts to air quality as a result of the Proposed Action and a conformity analysis is not required.

#### ***Cumulative Impacts***

As there are no impacts to air quality, there would be no cumulative adverse impacts as a result of the Proposed Action.

### **3.10 Global Climate**

Climate change refers to significant change in measures of climate (e.g., temperature, precipitation, or wind) lasting for decades or longer. Many environmental changes can contribute to climate change [changes in sun's intensity, changes in ocean circulation, deforestation, urbanization, burning fossil fuels, etc.] (EPA 2011a)

Gases that trap heat in the atmosphere are often called greenhouse gases (GHG). Some GHG, such as carbon dioxide (CO<sub>2</sub>), occur naturally and are emitted to the atmosphere through natural processes and human activities. Other GHG (e.g., fluorinated gases) are created and emitted solely through human activities. The principal GHG that enter the atmosphere because of human activities are: CO<sub>2</sub>, methane (CH<sub>4</sub>), nitrous oxide, and fluorinated gasses (EPA 2011a).

During the past century humans have substantially added to the amount of GHG in the atmosphere by burning fossil fuels such as coal, natural gas, oil and gasoline to power our cars, factories, utilities and appliances. The added gases, primarily CO<sub>2</sub> and CH<sub>4</sub>, are enhancing the natural greenhouse effect, and likely contributing to an increase in global average temperature and related climate changes. At present, there are uncertainties associated with the science of climate change (EPA 2011b).

Climate change has only recently been widely recognized as an imminent threat to the global climate, economy, and population. As a result, the national, state, and local climate change regulatory setting is complex and evolving.

In 2006, the State of California issued the California Global Warming Solutions Act of 2006, widely known as Assembly Bill 32, which requires California Air Resources Board (CARB) to develop and enforce regulations for the reporting and verification of statewide GHG emissions.

CARB is further directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020.

In addition, the EPA has issued regulatory actions under the CAA as well as other statutory authorities to address climate change issues (EPA 2011c). In 2009, the EPA issued a rule (40 CFR Part 98) for mandatory reporting of GHG by large source emitters and suppliers that emit 25,000 metric tons or more of GHG [as CO<sub>2</sub> equivalents per year] (EPA 2009). The rule is intended to collect accurate and timely emissions data to guide future policy decisions on climate change and has undergone and is still undergoing revisions (EPA 2011c).

### **3.10.1 Affected Environment**

Global mean surface temperatures have increased nearly 1.8°F from 1890 to 2006 (Intergovernmental Panel on Climate Change 2007). Models indicate that average temperature changes are likely to be greater in the northern hemisphere. Northern latitudes (above 24°North) have exhibited temperature increases of nearly 2.1°F since 1900, with nearly a 1.8°F increase since 1970 alone (Intergovernmental Panel on Climate Change 2007). Without additional meteorological monitoring systems, it is difficult to determine the spatial and temporal variability and change of climatic conditions, but increasing concentrations of GHG are likely to accelerate the rate of climate change.

More than 20 million Californians rely on the SWP and CVP. Increases in air temperature may lead to changes in precipitation patterns, runoff timing and volume, sea level rise, and changes in the amount of irrigation water needed due to modified evapotranspiration rates. These changes may lead to impacts to California's water resources and project operations.

While there is general consensus in their trend, the magnitudes and onset-timing of impacts are uncertain and are scenario-dependent (Anderson et al. 2008).

### **3.10.2 Environmental Consequences**

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

The No Action Alternative is the renewal of existing interim renewal 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. Contract provisions under the No Action Alternative stipulate that a tiered pricing structure would be applied. Tiered pricing is mandated under the water conservation section of the CVPIA for contracts of more than three years.

Delivery of CVP water from the Delta to the contractors listed in Table 2-1 requires the use of electric pumps within San Luis Unit, Delta Division, and San Felipe Division facilities which are part of existing baseline conditions. Implementation of the No Action Alternative would have no change on the composition of the atmosphere and therefore would have no direct or indirect effects to climate.

#### ***Proposed Action***

The Proposed Action is the execution of interim renewal contracts without the stipulation of tiered pricing. Water delivery under these contracts would be the same as it would be under the

No Action Alternative; therefore, the Proposed Action would have no direct or indirect effects to climate.

***Cumulative Impacts***

Climate change is considered a cumulative impact and refers to changes in the global or a regional climate over time. 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. 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 and therefore surface water resource changes due to climate change would be the same with or without either alternative. Neither alternative would involve physical changes to the environment or construction activities that could result in GHG emissions. In addition, deliveries of CVP water to the contractors listed in Table 2-1 are part of existing baseline conditions, and would therefore, not impact global climate change.

## **Section 4 Consultation and Coordination**

### **4.1 Public Review Period**

Reclamation intends to provide the public with an opportunity to comment on the Draft Finding of No Significant Impact and Draft EA during a 30 day public comment period.

### **4.2 Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.)**

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. The implementation of the CVPIA, of which this action is a part, has been jointly analyzed by Reclamation and USFWS and is being jointly implemented. Since there would be no construction and water would move in existing facilities the FWCA does not apply.

### **4.3 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 or Commerce, as appropriate), 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 has initiated Section 7 consultation with the USFWS for the Proposed Action. This EA will not be finalized until consultation is complete. On November 15, 2011, Reclamation submitted a biological evaluation for the City of Tracy and on November 22, 2011, a biological assessment for the remainder of the contracts.

### **4.4 National Historic Preservation Act (16 U.S.C. § 470 et seq.)**

Section 106 of the NHPA requires federal agencies to evaluate the effects of federal undertakings on historical, archaeological and cultural resources. Reclamation has made a determination that as the Proposed Action would result in no change in the water conveyed or applied to the ground by this contract renewal and given the lack of any possible impacts as a result of the undertaking,

Reclamation concludes that there is no potential to affect historic properties, pursuant to 36 CFR Part 800.3(a)(1). As described in the regulations, Reclamation has no further obligations under section 106.

#### **4.5 Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.)**

The Migratory Bird Treaty Act implements various treaties and conventions between the United States and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the Act, the Secretary of the Interior may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting or exporting of any migratory bird, part, nest or egg will be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns.

The Proposed Action would deliver water through existing facilities to existing irrigated agricultural lands which already receive delivered water. This would have no effect on birds protected by the Migratory Bird Treaty Act.

#### **4.6 Executive Order 11988 – Floodplain Management and Executive Order 11990 – Protection of Wetlands**

Executive Order 11988 requires Federal agencies to prepare floodplain assessments for actions located within or affecting flood plains, and similarly, Executive Order 11990 places similar requirements for actions in wetlands. The Proposed Action would deliver water through existing facilities to existing irrigated agricultural lands and would not impact wetlands and/or floodplains as there are none present in the areas to be irrigated.

#### **4.7 Clean Water Act (33 U.S.C. § 1251 et seq.)**

Section 401 of the Clean Water Act [CWA] (33 U.S.C. § 1311) prohibits the discharge of any pollutants into navigable waters, except as allowed by permit issued under sections 402 and 404 of the CWA (33 U.S.C. § 1342 and 1344). If new structures (e.g., treatment plants) are proposed, that would discharge effluent into navigable waters, relevant permits under the CWA would be required for the project applicant(s). Section 401 requires any applicant for an individual U. S. Army Corps of Engineers dredge and fill discharge permit (pursuant to Section 404) to first obtain certification from the state that the activity associated with dredging or filling will comply with applicable state effluent and water quality standards. This certification must be approved or waived prior to the issuance of a permit for dredging and filling. No activities such as dredging or filling of wetlands or surface waters would be required for implementation of the Proposed Action; therefore, permits obtained in compliance with CWA are not required.

## Section 5 List of Preparers and Reviewers

Rain Healer, Natural Resources Specialist, SCCAO  
 Dave Hyatt, Supervisory Wildlife Biologist, SCCAO  
 Shauna McDonald, Wildlife Biologist, SCCAO  
 Scott Williams, Archaeologist, MP-153  
 Patricia Rivera, ITA, MP-400  
 Valerie Curley, Supervisory Repayment Specialist, TO-442 – reviewer  
 Eileen Jones, Repayment Specialist, TO-440 – reviewer  
 Chuck Siek, Supervisory Natural Resources Specialist, SCCAO – reviewer  
 Michael Inthavong, Natural Resources Specialist, SCCAO – reviewer  
 Mike Eng, Natural Resources Specialist, SCCAO – reviewer

## Section 6 References

Almond Board of California. 2005. Good Agricultural Practices, Orchard Floor Management. Almond Board of California, Modesto, CA, 65 pp. Available at:  
<http://www.almondboard.com/Growers/GAPS/OrchardFloorManagement/Pages/default.aspx>

Anderson, J, F Chung, M Anderson, L Brekke, D Easton, M Ejetal, R Peterson, and R Snyder. 2008. Progress on Incorporating Climate Change into Management of California's Water Resources. *Climatic Change* 87(Suppl 1):S91–S108 DOI 10.1007/s10584-007-9353-1.

