

RECLAMATION

Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT

San Luis Water District's and Panoche Water District's Water Service Interim Renewal Contracts 2011 – 2013

FONSI-10-070

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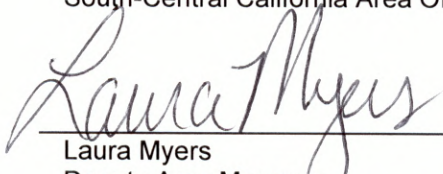
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Introduction

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 Interim Renewal Contracts for San Luis Water District (SLWD) and Panoche Water District (PWD) for the contract period March 1, 2011 through February 28, 2013 is not a major federal action that will significantly affect the quality of the human environment and an environmental impact statement is not required. This Finding of No Significant Impact is supported by Reclamation's Environmental Assessment (EA) Number EA-10-070, *San Luis Water District's and Panoche Water District's Water Service Interim Renewal Contracts 2011 – 2013*, and is hereby incorporated by reference.

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. Because SLWD's and PWD's existing interim contracts will expire February 28, 2011, and Reclamation has not yet completed appropriate environmental review of a 25 year water service contract, Reclamation will execute interim water service contracts for SLWD and PWD. The Proposed Action, therefore, is the execution of these interim renewal contracts with the United States, for two years with contract provisions as described within the EA. The water available to SLWD and PWD under the contract provisions of the Proposed Action will remain the same as in the existing interim contracts.

The Proposed Action is the continued delivery of Central Valley Project (CVP) water under the interim renewal of SLWD's and PWD's existing contracts which includes terms and conditions required by non-discretionary CVPIA provisions. The Proposed Action contains provisions consistent with interim renewal of current water service contracts as analyzed as part of the Preferred Alternative of the CVPIA Programmatic Environmental Impact Statement (PEIS) adapted for an interim period but without implementation of 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 concluded with a form of contract which does not include tiered pricing).

The CVPIA PEIS Preferred Alternative assumed that most contract provisions will 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 operation and maintenance of certain facilities and drainage service under the 1960 San Luis Act have been incorporated into the Proposed Action with some negotiated changes. Article 16(c) of the San Luis Unit contractors' interim renewal contract specifies that the Contracting Officer

shall notify the Contractor in writing when drainage service becomes available, and provides for the payment of rates for such service after such notice.

The Proposed Action also includes the definition of Municipal & Industrial (M&I) Water requiring the San Luis Unit contractors to consider all parcels five acres or smaller as an M&I use unless Reclamation certifies otherwise.

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

Execution of SLWD's and PWD's interim renewal contracts will not change contract water quantities from the quantities in the existing contracts, and will not lead to any increased water use. Therefore, there will be no effect on surface water supplies or quality. Since water quantities and deliveries will not change there will not be a shift to groundwater due to the interim renewal contracts. Therefore, there will be no significant impact on groundwater supplies or quality.

Execution of two year interim renewal contracts will not change historical values in quantity, quality, or discharge of drainage emanating from or within SLWD and PWD. 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); therefore, there are no significant environmental impacts associated with the Proposed Action.

Land Use

The interim renewal of SLWD's and PWD's 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 their existing contracts. Likewise, SLWD's and PWD's renewal contracts will not change contract terms or conditions governing the allocation of CVP water during times of limited supply (e.g., drought), so will not provide additional water reliability conducive to conversion of land use from agricultural to M&I uses. Given the two-year period of the interim renewal contracts, there will be no significant impact on land use.

Biological Resources

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 study area and other portions of the San Luis Unit. Additionally, execution of Interim Renewal Contracts under the Proposed Action would not involve construction of new facilities or installation of structures.

On December 15, 2010 Reclamation received a concurrence letter from the U.S. Fish and Wildlife Service (USFWS) Sacramento Field Office for the Proposed Action, concurring with Reclamation that effects of the Proposed Action are not likely to adversely affect San Joaquin kit fox, giant garter snake, and Delta smelt and its designated critical habitat. The USFWS based

their concurrence on Reclamation's continued participation in the Grasslands Bypass Project and compliance with its Biological Opinion. The execution of Interim Renewal Contracts for SLWD and PWD will be subject to the terms and conditions as specified in the 2009 Grasslands Bypass Project Biological Opinion (USFWS 2009).

Reclamation has consulted with the National Marine Fisheries Service (NMFS) on impacts from the Interim Renewal of SLWD and PWD contracts and on February 23, 2011 a Biological Opinion was issued by NMFS for the effects of agricultural drain water entering the San Joaquin River. The NMFS concluded the execution of interim renewal contracts were not likely to jeopardize the continued existence on federally listed endangered Sacramento River winter-run Chinook salmon, threatened Central Valley spring-run Chinook salmon, threatened Central Valley steelhead, the threatened Southern distinct population segment (DPS) of North American green sturgeon, and the designated critical habitat of Central Valley steelhead and the Southern DPS of North American green sturgeon with compliance to the terms and conditions in the Biological Opinion. These terms and conditions are non-discretionary and must be incorporated as binding conditions of any contracts or permits between Reclamation and PWD and SLWD. Reclamation will comply with requirements of the February 23, 2011 Biological Opinion issued by NMFS.

Cultural Resources

The Proposed Action has no potential to affect historic properties pursuant to the regulations at 36 CFR Part 800.3(a)(1). The Proposed Action will not change the SLWD and PWD service areas and water will continue to be delivered through existing conveyance features. No ground disturbance, change in land use, or modification to built environment features will occur under the Proposed Action. As such, the Proposed Action will have no impact to cultural resources.

Indian Trust Assets

No physical changes to existing facilities are proposed and no new facilities are proposed. Continued delivery of CVP water to SLWD and PWD under an interim renewal contract will not affect any Indian Trust Assets because existing rights will not be affected.

Environmental Justice

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 will not be expected to disproportionately affect minority or low income populations. There are no environmental justice implications from the Proposed Action.

Socioeconomic Resources

Under the Proposed Action, there is no potential for effects to occur due to tiered pricing since SLWD's and PWD's interim renewal contracts are less than three years in duration. 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 SLWD's and PWD's interim contracts will provide continued stability to the agricultural industry within the contractors' service area resulting in beneficial impacts to socioeconomic resources.

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

Climate change 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 run off regime. Current data are not yet clear on the hydrologic changes and how they will affect the San Joaquin Valley. Water allocations are 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 operational flexibility and therefore surface water resource changes due to climate change will be the same with or without the Proposed Action.

Cumulative Impacts

The Proposed Action, when added to other past, present, and future actions does not result in additional diversions of water, or significantly impact global climate change and water, biological, cultural, land use, or socioeconomic resources. Neither Indian Trust Assets nor disadvantaged or minority populations will be impacted. Water quality will not be degraded as a result of construction activities. Overall there will be no cumulative impacts due to this Proposed Action.

RECLAMATION

Managing Water in the West

Final Environmental Assessment

San Luis Water District's and Panoche Water District's Water Service Interim Renewal Contracts 2011-2013

EA-10-070



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

February 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
CAA	Clean Air Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDDB	California Native Diversity Data Base
CO	Carbon monoxide
CO ₂	Carbon dioxide
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CWA	Clean Water Act
DMC	Delta-Mendota Canal
DPS	Distinct Population Segment
DWR	California Department of Water Resources
EA	Environmental Assessment
EFH	Essential Fish Habitat

EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEIS	Final Environmental Impact Statement
FWCA	Fish & Wildlife Coordination Act
GBP	Grassland Bypass Project
GHG	greenhouse gases
ITA	Indian Trust Asset
M&I	Municipal and Industrial
MBTA	Migratory Bird Treaty Act
mg/L	milligram per liter
mg/m ³	Milligram per cubic meter
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NLAA	Not likely to adversely affect
NMFS	National Marine Fisheries Service
NO ₂	Nitrogen dioxide
NO _x	Nitrogen oxides
O ₃	Ozone
O&M	Operation and Maintenance
PEIS	Programmatic Environmental Impact Statement
PM ₁₀	Particulate matter between 2.5 and 10 microns in diameter
PM _{2.5}	Particulate matter less than 2.5 microns in diameter
PPM	Parts per million
PWD	Panoche Water District
Reclamation	Bureau of Reclamation
ROD	Record of Decision
ROG	Reactive organic gases
ROW	Right-of-way
SIP	State Implementation Plan
SJRIP	San Joaquin River Improvement Project
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SLC	San Luis Canal
SLDFRE	San Luis Drain Feature Reevaluation
SLWD	San Luis Water District
SO ₂	Sulfur dioxide
SWP	State Water Project
TDS	Total Dissolved Solids
USFWS	US Fish and Wildlife Service
µg/m ³	Microgram per cubic meter
VOC	Volatile organic compounds
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 interim renewal contracts beginning March 1, 2011, for San Luis Water District (SLWD) and Panoche Water District (PWD), contractors from the San Luis Unit, West San Joaquin Division. Each of the interim renewal contracts for water service will be renewed for up to two contract 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 contracts and long-term renewal of those contracts.

SLWD's and PWD's long-term contract expired December 31, 2008. In 2007, Reclamation executed interim renewal contracts for each of the contractors for up to two years and two months (26 months). The interim renewal contracts were analyzed in Environmental Assessment (EA), *San Luis Unit Water Service Interim Renewal Contracts – 2008-2011* (EA-07-56), and are hereby incorporated by reference (Reclamation 2007). The interim renewal contracts expire February 28, 2011, for SLWD and PWD.

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 analyzed the implementation of all aspects of CVPIA, contract renewal being one of many programs addressed by this Act (Reclamation 1999). 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 are 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 PEIS did not analyze site specific impacts of contract renewal.

The analysis in the PEIS as it relates to the implementation of CVPIA through contract renewal and the environmental impacts of implementation of the Preferred Alternative are foundational to this document. The PEIS has analyzed the differences in the environment between existing contract requirements, signed prior to CVPIA, and the PEIS No Action Alternative which is reflective of minimum implementation of CVPIA.

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 draft interim renewal contracts in any given year is uncertain, but likely similar to, or less than levels of historic deliveries.

CVP water service contracts in the 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 substantially completed negotiating the provisions of long-term renewal contracts with the San Luis Unit contractors; however, Reclamation has not yet completed environmental documentation for proposed long-term contracts within the San Luis Unit (West San Joaquin Division), including SLWD and PWD, due to unresolved operational and environmental issues. With the exception of Pacheco Water District's long-term contract (which expires at the end of February 2024), the remaining San Luis Unit contractors have interim renewal contracts which expire at the end of February 2012 or February 2013.

1.2 Purpose and Need

The purpose of the Proposed Action is to execute two San Luis Unit interim renewal contracts, for up to two years each, beginning March 1, 2011, for SLWD and PWD as required by, and to further implement CVPIA Section 3404(c). Execution of these two interim renewal contracts will provide the contractual relationship for the continued delivery of CVP water to these contractors pending execution of their long-term renewal contracts.

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 analyzes the delivery of CVP water for a two-year period from March 1, 2011 through February 28, 2013, within the service area of SLWD and PWD (see Figure 1-1). In the event the negotiated long-term renewal contracts are executed, the interim renewal contracts then in effect would be superseded by the long-term renewal contracts.

Reclamation analyzed the environmental impacts related to management of subsurface drainage within the Grassland Drainage Area (GDA) through the Grassland Bypass Project (GBP) between 2010 and December 31, 2019 in the 2009 *Grassland Bypass Project Environmental Impact Statement/Environmental Impact Report* (Reclamation 2009c). Water quality and monitoring requirements established by the Central Valley Regional Water Quality Control Board (CVRWQCB) are specified under the GBP Third Use Agreement and included as commitments in the ROD issued for the Third Use Agreement. Drainage management for PWD and SLWD lands located within Charleston Drainage District (participants in the GBP) are

included within the GBP analysis and environmental commitments in the ROD; therefore, drainage management is not part of the Proposed Action within this EA.

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 San Luis Unit 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 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* [SLDFRE-FEIS] (Reclamation 2005). Reclamation made a decision for that action which is reflected in the Record of Decision (ROD). The actions considered in this EA would not alter or affect the analysis or conclusions in the SLDFRE-FEIS or its ROD.

1.5 Potential Issues

Consistent with previous interim renewal contract EAs for other divisions of the CVP including the 2009 *San Luis Unit Water Service Interim Renewal Contracts -2010-2013 (EA-09-101)* for eleven San Luis Unit contractors (Reclamation 2009a) and the *2010 Renewal of Cross Valley Interim Water Service Contracts and Delta/San Felipe Division Contracts through February 29, 2011 (EA-09-126)* for nine Cross Valley and Delta/San Felipe contractors (Reclamation 2009b), both of which are hereby incorporated by reference, and with the inclusion of provisions on drainage service and O&M of certain federal facilities in the San Luis Unit irrigation and municipal and industrial (M&I) form of contract, this EA considers the potential direct, indirect, and cumulative effects of these two interim renewal contracts on the following resources: Surface Water Resources, Groundwater Resources, Biological Resources, Cultural Resources, Indian Trust Assets (ITA), Indian Sacred Sites, Land Use, Socioeconomic Resources, Environmental Justice, Air Quality, and Global Climate.

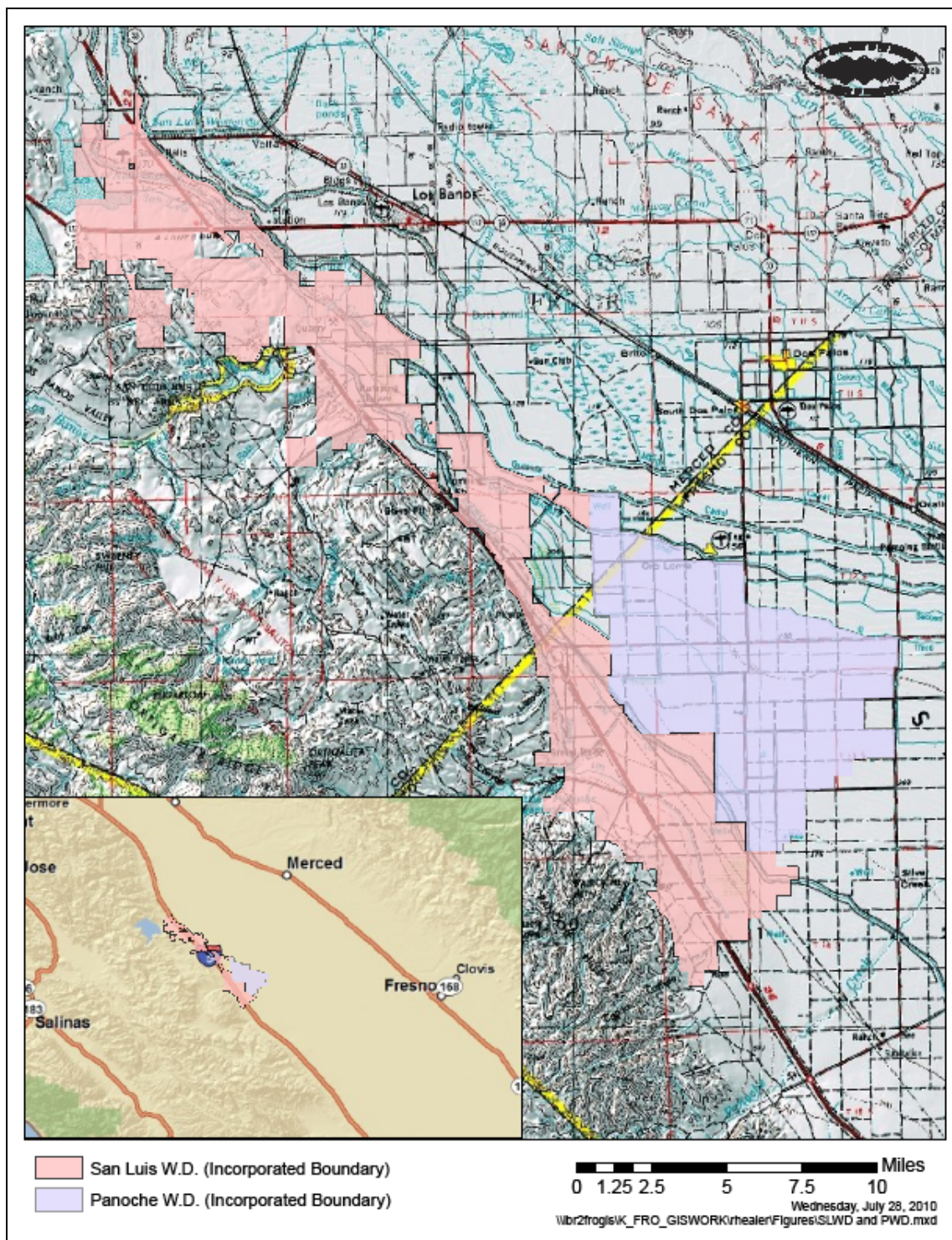


Figure 1-1 SLWD and PWD Service Areas

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Section 2 Alternatives Including the Proposed Action