Bureau of Reclamation (Reclamation). 1963. Contract Between the United States and Westlands Water District for Providing Water Service. Contract No. 14-06-200-495A. Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 1974. City of Tracy Long-term Contract. Contract 14-06-200-7858A. Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 1994. Interim Renewal Contracts Final Environmental Assessment. Mid-Pacific Region Regional Office. Sacramento, California.

Bureau of Reclamation (Reclamation). 1998. Finding Of No Significant Impact And Supplemental Environmental Assessment for the Renewal of 54 Interim Water Service Contracts through February 29, 2000. Mid-Pacific Region Regional Office. Sacramento, California.

Bureau of Reclamation (Reclamation). 1999a. Central Valley Project Improvement Act, Final Programmatic Environmental Impact Statement and Record of Decision. Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 1999b. CVP Water Supply Partial Contract Assignment from Mercy Springs Water District (Contract No. 14-06-200-3365A) to Pajaro Valley Water Management Area, Santa Clara Valley Water District, and WWD, Final Environmental



Assessment and Final Finding of No Significant Impact. Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2000a. Final Supplemental Environmental Assessment for the Renewal of 54 Interim Water Service Contracts through February 28, 2001, Central Valley Project, California. Mid-Pacific Region Regional Office. Sacramento, California.

Bureau of Reclamation (Reclamation). 2000b. Friant Division Long-term Contract Renewal Environmental Assessment (Draft). Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2000c. Draft Biological Opinion on Operation of the CVP and Implementation of the CVPIA. Mid-Pacific Region South-Central California Area Office. Fresno, California. Available at <http://www.usbr.gov/mp/cvpia/>.

Bureau of Reclamation (Reclamation). 2001a. Supplemental Environmental Assessment for the 2001 Renewal of Interim Water Service Contracts Through February 29, 2002, Central Valley Project. Mid-Pacific Region Regional Office. Sacramento, California.

Bureau of Reclamation (Reclamation). 2001b. Friant Division Long-term Contract Renewal Environmental Assessment (Final). Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2002a. Supplemental Environmental Assessment for the 2002 Renewal of Interim Water Service Contracts Through February 29, 2004, Central Valley Project, California. Mid-Pacific Region Regional Office. Sacramento, California.

Bureau of Reclamation (Reclamation). 2002b. Final Environmental Assessment and Finding of No Significant Impact (EA-00-84). Partial Assignment of CVP Water Supply Contract Assignment from Mercy Springs Water District (Contract No. 14-06-200-3365A) to Westlands Water District Distribution District #2. Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2002c. Central Valley Project Improvement Act: 10 Years of Progress. Mid-Pacific Region Regional Office. Sacramento, California.

Bureau of Reclamation (Reclamation). 2003a. Final Environmental Assessment and Finding of No Significant Impact (EA-01-64). West Side Irrigation District/City of Tracy Water Assignment Project (Contract No. 7-07-20-W0045). Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2003b. Final Environmental Assessment and Finding of No Significant Impact (EA-01-63). Banta Carbona Irrigation District/City of Tracy Water Assignment Project (Contract No. 14-06-200-4305A). Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2004a. Supplemental Environmental Assessment for the 2004 Renewal of Interim Water Service Contracts Through February 28, 2006, Central Valley Project, California. Mid-Pacific Regional Office. Sacramento, California.

Bureau of Reclamation (Reclamation). 2004b. Sacramento River Settlement Contractors Environmental Impact Statement (Final Report). Mid-Pacific Region Northern California Area Office. Shasta Lake, California and Mid-Pacific Region South Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2004c. Long-Term Central Valley Project Operations Criteria and Plan, CVP-OCAP. Sacramento, California. Website:  
[http://www.usbr.gov/mp/cvo/ocap/OCAP\\_6\\_30\\_04.pdf](http://www.usbr.gov/mp/cvo/ocap/OCAP_6_30_04.pdf).

Bureau of Reclamation (Reclamation). 2004d. Final Environmental Assessment and Finding of No Significant Impact (EA-03-116). Approval of CVP Water Supply Contract Assignment from Centinella Water District (Contract 7-07-20-W0055) to Westlands Water District. Mid-Pacific Region South Central California Area Office. Fresno, California

Bureau of Reclamation (Reclamation). 2005a. Revised Environmental Assessment for Renewal of the Long-term Contract for the Feather Water District, Central Valley Project, California. Mid-Pacific Region Northern California Area Office. Shasta Lake, California.

Bureau of Reclamation (Reclamation). 2005b. Final Environmental Assessment for the Long term Contract Renewal Shasta Division and Trinity River Divisions. Mid-Pacific Region Northern California Area Office. Shasta Lake, California.

Bureau of Reclamation (Reclamation). 2005c. Final Environmental Assessment for Long-term Renewal of Water Service Contracts in the Black Butte Unit, Corning Canal Unit, and Tehama-Colusa Canal Unit of the Sacramento River Division, Central Valley Project. Mid-Pacific Region Northern California Area Office. Shasta Lake, California.

Bureau of Reclamation (Reclamation). 2005d. Delta-Mendota Canal Unit Environmental Assessment for Long-term Contract Renewal. Mid-Pacific Region South Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2005e. Final Environmental Assessment for U.S. Department of Veterans affairs, San Joaquin Valley National Cemetery, Central Valley Project, Long-term Water Service Contract Renewal. Mid-Pacific Region South Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2005f. Final Environmental Assessment for Long-term Renewal Contract, Contra Costa Water District, Contra Costa Unit, Central Valley Project. Mid-Pacific Region South Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2005g. Long-term Central Valley Project Water Service Contract Renewals, American River Division Environmental Impact Statement. Mid-Pacific Region Central California Area Office. Folsom, California.

Bureau of Reclamation (Reclamation). 2005h. San Luis Drainage Feature Re-evaluation Draft Environmental Impact Statement. Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2005i. Santa Clara Valley Water District Long-term Groundwater Banking Project Storage and Exchange of Central Valley Project Water with Semitropic Water Storage District (EA-05-126). Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2005j. CVP Water Supply Contract Assignment from Widren Water District (Contract 04-06-200-8018) to Westlands Water District, Final Environmental Assessment and Initial Study. Mid-Pacific Region South Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2006a. Supplemental Environmental Assessment for the 2006 Renewal of Interim Water Service Contracts Through February 29, 2008, Central Valley Project, California. Mid-Pacific Regional Office. Sacramento, California.

Bureau of Reclamation (Reclamation). 2006b. Final Environmental Assessment and Finding of No Significant Impact (EA-05-43). Broadview Water District Contract Assignment and Annexation to Westlands Water District. Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2007. San Luis Unit Water Service Interim Renewal Contracts (EA-07-56). Central Valley Project, California. Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2008. Environmental Assessment for the 2008 Renewal of Interim Water Service Contracts through February 28, 2010 (EA-07-75). Central Valley Project, California. Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2009. City of Tracy Long-term Central Valley Project Water Groundwater Banking with Semitropic Water Storage District (EA-09-164). Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2010a. San Luis Unit Water Service Interim Renewal Contracts 2010-2013 (EA-09-101). Central Valley Project, California. Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2010b. 2010 Renewal of Cross Valley Interim Water Service Contracts and Delta Division/San Felipe Contracts through February 29, 2010 (EA-09-

126). Central Valley Project, California. Mid-Pacific Region South-Central California Area Office. Fresno, California.

Bureau of Reclamation (Reclamation). 2010c. San Luis Water District's and Panoche Water District's Water Service Interim Renewal Contracts 2011-2013 (EA-10-070). Central Valley Project, California. Mid-Pacific Region South-Central California Area Office. Fresno, California.

California Department of Fish and Game (DFG). 1995. Staff Report on Burrowing Owl Mitigation. 10 pp.

California Department of Fish and Game (DFG). 2005. The Status of Rare, Threatened, and Endangered Plants and Animals of California, 2000-2004.

California Department of Water Resources (DWR). 2003. California's Groundwater - Bulletin 118. Website:

<http://www.water.ca.gov/groundwater/bulletin118/bulletin118update2003.cfm>

California Employment Development Department (EDD). 2011. Links to LMI by County. Website: <http://www.labormarketinfo.edd.ca.gov/?pageid=170>. Accessed: August 5, 2011.

City of Tracy (Tracy). 2002. Final Water Conservation Plan. Prepared by the City of Tracy. Tracy, California.

City of Tracy (Tracy). 2005. City of Tracy General Plan: Draft Environmental Impact Report. Prepared by Design, Community, and Environment. Berkeley, California.

Cypher, B.L. 2006. *Kit fox conservation in the San Luis Drainage Study Unit*. Unpublished report to the U.S. Bureau of Reclamation South-Central California Area Office. California State University, Stanislaus, Endangered Species Recovery Program. Fresno, CA.

Cypher, B. L., S. E. Phillips, and P. A. Kelly. 2007. Habitat suitability and potential corridors for San Joaquin kit fox in the San Luis Unit, Fresno, Kings, and Merced Counties, California. Prepared for the U.S. Bureau of Reclamation, South-Central California Area Office, and the U.S. Fish and Wildlife Service, Endangered Species Program, Fresno, CA.

Environmental Protection Agency (EPA). 2011a. Climate Change – Basic Information. Website: <http://www.epa.gov/climatechange/basicinfo.html>.

Environmental Protection Agency (EPA). 2011b. U.S. Greenhouse Gas Inventory. Website: <http://www.epa.gov/climatechange/emissions/usgginventory.html>.

Environmental Protection Agency (EPA). 2011c. Climate Change – Science. Website: <http://www.epa.gov/climatechange/science/index.html>.

Intergovernmental Panel on Climate Change. 2007. Climate Change 2007: Synthesis Report. Website: [http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4\\_syr.pdf](http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf). Accessed: April 2011.

Phillips, S.E. 2006. In Progress Draft Environmental Baseline of the San Luis Unit Fresno, Kings and Merced Counties, California. California State University-Stanislaus, Endangered Species Recovery Program, Fresno, CA, 22 pp.

San Francisco Bay Area Air Quality Management District (BAAQMD). 2011. Air Quality Standards and Attainment Status. Website: [http://hank.baaqmd.gov/pln/air\\_quality/ambient\\_air\\_quality.htm](http://hank.baaqmd.gov/pln/air_quality/ambient_air_quality.htm). Accessed: August 2011.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2011. Ambient Air Quality Standards and Valley Attainment Status. Website: <http://www.valleyair.org/aqinfo/attainment.htm>. Accessed: August 2011.

South San Joaquin Irrigation District. 2009. District Services – Nick C. DeGroot Water Treatment Plant. Website: <http://www.ssjid.com/serv-H2O-domestic.htm>. Accessed: September 10, 2009.

Santa Clara County. 2003 (from SOCEV). California County Fact Book produced by California Institute for County Government in conjunction with the California State Association of Counties.

U.S. Census Bureau. 2011. Website: <http://quickfacts.census.gov/qfd/index.html> Accessed: August 2011.

U.S. Fish and Wildlife Service (USFWS). 2005. Formal Endangered Species Consultation on the Operations and Maintenance Program Occurring on Bureau of Reclamation Lands within the South-Central California Area Office. February 17, 2005 (1-1-04-F-0368). Sacramento Fish and Wildlife Office.

U.S. Fish and Wildlife Service (USFWS). 2000. Biological Opinion for the Interim Water Contract Renewal, Ref. No. 1-1-00-F-0056. February 29, 2000. Sacramento Fish and Wildlife Office.

U.S. Fish and Wildlife Service (USFWS). 2000. Biological Opinion for the Interim Water Contract Renewal, Ref. No. 1-1-00-F-0056. February 29, 2000. Sacramento Fish and Wildlife Office.

U.S. Fish and Wildlife Service (USFWS). 2002. Consultation for the Interim Water Contract Renewal, Ref. No. 02-F-0070. February 27, 2002. Sacramento Fish and Wildlife Office.

U.S. Fish and Wildlife Service (USFWS). 2004. Consultation for the Interim Water Contract Renewal, Ref. No. 04-F-0360. February 27, 2004. Sacramento Fish and Wildlife Office.

U.S. Fish and Wildlife Service (USFWS). 2006. Consultation for the Interim Water Contract Renewal, Ref. No. 06-F-0070. February 28, 2006. Sacramento Fish and Wildlife Office.

U.S. Fish and Wildlife Service (USFWS). 2008. Biological Opinion for the Interim Water Contract Renewal, Ref. No. 08-F-0538-1. December 15, 2008. Sacramento Fish and Wildlife Office.

U.S. Fish and Wildlife Service (USFWS). 2011. USFWS Endangered Species Lists (Document number 110804023340). Website: [http://www.fws.gov/sacramento/es/spp\\_list.htm](http://www.fws.gov/sacramento/es/spp_list.htm). Accessed: August 4, 2011.

Warrick, G.D., H.O. Clark, Jr., P.A. Kelly, and D.F. Williams, and B.L. Cypher. 2007. Use of agricultural lands by San Joaquin kit foxes. *Western North American Naturalist* 67:270-277.

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DRAFT ENVIRONMENTAL ASSESSMENT (11-049)

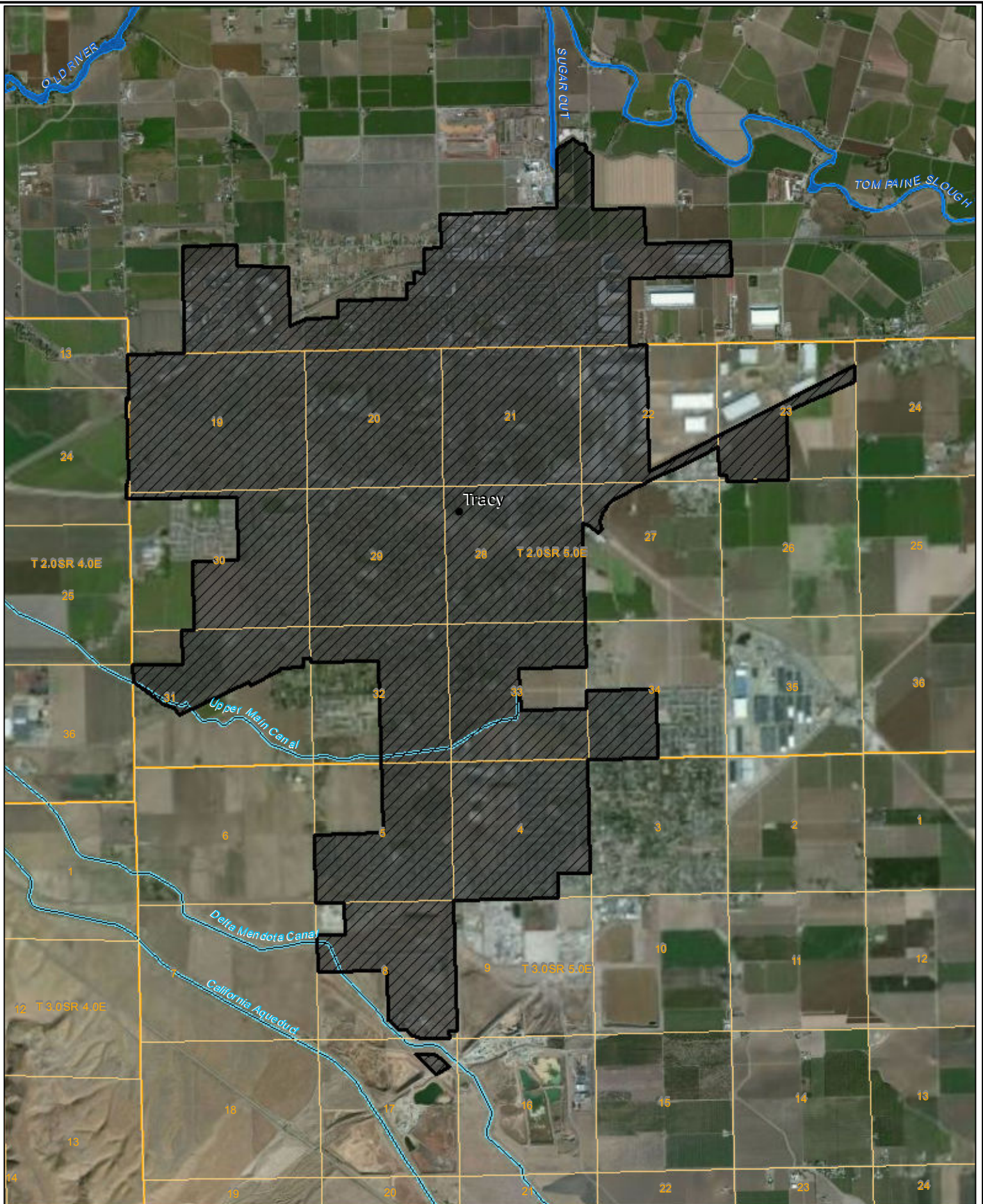
*THREE DELTA DIVISION AND FIVE SAN LUIS UNIT WATER SERVICE INTERIM  
RENEWAL CONTRACTS 2012-2014*