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

Table 2-1 San Luis Unit Contractors, Existing Contract Amounts, and Expiration Dates

Contractor and Current Contract Number	Contract Entitlement	Expiration of Previous Interim Renewal Contract	Purpose of Use
San Luis Water District 14-06-200-7773A-IR1	125,080 acre-feet (AF)	2/28/2011	Ag and M&I
Panoche Water District 14-06-200-7864A-IR1	94,000 AF	2/28/2011A	Ag and 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 (see 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 1999) adapted to apply for an interim period.

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

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.

Aspects of the interim renewal contracts that reflect the San Luis Unit specific contract provisions not reflected in the PEIS Preferred Alternative include “Federal Drainage Service” and “O&M of Certain Facilities by the San Luis Unit Contractors”. These provisions were summarized in EA-07-56 (Reclamation 2007) and are incorporated by reference.

2.1.1 Other Contract Provisions of Interest

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

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

2.2 Proposed Action

The Proposed Action evaluated in this document is the execution of two interim renewal water service contracts between the United States and SLWD and PWD which are the same two included in the No Action Alternative. Both of these contractors have existing interim renewal contracts which expire February 28, 2011. SLWD and PWD are on their first interim renewal contract. The Proposed Action would be their second.

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 SLWD’s and PWD’s service areas or water deliveries are part of the Proposed Action. CVP water deliveries under the two proposed interim renewal contracts can only be used within each designated contract service area (see Figure 1-1). Contract service areas for the proposed interim renewal contracts have not changed from the existing interim renewal contracts. The proposed interim renewal contract quantities (see 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 2008 interim renewal contracts from EA-07-56 (Reclamation 2007) are incorporated by reference into the Proposed Action.

The two 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 two 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 Endangered Species Act (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 the 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.

Table 2-2 provides a comparison of the differences in the terms and conditions between the expired Long-term Contract, the No Action Alternative, the first executed interim renewal contract and the Proposed Action. 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 (see Appendix A for SLWD and PWD draft contracts).

Table 2-2 Comparison of Contract Provisions

Contract Provision	Long-term Contract (Expired)	No Action Alternative (Based on PEIS Preferred Alternative)	Negotiated Contract (First Interim Renewal Contract) and Proposed Action
Explanatory Recitals	Assumes construction of an interceptor drain	No similar language in recitals	Assumes provision of drainage service
Definitions:			
Category 1 and Category 2	Not addressed	Tiered Pricing as in PEIS	No Tiered Pricing and No definition of Category 1 and Category 2
Contract Total	Not addressed	Contract Total described as Total Contract	Assumes maximum entitlement Assumes provision of water for irrigation of land in units less than or equal to five acres as M&I water unless Contracting Officer is satisfied use is irrigation
M&I water	Not addressed as definition – Addressed within an article – Article assumes obtaining a rate for M&I when delivered	Same as Existing Contract	
Terms of contract – right to use contract	Assumes that contracts may be renewed Assumes convertibility of contract to a 9(d) contract same as existing contracts	Same as Existing Contract Same as Existing Contract	Assumes that contracts would be renewed if Contractor has been compliant with contract Similar to No Action Alternative but preserves positions re: convertibility to 9(d) contract
Water to be made available and delivered to the	Assumes water availability in accordance with existing conditions	Same as Existing Contract	Similar to No Action Alternative but makes it more explicit that water to

Contract Provision	Long-term Contract (Expired)	No Action Alternative (Based on PEIS Preferred Alternative)	Negotiated Contract (First Interim Renewal Contract) and Proposed Action
contractor	<p>Assumes compliance with Biological Opinions and other environmental documents for contracting</p> <p>Assumes drain built and allows connection of district built drainage facilities</p>	<p>Same as Existing Contract</p> <p>Same as Existing Contract</p>	<p>be made available is subject to operational constraints</p> <p>Similar to No Action Alternative; Requires contractor to be within legal authority to implement.</p> <p>Assumes SLDFRE ROD Implementation (WWD only)</p>
Rates and method of payment for water	Assumes Contractor must pay for all water made available under the Contract whether it is all taken or not	Assumes Tiered Pricing is total water quantity; assumes advanced payment for rates for two months; payment only for water taken	Same as No Action Alternative in terms of payment and take or pay; however, tiered pricing is not applicable to contracts less than 3 years
Application of payments and adjustments	Assumes credits or refunds	Same as Existing Contract	Similar to No Action Alternative except requires \$1,000 or greater overpayment for refund
Opinions and determinations	Assumes the Contractor expressly reserves the right to relief from any arbitrary, capricious or unreasonable opinion or determination	PEIS recognizes that CVP will operate in accordance with existing rules; opinions will not be arbitrary, capricious or unreasonable	Same as No Action Alternative with additional clarifications on the right to seek relief and legal effect of section
Coordination and cooperation	Not addressed	Not addressed	Assumes that communication, coordination, and cooperation between CVP operations and users should participate in CVP operational decision making discussions however parties retain exclusive decision-making authority
Points of Diversion and Responsibility for Distribution of Water	Assumes interceptor drain built and allows for discontinuation of service for maintenance	Assumes drainage service	Assumes no indemnity for United States for lack of drainage service
Drainage Studies and Facilities	Assumes Contractor groundwater studies and reports. Assumes Districts construction of in-district drainage facilities	Assumes status quo of addressing drainage	Recognizes that the Secretary shall provide drainage service
O&M by non-federal entity	Assumes that the United States may transfer the O&M and does not affect the rights or obligations of either party to the contract	Assumes that CVP will operate in accordance with existing rules and no additional changes to operation responsibilities	Similar to No Action Alternative; however, recognizes role of certain operating Non-Federal Entity/Entities
Resolution of disputes	Not addressed	Not addressed	Assumes a Dispute Resolution Process
Changes in contractor's	Assumes no changes in absent Contracting Officer	Assumes no change in CVP water service areas absent	Assumes changes to limit rationale used for non-

Contract Provision	Long-term Contract (Expired)	No Action Alternative (Based on PEIS Preferred Alternative)	Negotiated Contract (First Interim Renewal Contract) and Proposed Action
service area	consent	Contracting Officer consent	consent and sets time limit for assumed consent.
Confirmation of contract	Assumes Court confirmation of contract for assurance relating to validity of contract	Same as Existing Contract	No requirement for court confirmation of contract on contracts of short duration

Note: Table 2-2 contains a summary of many but not all of the terms and conditions of the referenced contracts. Also the “Existing Contract” reflected in the above table is based upon Contract No. 14-06-200-495A (Reclamation 1963). Other San Luis Unit existing contracts may have some minor differences however this contract is believed to be representative. Finally, the above table is also generally descriptive of contract provisions within the three predominantly irrigation contract forms; however, for the precise contract language and an exact comparison, the specific contracts should be referenced.

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 two interim renewal contracts for several reasons:

1. Section 1(4) of the “Administration of Contracts under Section 9 of the Reclamation Project Act of 1939” Act of July 2, 1956 and Section 2 of the “Renewal of Water Supply Contracts Act of June 21, 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 San Luis Unit contractor, the contractor’s water needs equaled or exceeded the current total contract quantity.
2. 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 (PEIS ROD, p. 25). 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.

3. 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 San Luis Unit 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.
4. 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 measures 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 SLWD and PWD which receive CVP water from the Delta-Mendota Canal (DMC) and the San Luis Canal (SLC). The study area, shown in Figure 1-1, includes portions of Fresno and Merced Counties.