**Appendix A**  
**Contractor's Service Area Maps**



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December 2011





# **City of Tracy** (Partial Assignment from The West Side I.D.) 14-06-200-4305A-IR13-B

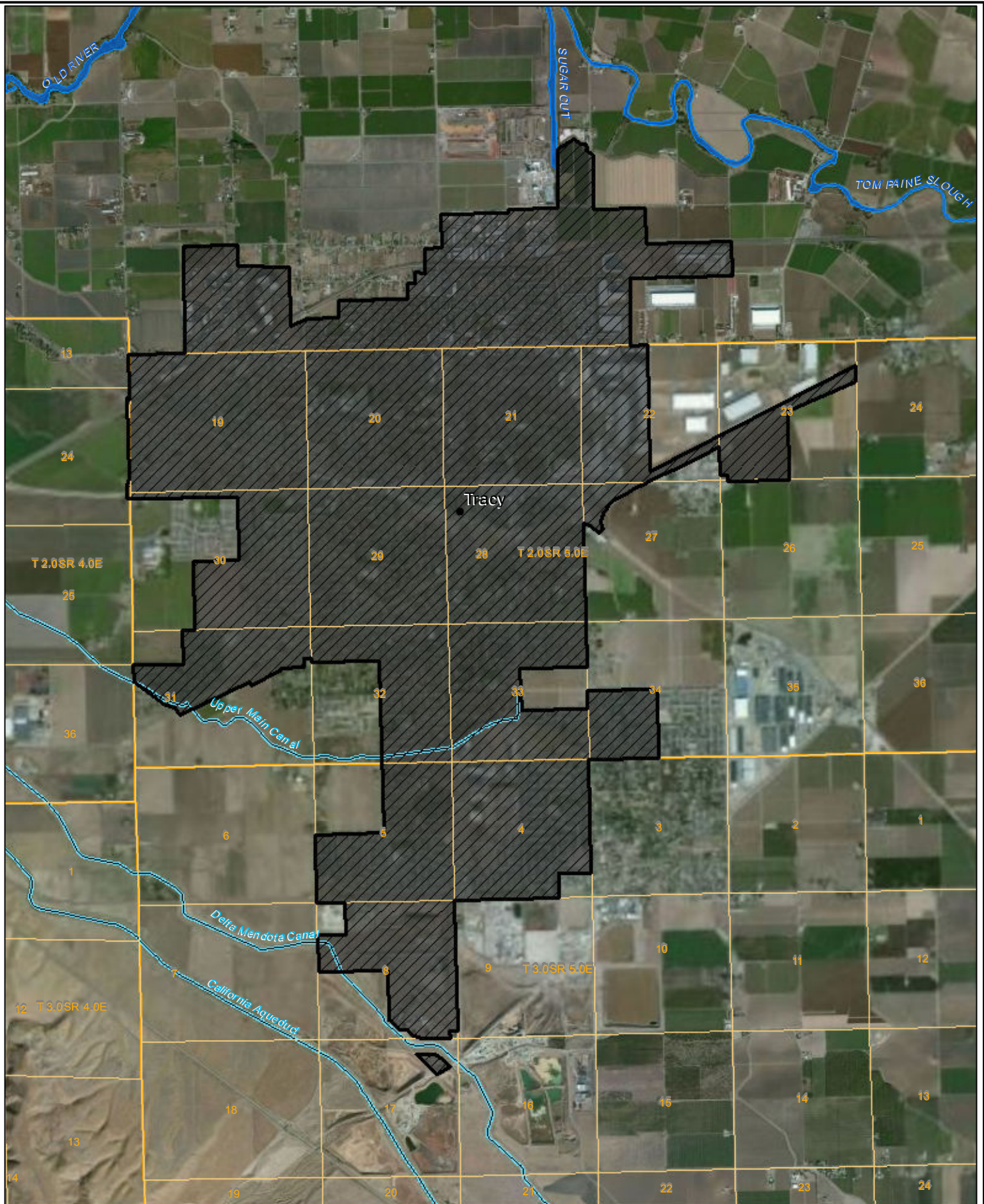
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


214-202-98





**City of Tracy**  
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7-07-20-W0045-IR13-B

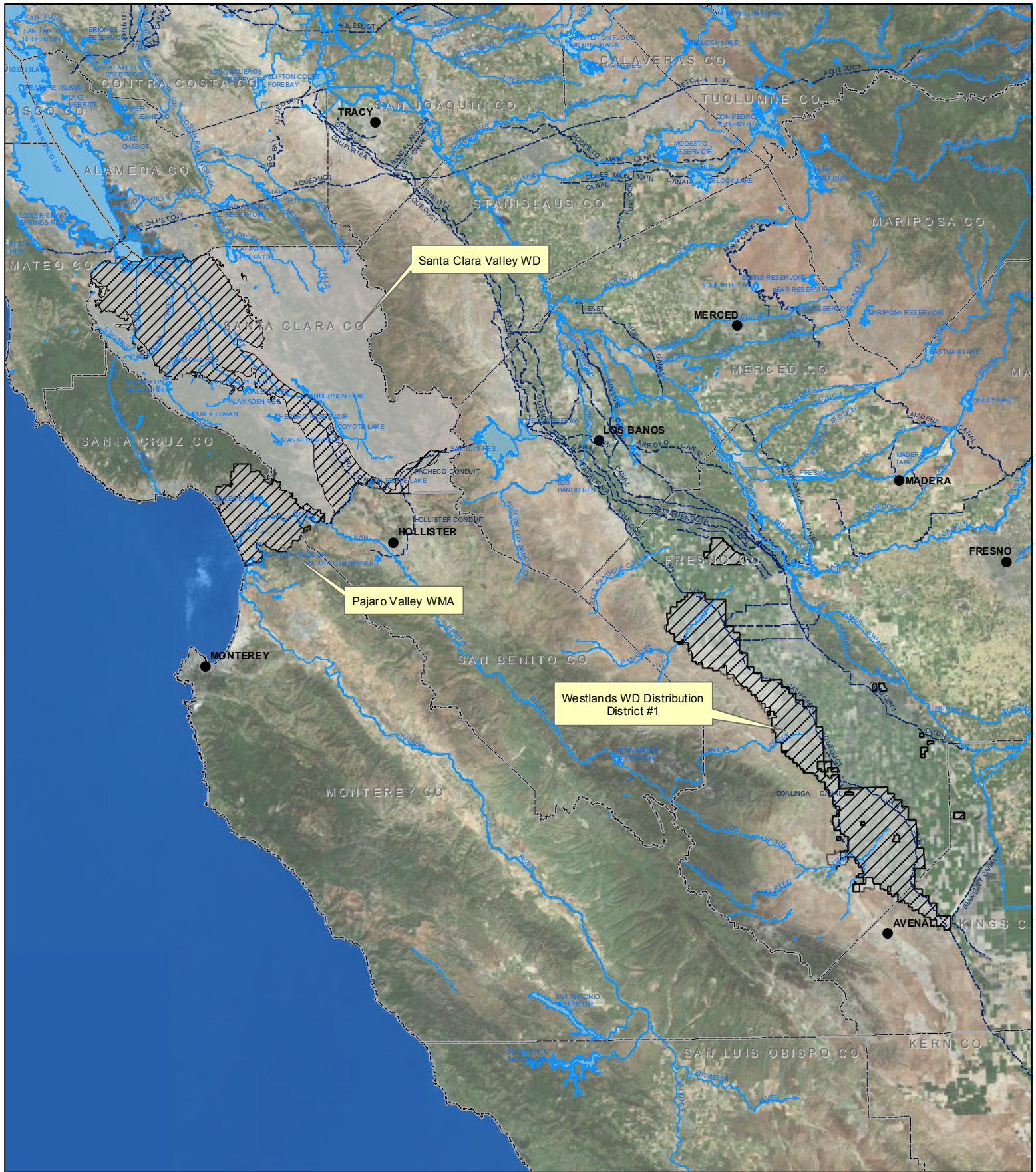
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-  Contractor's Service Area

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214-202-99





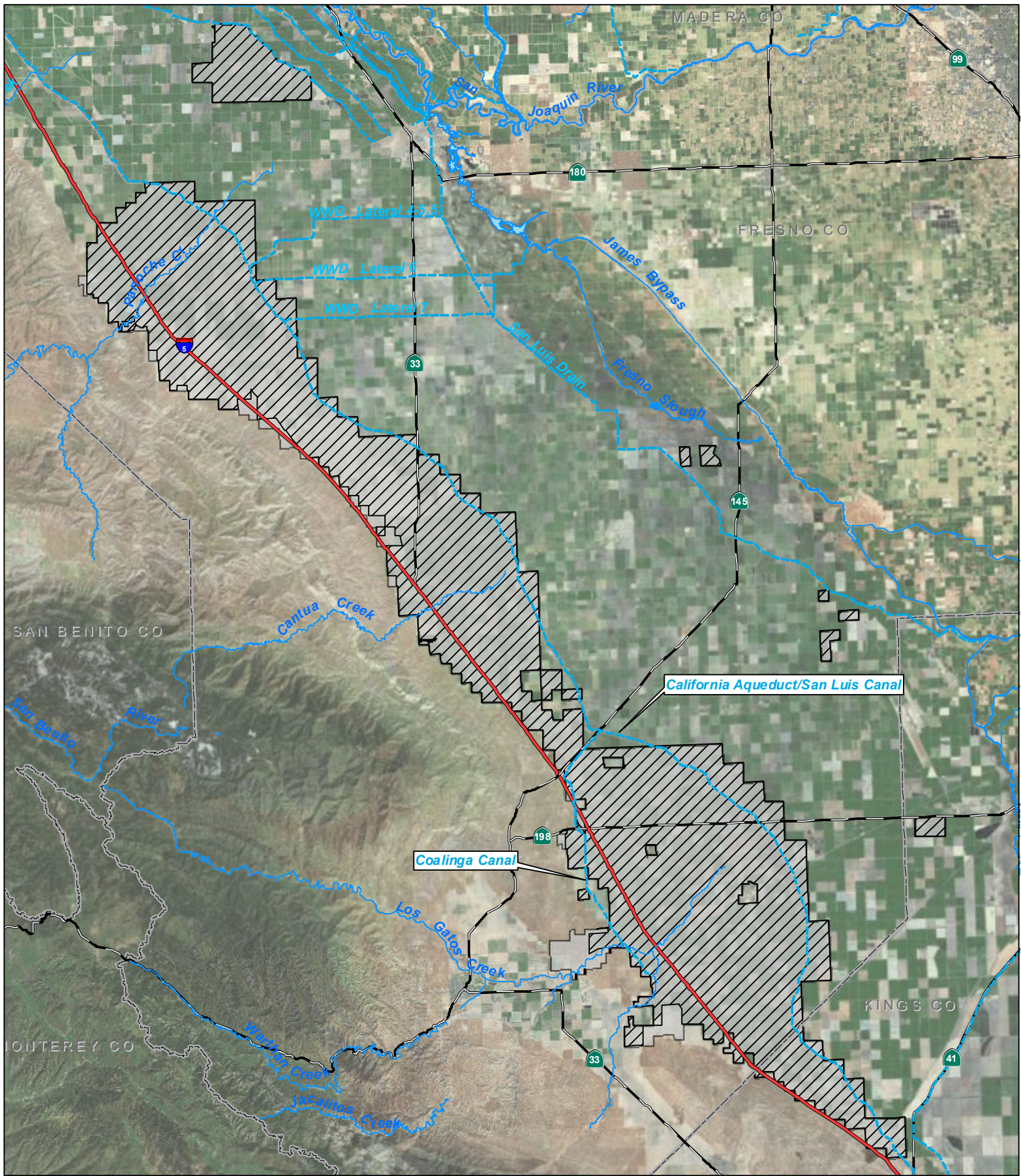
**Pajaro Valley W.M.A. - Santa Clara Valley W.D.  
Westlands W.D. Distribution District #1  
(3-Way Assignment From Mercy Springs W.D.)**

14-06-200-3365A-IR13-B

-  Contractor's Service Area
-  District Boundary







# **Westlands W.D. Distribution District #1 (Full Assignment From Broadview W.D.)**

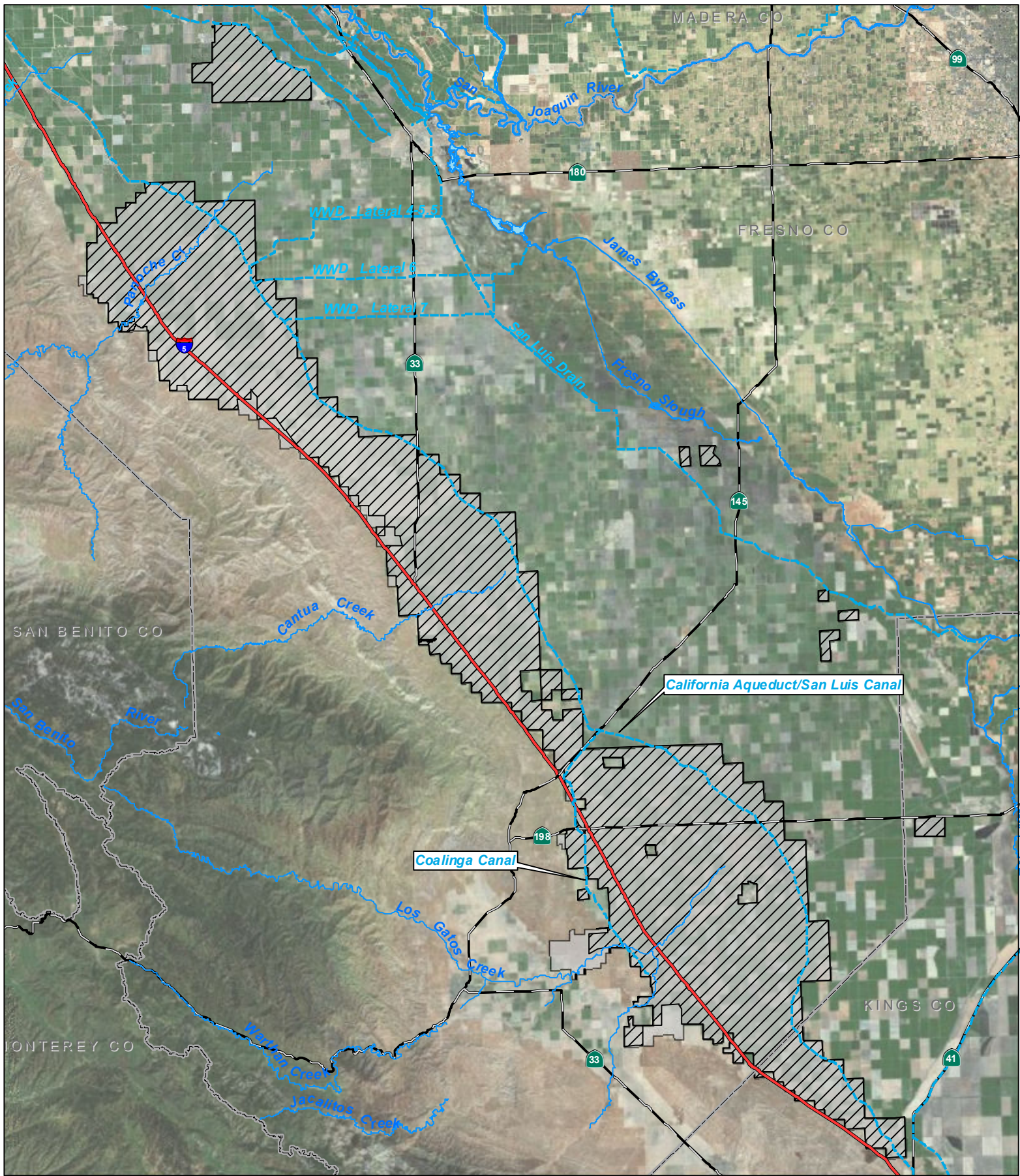
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-  District Boundary
-  Contractor's Service Area

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






**Westlands W.D. Distribution District #1  
(Full Assignment From Centinella W.D.)**

14-06-200-W0055-IR13-B

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-  Contractor's Service Area