EA-09-101 analyzed the renewal of interim water service contracts for San Luis Unit contractors except for SLWD and PWD (Reclamation 2009a). The affected environment common to all San Luis Unit contractors, including SLWD and PWD, was analyzed in EA-09-101, which is incorporated by reference into this document; therefore, the affected environment for this EA will focus on resources specific to SLWD and PWD not included in EA-09-101.

3.1 Water Resources

3.1.1 Affected Environment

3.1.1.1 San Luis Water District's Water Use

SLWD is located on the western side of the San Joaquin Valley near the City of Los Banos, in both Merced and Fresno Counties (see Figure 1-1). SLWD's current distribution system consists of 52 miles of pipelines, 10 miles of lined canals, and 7.5 miles of unlined canals. About 20,000 acres within the district, referred to as the Direct Service Area, receive CVP water from 39 turnouts on the DMC and 23 turnouts on the SLC. In addition to the Direct Service Area, three improvement districts are also served through distribution systems branching off the SLC. Both Improvement Districts 1 and 2 are primarily located within Fresno County; Improvement District 3 is located primarily in Merced County.

SLWD's water needs analysis completed by Reclamation in June 2003 estimated that there would be an unmet demand for 2025 of 5,830 AF (see Appendix B).

CVP Contracts On February 25, 1959, SLWD entered into a long-term contract (Contract 14-06-200-7563) with Reclamation for 93,300 AF of CVP supply from the DMC (Reclamation 1959). This contract was superseded by a contract executed on June 19, 1974 (Contract 14-06-200-7773A) for a maximum of 125,080 AF of CVP supply from the DMC and SLC which was further amended on January 13, 1986. This contract expired December 31, 2008. An interim renewal contract (Contract 14-06-200-8033A-IR1) was issued in 2008 and remains in effect until February 28, 2011 (Reclamation 2007).

Other Available Water Supplies CVP water is SLWD's only long-term water supply. The district does not own any groundwater wells and has no long-term contracts for surface water or groundwater supplies. There are 20 privately owned and operated groundwater wells that provide water to 6,000 acres in the Direct Service Area. There are no agricultural wells within the three improvement districts. The vast majority of the SLWD's water users do not have meaningful access to groundwater that can be used for irrigation, and therefore, supplementation of the CVP supply is nominal.

Although water deliveries by the SLWD historically have been almost exclusively used for agricultural use, substantial development in and around the cities of Los Banos and Santa Nella have resulted in a shift of some water supplies to M&I use. The SLWD currently supplies approximately 800 AF per year (AFY) as a wholesaler and not to end uses. M&I use demands are expected to increase.

3.1.1.2 Panoche Water District's Water Use

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

PWD's water needs analysis completed by Reclamation in June 2003 estimated that there would be an unmet demand for 2025 of 1,136 AF (see Appendix B).

CVP Contracts On August 16, 1955, PWD entered into a long-term contract (Contract 14-06-200-7864) with Reclamation for 93,988 AF of CVP supply from the DMC (Reclamation 1955). This contract was amended on August 30, 1974 (Contract 14-06-200-7684A) to allow a maximum delivery of 94,000 AF of CVP supply from the DMC or SLC. This contract was further revised on January 13, 1986 and November 14, 1988 in amendatory contracts that revised some contract terms but did not revise the maximum quantity of CVP water to be supplied. The long-term contract expired December 31, 2008. An interim renewal contract (Contract 14-06-200-8033A-IR1) was issued in 2007 and remains in effect until February 28, 2011 (Reclamation 2007).

Other Available Water Supplies In addition to its CVP water, PWD has entered into a long-term water supply contract with the Central California Irrigation District and Firebaugh Canal Water District. This agreement provides 3,000 AFY in supplemental water to PWD through 2033. Some groundwater is used within PWD. There are 42 privately owned and operated groundwater wells in the district service area in addition to one district owned well. Because of its poor quality, groundwater is primarily used as a water shortage contingency water supply source. PWD is also working on a 10-year transfer from San Luis Canal Company of 5,000 AFY, which is currently undergoing National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA) review. Both sources would supplement anticipated ongoing shortages in the CVP contract supply that are imposed as described in Section 2.3.2.

3.1.1.3 Groundwater Resources

The San Joaquin River Hydrologic Region covers approximately 9.7 million acres (15,200 square miles) and includes all of Calaveras, Tuolumne, Mariposa, Madera, San Joaquin, and Stanislaus counties, most of Merced and Amador counties, and parts of Alpine, Fresno, Alameda, Contra Costa, Sacramento, El Dorado, and San Benito counties (DWR 2003). Tulare Lake Hydrologic Region covers approximately 10.9 million acres (17,000 square miles) and includes all of Kings and Tulare Counties and most of Fresno and Kern Counties (DWR 2003). SLWD and PWD fall within these two hydrologic regions.

The California Department of Water Resources (DWR) estimates an annual overdraft of approximately 205,000 AF of groundwater within the San Joaquin Valley. This over-drafting of groundwater has caused ground subsidence since the mid-1920s. By 1970, 5,200 square miles of the valley were affected and maximum subsidence exceeded 28 feet in an area west of Mendota. Much of this area is now served by the CVP's San Luis Unit (DWR 2003; Reclamation 2005). During the past 40 years, recharge increased dramatically as a result of imported irrigation water. Increased rates of recharge resulting from percolation of irrigation water, combined with the rapid post-1967 decrease in pumping, caused a rise in the height of the water table over much of the western valley (Belitz and Heimes 1990).

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

Both SLWD and PWD have approved groundwater management plans.

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

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

The high TDS content of west side groundwater is due to recharge of stream flow originating from marine sediments in the Coast Range (DWR 2003). The high TDS content in the trough of the valley is the result of concentration of salts due to evaporation and poor drainage from naturally saline and high clay content soils, which restricts drainage. Nitrates may occur

naturally or as a result of disposal of human and animal waste products and fertilizer. Boron and chloride are likely a result of concentration from evaporation near the valley trough (DWR 2003). Organic contaminants contributed by agriculture have been detected in groundwater throughout the region but primarily in areas east of the San Luis Unit where soil permeability is higher and depth to groundwater is shallower. In the central and west-side portions of the valley, where the Corcoran Clay confining layer exists, water quality is generally better beneath the clay than above it (DWR 2003).

Contractors in the San Luis Unit with drainage-impacted lands, such as PWD, have developed aggressive programs to manage salts in the root zone and to minimize deep percolation through the use of high-efficiency irrigation techniques, such as sprinklers and advanced drip technologies, shortened rows, and the installation of groundwater monitoring wells.

Production of Drainage Water within SLWD and PWD The Northern Area of the San Luis Unit includes approximately 38,000 acres in PWD, 4,100 acres in Pacheco Water District and 3,882 acres of SLWD land located within Charleston Drainage District (Pacheco Water District is not included in the current interim contract renewal process as their contract does not expire until 2024). Approximately 30,000 acres within the Northern Area is presently improved with subsurface drainage systems (SLDFRE DEIS Table C1-4) including approximately 24,000 acres between PWD and SLWD. Drainage water from irrigation within the Northern Area of the San Luis Unit is produced primarily through operation of subsurface tile and deep drain collector systems which remove subsurface water from the plant root zones. Drainage produced within the Northern Area may also result from uncontrolled groundwater intrusion from upslope irrigation, subterranean flows from the Coastal Range, and seepage from the California Aqueduct. Each of the districts in the Northern Area encourage on-farm drainage management through policies to control surface water discharges, programs to support on-farm irrigation efficiency improvements, and mandatory water conservation planning. Each of the three districts also reuse drainage water within their respective drainage service areas.

PWD and a portion of the SLWD are within the Grassland Drainage Area and participate in the Grassland Bypass Project (GBP), which serves a total of 97,000 acres. At present, drainage that leaves each district's boundaries is disposed of by reuse on the 6,000-acre San Joaquin River Water Quality Improvement Project (SJRIIP) and/or discharged through the GBP into the San Luis Drain, Mud Slough North and ultimately, the San Joaquin River. This is the only route for drainage disposal for these service areas. Table 3-1 below lists the amount of drainage discharged between 1986 and 2009 by PWD (as Panoche Drainage District) and a portion of SLWD (SLWD lands contained within Charleston Drainage District).