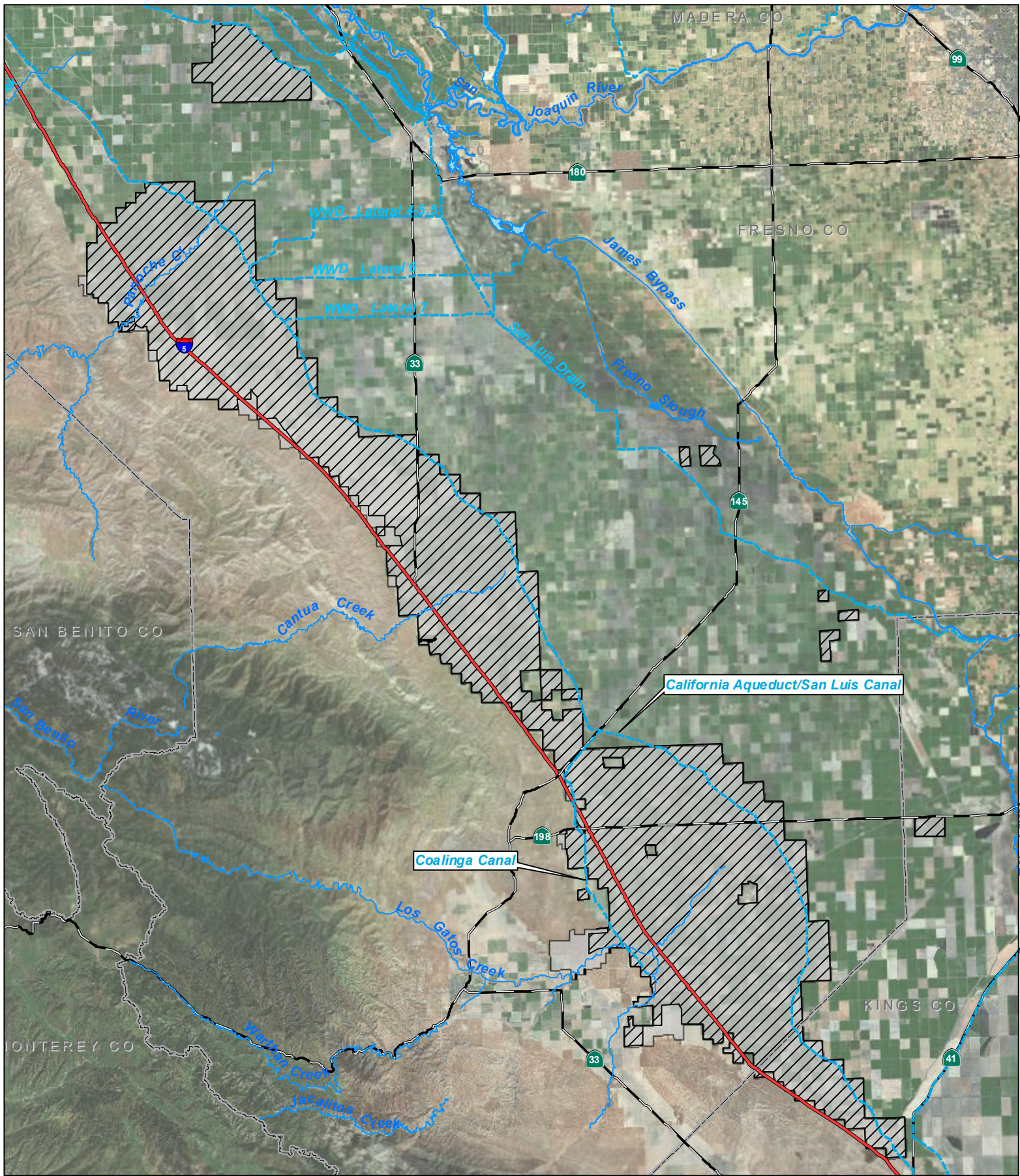
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805-202-45





# **Westlands W.D. Distribution District #1** **(Full Assignment From Widren W.D.)**

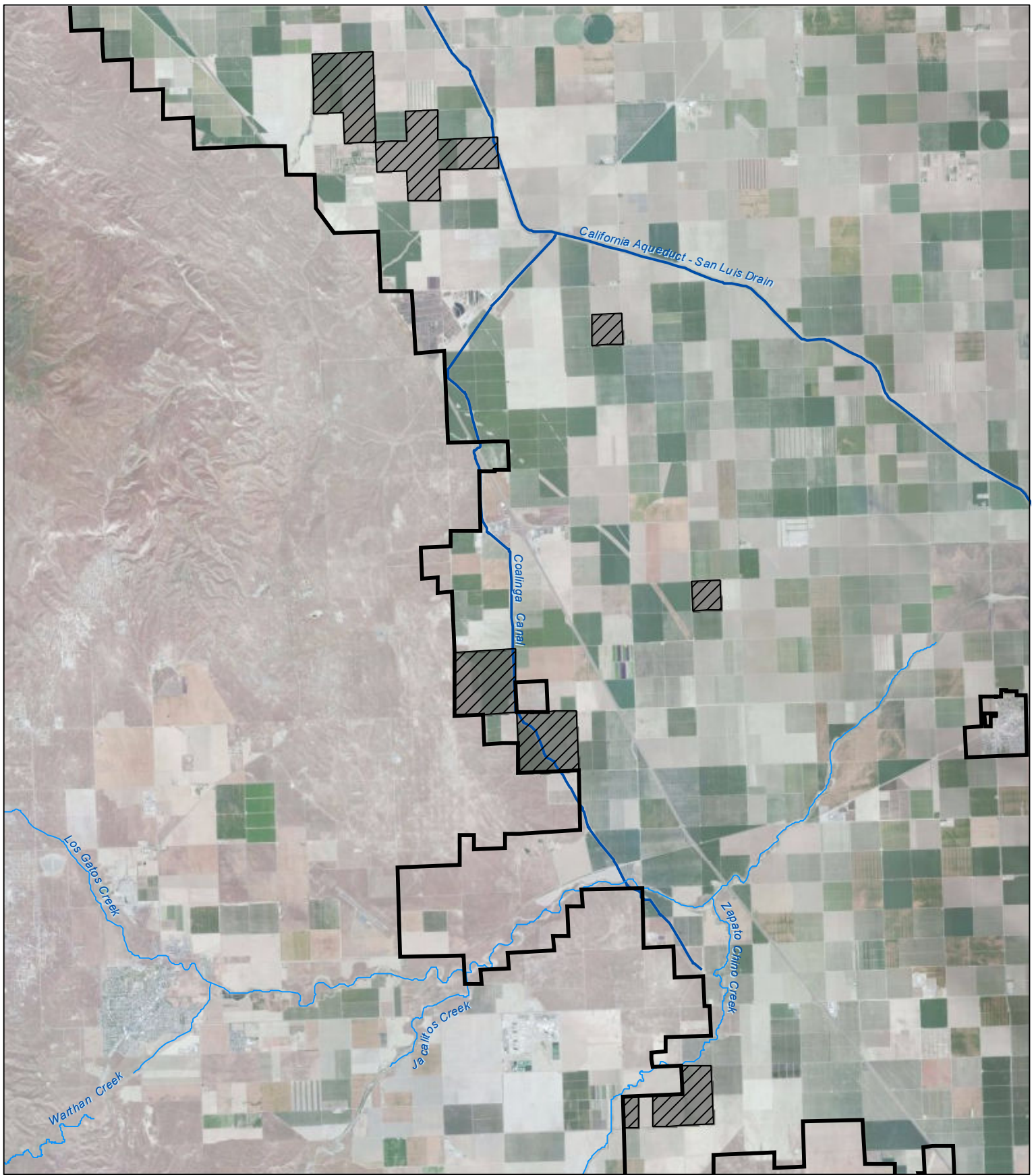
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-  Contractor's Service Area