Table 3-1 Discharges for SLWD and PWD from the Grassland Drainage Area

Year	Charleston Drainage District (includes SLWD)			PWD as Panoche Drainage District		
	Discharge (AF)	Salt Load (tons)	Selenium Load (pounds)	Discharge (AF)	Salt Load (tons)	Selenium Load (pounds)
1986	3,186	10,699	474	31,573	102,699	4,480
1987	4,769	19,023	946	35,229	111,435	4,990
1988	5,015	20,062	906	31,575	114,989	4,930
1989	2,799	12,068	519	24,075	92,633	4,032
1990	2,126	8,592	387	21,462	88,117	4,009
1991	781	3,161	227	14,092	60,414	2,558
1992	730	3,279	153	12,658	58,766	2,824

Year	Charleston Drainage District (includes SLWD)			PWD as Panoche Drainage District		
	Discharge (AF)	Salt Load (tons)	Selenium Load (pounds)	Discharge (AF)	Salt Load (tons)	Selenium Load (pounds)
1993	1,858	8,412	425	19,774	90,696	4,779
1994	3,199	14,330	808	19,265	85,959	4,083
1995	4,316	19,376	971	28,533	121,128	5,942
1996	3,897	14,771	609	24,538	103,384	5,276
1997	1,509	6,676	349	17,028	76,824	3,250
1998	1,674	8,100	456	19,268	82,142	3,662
1999	983	4,787	233	12,823	55,483	1,771
2000	869	4,210	256	13,047	53,487	1,790
2001	533	3,370	205	11,436	51,484	1,882
2002	1,179	6,653	327	9,351	42,097*	1,548
2003	943	5,172	271	9,928	44,694*	1,504
2004	1,180	6,111	399	9,003	40,531*	3,216
2005	2,056	10,890	554	13,825	62,236*	2,020
2006	1,748	8,381	330	8,189	36,868*	1,007
2007	1,482	8,218	423	6,583	29,638*	1,285
2008	213	372	45	6,298	28,353*	848
2009	310	1,123	69	6,615	29,780*	735
Average	1,973	8,660	431	16,924	69,327	3,018
Maximum	5,015	20,062	971	35,229	121,128	5,942
Minimum	213	372	45	6,298	28,353	735

*Amounts based on estimated values

As described previously, Reclamation issued its FEIS on the SLDFRE analyzing the effects of implementing drainage service and further issued its ROD on March 16, 2007. The ROD reflects Reclamation's decision to implement the in-Valley/water needs land retirement alternative, which includes drainage reduction measures, drainage water reuse facilities, treatment systems, and evaporation ponds. It also includes retiring 194,000 acres of land from irrigated farming.

Notwithstanding the requirements of the San Luis Act and the issuance of the ROD, SLWD, PWD, Pacheco Water District and Westlands Water District (WWD) have district-specific policies and methods for dealing with drainage (Pacheco Water District and WWD are located in the San Luis Unit but not included in the Proposed Action). Lack of a drainage outlet has led to an increase in saline groundwater beneath some portions of these districts.

3.1.2 Environmental Consequences

3.1.2.1 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. As described in EA-09-101, model predictions indicate that the number of years when tiered pricing would be applicable would be limited to approximately 22 or 24 percent of the time [or one year out of four or five] for interim contracts greater than three years (Reclamation 2009a). Water supplies do not typically meet demands for most contractors and many contractors are very active on the water market purchasing water supplies. Areas within the San Luis Unit have been planted in permanent crops and the contractors from these areas, to make up for shortages and preserve their crop investment, have paid prices for water that exceed the maximum amount that would be

paid if tiered pricing were applied. For that reason, increasing water prices due to tiered pricing would not likely change water use trends.

Additionally, water users within the San Luis Unit 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 San Luis Unit is drainage impacted, so high efficiency irrigation is implemented as a mechanism for reducing deep percolation and subsurface drainage production.

Groundwater as an alternate source may contain salts or boron unsuitable for irrigation of permanent crops depending on location. For those areas where groundwater is of suitable quality and therefore available for irrigation or M&I, CVP water is considered to be a supplemental supply for most contractors and therefore these contractors already rely on groundwater supplies and in some cases water transfers to meet their needs. In areas such as PWD and SLWD, where groundwater is already utilized to meet crop demands, farmers would have no alternative but to pay the additional tiered pricing costs as any further reduction in water supplies would lead to further overdraft and potentially subsidence.

Even if tiered pricing were to apply, it is unlikely to result in a reduction in surface water use, a change in groundwater, or other actions that could affect water resources. The contractors continue to have less water supply (surface water and groundwater) than demand, conditions that exist notwithstanding their careful water management (e.g., installation and use of high efficiency irrigation systems). For those reasons, and others discussed in this EA, implementation of the No Action Alternative is not likely to cause an adverse impact to water resources.

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.

Pursuant to its commitment to the Court regarding drainage litigation, Reclamation is planning and designing a selenium biotreatment pilot project to be located at the SJRIP within the Panoche Drainage District. The SJRIP is a drainage management and reuse project which serves the land in PWD and SLWD lands within Charleston Drainage District. The pilot project is expected to be constructed during the term of the renewed interim contracts and would require separate environmental review under NEPA and CEQA. In the interim, Reclamation is committing funding on an annual basis for the development of the drainage reuse area. Construction of permanent treatment facilities related to implementation of the SLDFRE ROD is not reasonably expected to take place during the term of the interim renewal contracts because Federal funds have not yet been authorized for such activities. The federal government is on a three-year federal budget cycle requiring planning for large projects requiring large funding

streams to be budgeted several years in advance. Funding for implementation of the ROD was preliminarily projected to be \$875.5 million in the EIS. However, Reclamation has since estimated costs for implementing the ROD at \$2.6 billion (Reclamation 2008). Further, although the NEPA has been completed, authorization has not been received and planning and engineering have only recently been instituted.

In part because of these budget issues and continuing planning efforts, Reclamation has been involved in discussions with a number of parties concerning alternatives to implementation of the ROD. Any alternative resolution of the drainage service issue is speculative at this time. Although the current approvals for the GBP will terminate at the end of 2019, it is anticipated that drainage discharges to surface waters from this project would have similar reduction trends during the tenure of the interim renewal contracts as those that have occurred (see Table 3-1).

Reclamation does not anticipate that the No Action Alternative would cause any changes from historical values in the quantity, quality or discharge of drainage emanating from or within SLWD or PWD during the two years of the interim renewal contracts.

PWD and SLWD would continue to operate and maintain facilities related to their individual water delivery activities, including turnouts from pumping stations on the SLC and DMC, on terms substantially the same as the existing long-term contracts. These activities relate to already constructed facilities on federal rights-of-way (ROW) with no anticipated changes in activity level or use.

3.1.2.2 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. For reasons similar to why the tiered pricing provisions of the No Action Alternative were concluded to have no impact on water use, the lack of tiered pricing in the Proposed Action is also not likely to have an impact on water use.

Execution of SLWD's and PWD's interim renewal contracts would not change contract water quantities from the quantities in the existing contracts, and would not lead to any increased water use. Therefore, there would be no effect on surface water supplies or quality. Since water quantities and deliveries would not change there would not be a shift to groundwater due to the interim renewal contracts. Therefore, there would be no adverse impact on groundwater supplies.

As described under the No Action Alternative, execution of two year interim renewal contracts would not change historical values in quantity, quality, or discharge of drainage emanating from or within SLWD and PWD. 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); therefore, there are no adverse environmental impacts associated with the Proposed Action.

3.1.2.3 Cumulative Impacts

Reclamation's South-Central California Area Office has completed environmental analysis for 200 water service actions out of 300 proposed between 2005 and 2010 (see Table 3-2). 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. Between 2005 and 2010, 83 out of the 300 water service actions were specific to San Luis Unit contractors and 87 out of the 300 water service actions utilized San Luis Unit facilities.

Table 3-2 Reclamation's Completed Water Service Related Actions 2005-2010

Proposed Projects	2005	2006	2007	2008	2009	2010	Pending
Assignments	3	2	0	2	0	0	1
Banking	9	9	2	5	20	5	13
Contracts	1	4	4	2	4	1	4
Exchanges*	11	6	6	7	8	2	4
Exclusion of lands	3	7	3	0	4	2	1
Inclusion of lands	5	3	2	2	4	2	4
Surplus Water	5	5	4	3	2	3	4
Transfers*	21	13	5	10	10	7	10
Warren Act Contracts	6	8	11	9	24	4	17
Total Proposed Projects	64	57	37	40	76	26	
Projects Pending	4	5	1	3	15	21	
Cancelled Projects	5	10	2	13	21	0	
Completed projects	55	42	34	24	40	5	

*Note: These are exchanges and transfers that are not part of the Accelerated Water Transfer Program.

A total of 28 proposed water service projects are still pending from the past five years and an additional 26 water service projects have already been proposed for 2010 (see Table 3-2). Each of these actions is currently undergoing environmental analysis and any future proposed activities require environmental review prior to implementation. It is likely that in 2010, more districts will request additional water service actions since it may be a dry year and CVP contractors need to supplement the reduced CVP supply.

Reclamation's action is the execution of interim renewal water service contracts between the United States and SLWD and PWD for up to two years. Both districts have existing interim renewal contracts. It is likely that subsequent interim renewals would be needed in the future pending the execution of long-term contract renewals. 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

3.2.1 Affected Environment

3.2.1.1 Panoche Water District

PWD is located on the western side of the San Joaquin Valley in both Merced and Fresno Counties. The district is comprised of approximately 38,000 acres with a population of approximately 300 and is primarily an agricultural district. A small amount of CVP water is diverted annually to satisfy domestic needs within the district. M&I water use is incidental to agricultural use and amounts to less than 50 AFY. M&I use is not expected to increase because it is not anticipated that agricultural land would be converted to other land uses.

There are approximately 65 water users in the district, which includes 60 landowners. The largest landowner farms approximately 9,000 acres, while the smallest landowner farms less than 20 acres. The landowner base in the district has remained very stable, with the majority of the landowners having been there since the 1940s and 1950s. Approximately 26 percent of the land is leased out; the remaining land is farmed directly by the landowners. The district also participates in an active drainage management program that reduces drain water volumes and constituent loads by altering cropping patterns and/or irrigation methods in targeted areas. Primary crops produced in the district include field row crops such as alfalfa, cotton, tomatoes, and melons and permanent crops such as almonds, grapes, pistachios, and pomegranates. Land use trends are toward permanent crops installed on drip irrigation.

3.2.1.2 San Luis Water District

The SLWD is located near Los Banos within Merced and Fresno Counties (see Figure 1-1). The district's current size is approximately 66,458 acres. The southern section of the district located in Fresno County is primarily agricultural. The land is planted with either row crops, including cotton and melons, or permanent crops, primarily almonds. In recent years, some parcels in this area of the district have not been farmed because they are of marginal quality or have high water costs or drainage problems.

The district's current population is approximately 700, with most individuals residing in the community of Santa Nella, located in the extreme northern portion of the district. Although water deliveries by the SLWD historically have been almost exclusively used for agricultural, substantial development in and around the cities of Los Banos and Santa Nella have resulted in a shift of some water supplies to M&I use and M&I demands within the district are expected to increase.

M&I use primarily occurs in the northern section of the district, which is located in Merced County. SLWD currently supplies approximately 800 AFY as a wholesaler. It is anticipated that the conversion from agricultural use to M&I use would occur mostly in this section of the district. Approximately 10,000 acres identified as potential development locations are currently in the planning stages with Merced County and the district. Much of the land targeted for M&I development is currently unused for irrigated agriculture.

3.2.2 Environmental Consequences

3.2.2.1 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 San Luis Unit that are productive are farmed. 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, 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. Therefore, 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 SLWD and PWD are water short even in high allocation years. It is anticipated that 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. In addition, the short term of the contracts does not provide the long-term water supply required for conversions from agriculture to M&I uses.

3.2.2.2 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 also have no impact on land use. The interim renewal of SLWD's and PWD's 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 their existing contracts. Likewise, SLWD's and PWD's interim renewal contracts would not change contract terms or conditions governing the allocation of CVP water during times of limited supply (i.e., drought), so would not provide additional water reliability conducive to conversion of land use from agricultural to M&I uses. Consequently, there would be no adverse impacts to land use as a result of the Proposed Action.

3.2.2.3 Cumulative Impacts

Land use trends would continue with or without either alternative. 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 as their terms are short with no ability to influence land use conversions. Further, the renewal of interim contracts pending the renewal of long-term contracts would maintain existing land uses within SLWD and PWD; therefore, there would be no cumulative adverse impacts to land use trends as a result of the Proposed Action.

3.3 Biological Resources

3.3.1 Affected Environment

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

SLWD and PWD service areas are dominated by agricultural habitat that includes field crops, orchards, and pasture. The vegetation is primarily crops and frequently includes weedy non-native annual and biennial plants. The intensive management of agricultural lands, including soil preparation activities, grazing, and the use of chemicals, effectively reduces the value of these habitat for wildlife.

In 2007, Reclamation initiated consultation with the U.S. Fish and Wildlife Service (USFWS) on the renewal and issuance of Interim Renewal Contracts for the San Luis Unit contractors including SLWD and PWD (Reclamation 2007). On December 18, 2007, USFWS determined that the two-year renewal of Interim Renewal Contracts for WWD, California Department of Fish & Game, and the Cities of Avenal, Coalinga, and Huron would not likely adversely affect (NLAA) listed species (USFWS 2007). On December 22, 2008, USFWS concurred with Reclamation's determination that the issuance of Interim Renewal Contracts for 26 months to SLWD and PWD would NLAA the San Joaquin kit fox and the giant garter snake (USFWS 2008).

In 2009, Reclamation completed consultation with the USFWS on renewal of two-year Interim Renewal Contracts for WWD, California Department of Fish & Game, and the Cities of Avenal, Coalinga, Huron, and Tracy (Reclamation 2009a). On February 26, 2010, USFWS issued a Biological Opinion (USFWS 2010a), which determined that the renewal of the proposed five San Luis Unit Interim Renewal Contracts was not likely to jeopardize the continued existence of San Joaquin kit fox, giant garter snake, California least tern, blunt-nosed leopard lizard, California jewelflower, and San Joaquin woolly threads. The SLWD and PWD Interim Renewal Contracts were not included in that consultation since impacts due to contaminated drainwater discharge to the Grasslands Bypass Project (GBP) were to be addressed in the GBP Biological Opinion which was still pending.

On December 18, 2009, the USFWS issued a Biological Opinion (USFWS 2009) to Reclamation concluding that the GBP is not likely to jeopardize the continued existence of the giant garter snake and the San Joaquin kit fox. The 2009 Biological Opinion provides reasonable and

prudent measures and terms and conditions to implement those measures. The execution of Interim Renewal Contracts for SLWD and PWD will be subjected to the terms and conditions.

Potential impacts to listed anadromous fish species and fish habitat resulting from SLWD and PWD Interim Renewal Contracts were addressed in a Biological Opinion issued by NMFS, on December 29, 2008 (NMFS 2008). They determined continued existence of listed anadromous fish species were not likely to be jeopardized nor would permanent destruction or adverse modification to designated or proposed critical habitat occur by renewing the Interim Renewal Contracts. However, NMFS stated adverse impacts to Essential Fish Habitat (EFH) of Pacific salmon in the action area would occur from contaminated agricultural drainwater as a result of executing Interim Renewal Contracts. Subsequently, attached to the Biological Opinion were EFH Recommendations as made under the Magnuson-Stevens Fishery Conservation and Management Act (16 USC 38 §1801 et seq.). NMFS recommended Terms and Conditions and Conservation Recommendations in the Interim Renewal Contract Biological Opinion be adopted as the EFH Conservation Recommendations. NMFS also commented in the Biological Opinion on the benefits of the GBP to listed fish species and their habit by reducing agricultural drainwater discharge into the San Joaquin River (NMFS 2009a).