0 2.5 5 10 Miles





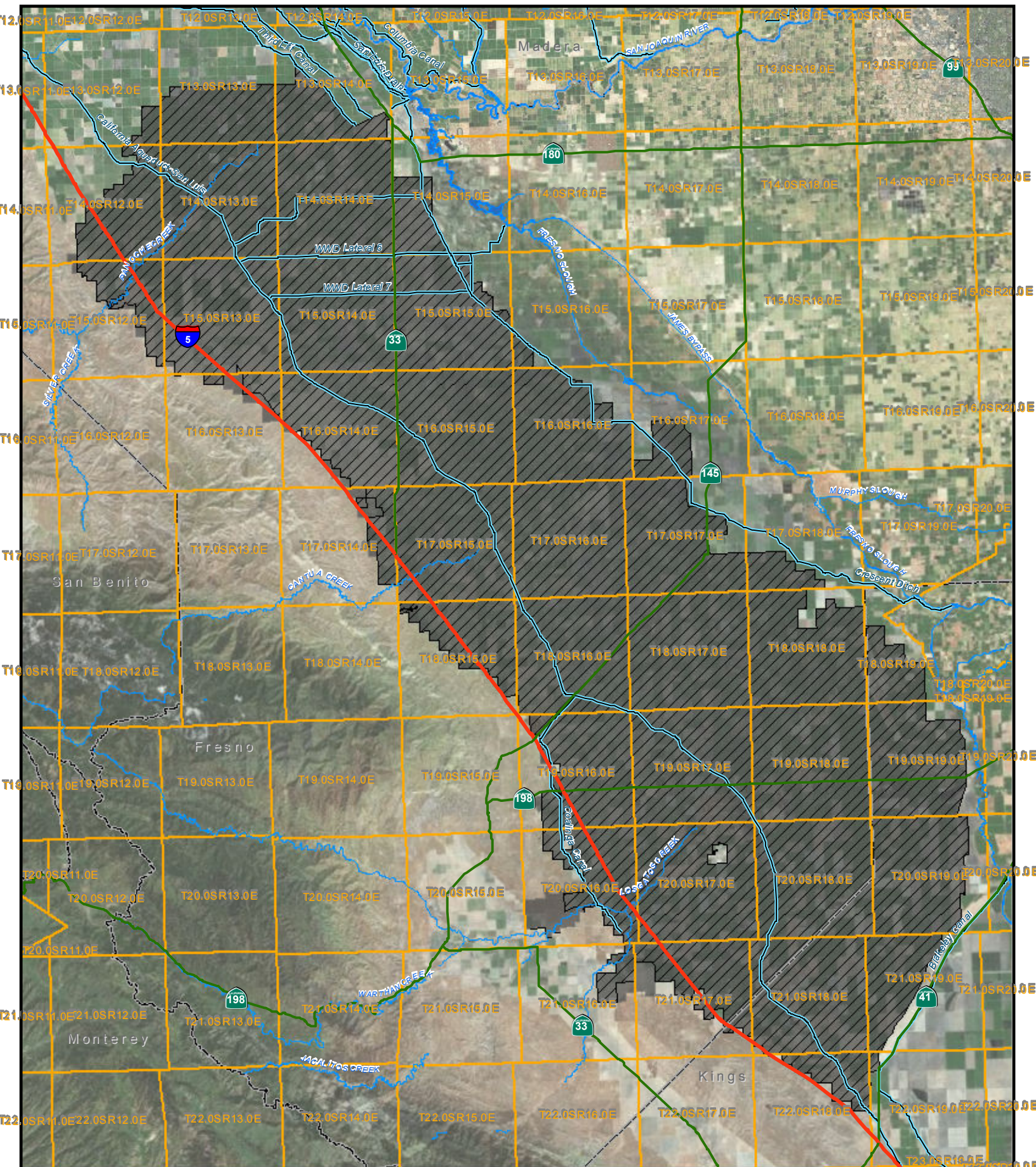


-  District Boundary
-  Contractor's Service Area
-  Westlands Water District

**Westlands Water District**  
**Distribution District No. 2**  
**(Partial Assignment From Mercy Springs W.D.)**  
 14-06-200-3365A-IR13-C







# Westlands Water District

14-06-200-495-IR3

- District Boundary
- Contractor's Service Area

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805-202-46



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DRAFT ENVIRONMENTAL ASSESSMENT (11-049)

*THREE DELTA DIVISION AND FIVE SAN LUIS UNIT WATER SERVICE INTERIM  
RENEWAL CONTRACTS 2012-2014*

**Appendix B**  
**Contractor's 2006 Water Needs Assessments**

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December 2011



# SANTA CLARA VALLEY WD

Contractor ID: 202845

San Felipe

## Water Needs Assessment

### Contractor's Water Supply Sources and Quantities (acre-feet)

Date: 5/31/2006 2:52:07

Timeframe 1	Surface Water Supply							Groundwater Supply				Total Supply 13
	Reference Delivery 2	USBR Total Deliv/Max 3	SWP 4	Local 5	Local Source 6	Trsf / Rtm / Recycle In 7	Trsf / Out 8	District 9	Private 10	Safe Yield 11	Recharge 12	
1995	152,500	*	109,250	28,756	168,536	HetchH/Local resv	15	16,000	0	159,078	114,402	335,233
2003	0		0									0
2025	152,500	*	152,500	74,000	164,800	HetchH/Local resv	14,400	0	0	165,000	132,000	438,700

### Contractor's Agricultural Water Demands

Maximum Productive Acres: 11,304

Timeframe 1	Crop Water Requirement (acre-feet) 15	District Irrig. Efficiency (%) 16	Effective Precip (acre-feet) 17	Reference Effective Precip (acre-ft) 18	Calculated Net Crop Water Req (acre-feet) 19	USBR Net Crop Water Req (acre-feet) 20	Average Irrigated Acres (acres) 21	Reference Irrigated Acres (acres) 22	Calculated FDR (AF/acre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feet) 25	Total Ag Demand (acre-feet) 26
1995	71,266	75	45,953	18,879	33,751	75,514	37,757	37,757	0.89	2.00	0	33,751
2003	49,213	75	10,471		51,656		26,177		1.97		0	51,656
2025	49,213	85	10,471	10,471	45,579	47,119	26,177	26,177	1.74	1.80	0	45,579

### Contractor's M&I Water Demands

Timeframe 1	Residential Water Demand			Nonresidential Water Demand			Loss	Ref Urban Per Capita Dmd (gpcd) 35	Calc Urban Per Capita Dmd (gpcd) 36	Total M&I Demand (acre-feet) 37	Total Ag + M&I Dmd (acre-feet) 38	Unmet Demand (acre-feet) 39
	Population 28	Per Capita Demand (gpcd) 29	Total Demand (acre-feet) 30	Industrial (acre-feet) 31	Comm / Insti. (acre-feet) 32	Total Demand (acre-feet) 33	Unacc. / Distr. (acre-feet) 34					
1995	1,599,100	174.0	311,620	0	0	0	0	274.0	174.0	311,620	345,371	10,138
2003						0	0			0	51,656	51,656
2025	2,175,800	117.3	285,998	263,997	0	263,997	0	257.0	225.7	549,995	595,574	156,874

\* Represents Maximum Contract Amount

**Notes:** 2025 M&I Demand Data: from 2020 average data submitted by SCWD 5/2/00 FAX; no breakdown of industrial & commercial demnds. 2025 supply: CVP supply = max contract amount; Transfer In=recycled water; 40 TAF env demnd could decrease local supply--not shown. 2003 only includes information on currently agricultural cropping and water use and assumes a 75% irrigation efficiency. 2025 agricultural information based on 2003 cropping and water use and assumes an 85% efficiency.

TRACY, CITY OF

Contractor ID: 202135

# Water Needs Assessment

Delta

## Contractor's Water Supply Sources and Quantities (acre-feet)

Date: 5/25/2006 9:12:41

Timeframe 1	Surface Water Supply							Groundwater Supply				Total Supply 13
	Reference Delivery 2	USBR Total Deliv/Max 3	SWP 4	Local 5	Local Source 6	Trsf / Rtm / Recycle In 7	Trsf / Out 8	District 9	Private 10	Safe Yield 11	Recharge 12	
1995	10,000 *	0	0	0		0	0	5,000	0		0	5,000
2025	10,000 *	10,000 *	0	0		32,500	0	5,000	0		0	47,500

## Contractor's Agricultural Water Demands

Maximum Productive Acres: 3,962

Timeframe 1	Crop Water Requirement (acre-feet) 15	District Irrig. Efficiency (%) 16	Effective Precip (acre-feet) 17	Reference Effective Precip (acre-ft) 18	Calculated Net Crop Water Req (acre-feet) 19	USBR Net Crop Water Req (acre-feet) 20	Average Irrigated Acres (acres) 21	Reference Irrigated Acres (acres) 22	Calculated FDR (AF/acre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feet) 25	Total Ag Demand (acre-feet) 26
1995												
2025												

## Contractor's M&I Water Demands

Timeframe 1	Residential Water Demand			Nonresidential Water Demand			Loss	Ref Urban Per Capita Dmd (gpcd) 35	Calc Urban Per Capita Dmd (gpcd) 36	Total M&I Demand (acre-feet) 37	Total Ag + M&I Dmd (acre-feet) 38	Unmet Demand (acre-feet) 39
	Population 28	Per Capita Demand (gpcd) 29	Total Demand (acre-feet) 30	Industrial (acre-feet) 31	Comm / Instit. (acre-feet) 32	Total Demand (acre-feet) 33	Unacc. / Distr. (acre-feet) 34					
1995	46,000	242.3	12,487	0	0	0	0	301.0	242.3	12,487	12,487	7,487
2025	160,000	256.7	46,000	0	0	0	0	269.0	256.7	46,000	46,000	-1,500

\* Represents Maximum Contract Amount

**Notes:** In 2025, transfers in = 10,000 ac-ft (So. San Joaquin ID), 3,000 ac-ft (Widren), 5,000 ac-ft (Banta Carbona), 5,000 ac-ft (The West Side) and 9,500 ac-ft (Plain View). Many of these transfers are uncertain.