Reclamation requested an official species list from the USFWS on September 3, 2010 via the Sacramento Field Office's website: http://www.fws.gov/sacramento/es/spp_list.htm (Document Number 100903013938; USFWS 2010b). The list includes species identified from the following U.S. Geological Survey 7½ minute quadrangles surrounding the Proposed Action area including: Chounet Ranch, Dos Palos, Hammonds Ranch, Broadview Farms, Charleston School, Ortigalita Peak Nw, Laguna Seca Ranch, Los Banos Valley, Volta, Los Banos, and San Luis Dam. Reclamation further queried the California Natural Diversity Database for records of protected species within 10 miles of the project location as well as protected species records present downstream (CNDDDB 2010). The two lists, in addition to other information within Reclamation's files were combined to create the following list (Table 3.3).

Table 3-3 Biological Species List for the Proposed Action, Including Fish Downstream

<u>Species</u>	<u>Status</u> ¹	<u>Effects</u> ²	<u>Potential to Occur</u> ³
Amphibians			
California red-legged frog (<i>Rana draytonii</i>)	T, X	NE	Absent. No CNDDDB ⁴ -recorded occurrences in action area. Area is not within areas designated as critical habitat.
California tiger salamander (<i>Ambystoma californiense</i>)	T, X	NE	Absent. No CNDDDB-recorded occurrences in action area. Area is not within areas designated as critical habitat.
Fish			
Central Valley spring-run Chinook salmon (<i>Oncorhynchus tshawytscha</i>)	T, X NMFS	LAA	Present. Suitable habitat and speices are present downstream of the Proposed Action area and can be affected by agricultural drainage.
Central Valley steelhead (<i>Oncorhynchus mykiss</i>)	T, X NMFS	LAA	Present. Suitable habitat and speices are present downstream of the Proposed Action area and can be affected by agricultural drainage.
Delta smelt (<i>Hypomesus transpacificus</i>)	T, X	NLAA	Present. Natural waterways within the species' range have been addressed in GBP Biological Opinion and all Terms and Conditions will be followed.

<u>Species</u>	<u>Status</u>¹	<u>Effects</u>²	<u>Potential to Occur</u>³
Sacramento River winter-run Chinook salmon (<i>Oncorhynchus tshawytscha</i>)	E, X NMFS	LAA	Present. Suitable habitat and species are present downstream of the Proposed Action area and can be affected by agricultural drainage.
Southern distinct population segment of North American green sturgeon (<i>Acipenser medirostris</i>)	T, X NMFS	LAA	Present. Suitable habitat and species are present downstream of the Proposed Action area and can be affected by agricultural drainage.
Invertebrates			
longhorn fairy shrimp (<i>Branchinecta longiantenna</i>)	E	NE	Absent. No records or vernal pools in area of effect.
Valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>)	T	NE	Absent. No records in area of effect. No elderberry shrubs will be impacted by the proposed action.
Vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	T	NE	Absent. No records or vernal pools in area of effect.
Vernal pool tadpole shrimp (<i>Lepidurus packardii</i>)	E	NE	Absent. No records or vernal pools in area of effect.
Mammals			
Fresno kangaroo rat (<i>Dipodomys nitratoides exilis</i>)	E	NE	Unlikely. No CNDDDB-recorded occurrences and managed agricultural lands are not expected to provide suitable habitat. Yet, any suitable habitat action area would not be impacted by Proposed Action.
giant kangaroo rat (<i>Dipodomys ingens</i>)	E	NE	Unlikely. No CNDDDB-recorded occurrences and managed agricultural lands are not expected to provide suitable habitat. Yet, any suitable habitat action area would not be impacted by Proposed Action.
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	E	NLAA	Present. There are several CNDDDB-recorded occurrences in area and site could be used for movement and as foraging habitat.
Plant			
San Joaquin woolly-threads (<i>Monolopia congdonii</i>)	E	NE	Absent. No CNDDDB-recorded occurrences in action area.
Reptiles			
blunt-nosed leopard lizard (<i>Gambelia sila</i>)	E	NE	Possible. There are CNDDDB-recorded occurrences located in the western section of SLWD along I-5. Agricultural lands do not provide suitable habitat yet, any suitable habitat that occurs in the project area would not be impacted by the Proposed Action.
Giant garter snake (<i>Thamnophis gigas</i>)	T	NLAA	Possible. CNDDDB records are approximately 4 miles to east of SLWD on other side of DMC. Suitable habitat lacking in project area but there are potential impacts downstream if water quality standards are not followed.
<p>1 Status= Status of federally protected species protected under federal ESA E: Listed as Endangered NMFS: Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service T: Listed as Threatened X: Critical Habitat designated for this species</p> <p>2 Effects = Effect determination LAA: May Affect, Likely to Adversely Affect NE: No Effect NLAA: Not Likely to Adversely Affect</p> <p>3 Definition Of Occurrence Indicators Present: Species recorded in area and suitable habitat present. Possible: Species recorded in area and habitat suboptimal.</p>			

<u>Species</u>	<u>Status</u>¹	<u>Effects</u>²	<u>Potential to Occur</u>³
Unlikely: Species recorded in area but habitat marginal or lacking entirely. Absent: Species not recorded in study area and suitable habitat absent. 4 CNDDB = California Natural Diversity Database 2010			

3.3.1.1 Documents Addressing Potential Impacts of Actions of the CVP (Other than the Proposed Action) 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 State Water Project [SWP] (Reclamation 2004). Compliance activities are ongoing.

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 (USFWS 2005). The opinion considers the effects of routine O&M of Reclamation's facilities used to deliver water to the study area, as well as certain other facilities within the jurisdiction of the South-Central California Area Office, on California tiger salamander, vernal pool fairy shrimp, valley elderberry longhorn beetle, blunt-nosed leopard lizard, vernal pool tadpole shrimp, San Joaquin woolly-threads, California red-legged frog, giant garter snake, San Joaquin kit fox, and on proposed critical habitat for the California red-legged frog and California tiger salamander.

3.3.2 Environmental Consequences

3.3.2.1 No Action

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

3.3.2.2 Proposed Action

Reclamation's biological impacts determination is largely dependent on the service areas compliance with applicable requirements of existing Biological Opinions, as described above in Section 3.3.1. The Proposed Action would not result in substantial changes in natural and semi-natural communities and other land uses that have the potential to occur within the study area and other portions of the San Luis Unit. Additionally, execution of Interim Renewal Contracts under the Proposed Action would not involve construction of new facilities or installation of structures.

PWD and a portion of SLWD have drainage outside of their contract service areas that can reach the San Joaquin River via the GBP. Reclamation, SLWD, and PWD are committed to the reduced discharge of agricultural drainwater through participation in a number of activities, including GBP. The GBP is intended to continue separation of unusable agricultural drainwater discharged from the Grassland Drainage Area from that of wetland water supply conveyance channels, and to facilitate drainage management that maintains agriculture in the Grassland Drainage Area, thus promoting the improvement in water quality in the San Joaquin River.

On December 15, 2010 Reclamation received a concurrence letter from USFWS Sacramento Field Office for the Proposed Action, concurring with Reclamation that effects of the Proposed Action are not likely to adversely affect San Joaquin kit fox, giant garter snake, and Delta smelt and its designated critical habitat (Appendix D). USFWS based their concurrence on Reclamations continued participation in the GBP and compliance with its Biological Opinion. The execution of Interim Renewal Contracts for SLWD and PWD will be subject to the terms and conditions as specified in the 2009 Grasslands Bypass Project Biological Opinion (USFWS 2009).

Reclamation has consulted with NMFS on impacts from the Interim Renewal of SLWD and PWD contracts and on February 23, 2011 a Biological Opinion was issued by NMFS for the effects of agricultural drain water entering the San Joaquin River (Appendix E). They concluded the execution of interim renewal contracts were not likely to jeopardize the continued existence on federally listed endangered Sacramento River winter-run Chinook salmon, threatened Central Valley spring-run Chinook salmon, threatened Central Valley steelhead, the threatened Southern distinct population segment (DPS) of North American green sturgeon, and the designated critical habitat of Central Valley steelhead and the Southern DPS of North American green sturgeon. Reclamation will comply with requirements of the Biological Opinion (dated February 23, 2011) issued by NMFS (Appendix E).