# WESTLANDS WD

Contractor ID: 203220

West San Joaquin

# Water Needs Assessment

## Contractor's Water Supply Sources and Quantities (acre-feet)

Date: 5/25/2006 9:14:46

Timeframe 1	Surface Water Supply							Groundwater Supply				Total Supply 13
	Reference Delivery 2	USBR Total Deliv/Max 3	SWP 4	Local 5	Local Source 6	Trsfr / Rtn / Recycle In 7	Trsfr / Out 8	District 9	Private 10	Safe Yield 11	Recharge 12	
1989	1,062,509	1,130,463	0	0		32,865	5,420	0	175,000		0	1,332,908
1996	0	0										0
1999	0	0										0
2025	*	*	0	0		0	4,938	0	175,000		0	170,062
2026	*	1,150,000	0	0		0	4,938	0	175,000		0	1,320,062
2030 Distrib Dist 2	*	2,675	0	0		4,198	0	0	0		0	6,873

## Contractor's Agricultural Water Demands

Maximum Productive Acres: 532,700

Timeframe 1	Crop Water Requirement (acre-feet) 15	District Irrig. Efficiency (%) 16	Effective Precip (acre-feet) 17	Reference Effective Precip (acre-ft) 18	Calculated Net Crop Water Req (acre-feet) 19	USBR Net Crop Water Req (acre-feet) 20	Average Irrigated Acres (acres) 21	Reference Irrigated Acres (acres) 22	Calculated FDR (AF/acre) 23	USBR FDR (AF/acre) 24	Conveyance Loss (acre-feet) 25	Total Ag Demand (acre-feet) 26
1989	1,150,449	75	65,249	155,765	1,446,933	1,401,883	515,000	519,216	2.81	2.70	319	1,447,252
1996	1,229,209	75	163,895	163,895	1,420,419	1,420,419	546,315	546,315	2.60	2.60		
1999	1,269,094	75	163,754	163,754	1,473,787	1,473,787	545,847	545,847	2.70	2.70		
2025	1,366,756	85	181,830	181,830	1,394,030	1,394,030	606,100	606,100	2.30	2.30	319	1,394,349
2026	1,139,266	85	151,230		1,162,395		504,100		2.31		66,003	1,228,398
2030	10,560	85	1,330		10,859		3,598		3.02		343	11,202

## Contractor's M&I Water Demands

Timeframe 1	Residential Water Demand			Nonresidential Water Demand			Loss	Ref Urban Per Capita Dmd (gpcd) 35	Calc Urban Per Capita Dmd (gpcd) 36	Total M&I Demand (acre-feet) 37	Total Ag + M&I Dmd (acre-feet) 38	Unmet Demand (acre-feet) 39
	Population 28	Per Capita Demand (gpcd) 29	Total Demand (acre-feet) 30	Industrial (acre-feet) 31	Comm / Instit. (acre-feet) 32	Total Demand (acre-feet) 33	Unacc. / Distr. (acre-feet) 34					
1989						0	0			0	1,447,252	114,344
1996						0	0			0	0	0
1999						0	0			0	0	0
2025						0	0			0	1,394,349	1,224,287
2026						0	0			0	1,228,398	-91,664
2030						0	0			0	11,202	4,329

\* Represents Maximum Contract Amount

**Notes:** In order to limit this to an assessment of agricultural water needs, M&I water demand in the amount of 5,420 AF in 1989 and 4,938 AF in 2025 are shown as transfers out. 2030 is 2025 assessment for Westlands Distribution District #2 and includes an assignment of 4198 AF from Mercy Springs Water District, 5% conveyance loss and effective precipitation proportional to WWD 2025 estimate.

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DRAFT ENVIRONMENTAL ASSESSMENT (11-049)

*THREE DELTA DIVISION AND FIVE SAN LUIS UNIT WATER SERVICE INTERIM  
RENEWAL CONTRACTS 2012-2014*

**Appendix C**  
**Reclamation's Environmental Determinations (Cultural  
Resources, ITA)**

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December 2011

## Healer, Rain L

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**From:** Williams, Scott A  
**Sent:** Thursday, October 27, 2011 10:21 AM  
**To:** Healer, Rain L  
**Subject:** 12-SCAO-019: Three Delta Division and Five San Luis Unit Water Service Interim Renewal Contracts, 2012-2014

Project No. 12-SCAO-019

Rain Healer:

The proposed undertaking of the Three Delta Division and Five San Luis Unit Water Service Interim Renewal Contracts, 2012-2014 has no potential to cause effects to historic properties pursuant to the Section 106 implementing regulations at 36 CFR Part 800.3(a)(1).

Interim renewal contracts are undertaken under the authority of the CVPIA to provide a bridge between the expiration of the original long-term water service contract and the execution of a new long-term water service contract. The eight water service contracts proposed for interim renewal in 2012 are listed in Table 1-1. These eight interim renewal contracts would be renewed for a two-year period from March 1, 2012 through February 28, 2014. In the event a new long-term water service contract is executed, the interim water service contract then-in-effect would be superseded by the long-term water service contract. In the event a new long-term water service contract is executed, the interim water service contract then-in-effect would be superseded by the long-term water service contract.

**Table 1-1 Contractors, Existing Contract Amounts, and Expiration Dates**

<b>Contractor</b>	<b>Contract Number</b>	<b>Contract Quantity (acre-feet)</b>	<b>Expiration of Existing Interim Renewal Contract</b>
<b>DELTA DIVISION CONTRACTS</b>			
City of Tracy (partial assignment from West Side Irrigation District)	14-06-200-4305A-IR12-B	2,500 <sup>1</sup>	2/29/2012
City of Tracy (partial assignment from Banta-Carbona Irrigation District)	7-07-20-W0045-IR12-B	5,000	2/29/2012
Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District Distribution District # 1 (3-way assignment from Mercy Springs Water District)	14-06-200-3365A-IR12-B	6,260	2/29/2012
<b>SAN LUIS UNIT CONTRACTS</b>			
Westlands Water District	14-06-200-495-IR2	1,150,000	2/29/2012
Westlands Water District DD#1 (full assignment from Centinella Water District)	14-06-200-W0055-IR12-B	2,500	2/29/2012
Westlands Water District DD #1 (full assignment from Widren Water District)	14-06-200-8018-IR12-B	2,990	2/29/2012

Westlands Water District DD #1 (full assignment from Broadview Water District)	14-06-200-8092-IR12	27,000	2/29/2012
Westlands Water District DD #2 (partial assignment from Mercy Springs Water District)	14-06-200-3365A-IR12-C	4,198	2/29/2012
<sup>1</sup> With an option to acquire an additional 2,500 AF			

The EA has been prepared to examine the impacts on environmental resources as a result of delivering water to the contractors listed in Table 1-1 under the proposed interim renewal contracts. The water would be delivered for agricultural or municipal and industrial (M&I) purposes within Reclamation's existing water right place of use. The water would be delivered within the current contractor service area boundaries using existing facilities for a period of up to two years. Use of contract water for agricultural irrigation use or M&I use under the proposed interim renewal contracts would not change from the purpose of use specified in the existing contracts.

The action as presented is primarily administrative and there will be no ground disturbance nor modification of any facilities associated with this project. As the proposed action has no potential to affect historic properties, no additional consideration under Section 106 of the National Historic Preservation Act is required.

This email memo is intended to convey the conclusion of the Section 106 process for this undertaking. Please retain a copy of this memo with the EA file. Thank you for providing the opportunity to comment on this action.

Sincerely,

Scott A. Williams, M.A. Archaeologist  
Bureau of Reclamation, Mid-Pacific Region  
2800 Cottage Way, MP-153  
Sacramento, CA 95825  
916-978-5042

## Healer, Rain L

**From:** Rivera, Patricia L  
**Sent:** Thursday, October 27, 2011 9:19 AM  
**To:** Healer, Rain L  
**Cc:** Robbins, Eleanor J (Ellie)  
**Subject:** RE: EA-11-049 for your review---ELLIE THIS IS ADMIN

Rain,

I reviewed the proposed action to execute three Delta Division and five San Luis Unit interim renewal contracts beginning March 1, 2012. This interim renewal is in accordance with the Reclamation Projects Authorization and Adjustment Act of 1992 (Public Law 102-575) that included Title 34, the Central Valley Project Improvement Act (CVPIA), Section 3404(c) of the CVPIA.

Interim renewal contracts are undertaken under the authority of the CVPIA to provide a bridge between the expiration of the original long-term water service contract and the execution of a new long-term water service contract. The eight water service contracts proposed for interim renewal in 2012 are listed in Table 1-1. These eight interim renewal contracts would be renewed for a two-year period from March 1, 2012 through February 28, 2014.

**Table 1-1 Contractors, Existing Contract Amounts, and Expiration Dates**

Contractor	Contract Number	Contract Quantity (acre-feet)	Expiration of Existing Interim Renewal Contract
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Pajaro Valley Water Management Agency, Santa Clara Valley Water District, and Westlands Water District Distribution District # 1 (3-way assignment from Mercy Springs Water District)	14-06-200-3365A-IR12-B	6,260	2/29/2012
<b>SAN LUIS UNIT CONTRACTS</b>			
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Westlands Water District DD#1 (full assignment from Centinella Water District)	14-06-200-W0055-IR12-B	2,500	2/29/2012
Westlands Water District DD #1 (full assignment from Widren Water District)	14-06-200-8018-IR12-B	2,990	2/29/2012
Westlands Water District DD #1 (full assignment from Broadview Water District)	14-06-200-8092-IR12	27,000	2/29/2012
Westlands Water District DD #2 (partial assignment from Mercy Springs Water District)	14-06-200-3365A-IR12-C	4,198	2/29/2012
<sup>1</sup> With an option to acquire an additional 2,500 AF			

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 that a new long-term water contract is executed, that interim renewal contract would then expire.

The proposed action does not have a potential to affect Indian Trust Assets.

Patricia