In the February 2011 Biological Opinion, NMFS determined that the level of anticipated take due to the Proposed Action is not likely to result in jeopardy to the species or permanent destruction or adverse modification of critical habitat. This determination was based on the following terms and conditions:

1. Measures shall be taken to minimize the amount of agricultural subsurface drainage discharged to the San Joaquin River from PWD and SLWD.
 - a. Reclamation shall require the water districts' continued participation in the Westside Regional Drainage Plan, which employs actions leading to zero discharge of subsurface drainage water beyond the boundaries of regional drainage management facilities, including but not limited to:
 - i. Recirculating tailwater on-farm;
 - ii. Employing micro irrigation and drip irrigation systems to the maximum extent practical;
 - iii. Lining district water delivery facilities to the maximum extent practical;
 - iv. Applying collected subsurface drainage water to salt tolerant crops and other drainwater displacement projects (such as road wetting for dust control); and
 - v. Converting any remaining furrow and flood agricultural practices to contoured row agriculture employing micro, drip, or overhead sprinkler irrigation wherever feasible.
2. Reclamation shall require SLWD and PWD continuing participation in the GBP.

3. Reclamation shall coordinate with the California Department of Fish and Game and create an action plan to protect Central Valley steelhead from high selenium pulses in the San Joaquin River above the confluence with the Merced River through the operation of the Hills Ferry Barrier.
4. Measures shall be taken to assess and monitor the concentrations of selenium within the waters, sediments, vegetation, and invertebrates of the San Joaquin River, and at the mouths of Salt Slough and Mud Slough (north) to assess the contributions of selenium from each pathway.
 - a. Reclamation shall design and initiate a plan for sampling the selenium concentrations in the waters, sediment, vegetation, and invertebrates of the San Joaquin River below the confluence with Mud Slough and above the confluence with the Merced River to adequately provide baseline conditions to be included in the next biological assessment prior to initiating consultation for future long-term contracts.
 - b. Reclamation shall design and initiate a plan for sampling the selenium concentrations in the waters, sediment, vegetation, and invertebrates of the San Joaquin River above the confluence with Salt Slough to adequately provide baseline conditions to be included in the next biological assessment prior to initiating consultation for future long-term contracts.
 - c. Reclamation shall provide an annual report to NMFS summarizing the sampling of selenium concentrations in the waters, sediments, vegetation, and invertebrates of the San Joaquin River as well as in Mud Slough (north).

These terms and conditions are non-discretionary and must be incorporated as binding conditions of any contracts or permits between Reclamation and PWD and SLWD.

3.3.2.3 Cumulative Impacts

Interim renewal contracts, when added to other past, present, and reasonably foreseeable future actions, represent a continuation of existing conditions which are unlikely to result in cumulative impacts on the biological resources of the study area and other portions of the San Luis Unit. 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. As discussed in other sections of this EA, through local and on-farm activities, through the implementation of regional projects that increase irrigation efficiency and continued use of reuse areas for the application of drainwater to salt tolerant plants in accordance with existing permits, Reclamation expects that drainage production within the study area during the interim period would continue to be reduced, and discharges to the San Joaquin River would decrease. Thus, the interim renewal contracts, together with reasonably foreseeable future actions, would not incrementally contribute to any physical impacts to study area biological resources.

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

The CVPIA has redefined the purposes of the CVP to include the protection, restoration, and enhancement of fish, wildlife, and associated habitats; and to contribute to the State of California's interim and long-term efforts to protect the San Francisco Bay/Sacramento-San Joaquin River Delta Estuary. Overall, the CVPIA seeks to "achieve a reasonable balance among competing demands for use of [CVP] water, including the requirements of fish and wildlife, and agricultural, municipal and industrial, and power contractors."

Finally, as explained above, interim renewal contracts would be subject to regulatory constraints imposed pursuant to Section 7 of the ESA, regardless of whether those constraints exist today. Consequently, there would be no cumulative adverse impacts as a result of 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 would 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 would 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

Archaeological sites are known to exist in the San Luis Unit water delivery area; however, the actions being considered under this EA are administrative in nature and will have no impact on prehistoric cultural resources. The San Luis Unit is a joint Federal and State of California venture, with the O'Neil Pumping Plant and Intake Canal, Coalinga Canal, Pleasant Valley Pumping Plant, and the San Luis Drain comprising the Federal-only built environment components. These facilities have not been formally evaluated for National Register eligibility. Additionally, all were constructed in the late 1960s and as such do not meet the minimum age qualification for National Register inclusion. However, the actions under consideration would result in no structural modifications or other impacts to the built environment components of the San Luis Unit.

3.4.2 Environmental Consequences

3.4.2.1 No Action

Under the No Action Alternative, CVP water would continue to be delivered to SLWD and PWD under the interim renewal of existing contracts. The No Action Alternative has no potential to affect historic properties pursuant to 36 CFR Part 800.3(a)(1). There would be no impacts to cultural resources as a result of implementing the No Action Alternative.

3.4.2.2 Proposed Action

Under the Proposed Action, two interim renewal water service contracts would be executed between Reclamation and SLWD and PWD, with only minor administrative changes to the contract provisions to update the previous interim renewal contracts for the new contract period. The Proposed Action 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 Proposed Action would not change the SLWD and PWD service areas and water would continue to be delivered through existing conveyance features. No ground disturbance, change in land use, or modification to built environment features would occur under the Proposed Action. As such, the Proposed Action would have no impact to cultural resources.

3.4.2.3 Cumulative Impacts

As there are no impacts on cultural resources, there would be no cumulative adverse impacts to cultural resources as a result of the Proposed Action.

3.5 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.

3.5.1 Affected Environment

The nearest ITA is a Public Domain Allotment approximately 52 miles northeast of the Proposed Action location.

3.5.2 Environmental Consequences

3.5.2.1 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 as no physical changes to existing facilities and no new facilities are proposed.

3.5.2.2 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 SLWD and PWD under an interim renewal contract would not affect any ITA because existing rights would not be affected.

3.5.2.3 Cumulative Impacts

As there are no impacts to ITA there would be no cumulative impacts to ITA as a result of the Proposed Action.

3.6 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.

3.6.1 Affected Environment

The Hispanic community within Fresno and Merced Counties is greater than the California average (see Table 3-4). 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.

Table 3-4 County Demographics

	Fresno County		Merced County		California	
Demographics	Estimate	%	Estimate	%	Estimate	%
Total Population (2009 estimate)	915,267	--	245,321	--	36,961,664	--
Percent change (2000-2009)	--	14.6	--	16.2	--	9.1
White, non-Hispanic	--	35.4	--	34.9	--	42.3
Black or African American	--	5.8	--	4.1	--	6.7
American Indian	--	2.0	--	1.6	--	1.2
Asian	--	8.7	--	6.6	--	12.5
Native Hawaiian/Pacific Islander	--	0.2	--	0.3	--	0.4
Hispanic	--	48.7	--	52.9	--	36.6

Source: U.S. Census Bureau 2010a

3.6.2 Environmental Consequences

3.6.2.1 No Action

Contract provisions under the No Action Alternative include the tiered pricing structure (80/10/10 tiered pricing). As discussed previously, modeling predicts that the number of years when tiered pricing would be applicable would be limited to approximately 22 or 24 percent of

the time [or one year out of four or five] (Reclamation 2009a). During those times, implementation of tiered pricing would increase the cost of water, which could reduce farming revenues and decrease land values. As previously described, tiered pricing could, but is not likely to result in changes in agricultural practices, including cropping patterns and land fallowing. M&I users may also be impacted by changes in water supply costs placing increased pressure on low income households.

Reduced farming revenue and land values would adversely impact farm workers, especially migrant workers who tend to be from minority and low-income populations. However, the impact from tiered pricing would occur only when allocations are above 80 percent which has only occurred twice in the last 10 years [2005 and 2006] (Reclamation 2009a). Therefore, any changes due to tiered pricing would likely be within the normal range of annual or seasonal variations.

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; therefore, there would be no adverse impacts due to this action alternative.

3.6.2.2 Proposed Action

Tiered pricing is not part of the Proposed Action since the renewal of the interim contracts is for less than three years; consequently, impacts associated with tiered pricing as discussed under the No Action Alternative would not occur. 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 as there would be no changes to existing conditions. Therefore, there would be no adverse impacts to Environmental Justice as a result of the Proposed Action.

3.6.2.3 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.

3.7 Socioeconomic Resources

3.7.1 Affected Environment

SLWD's and PWD's service areas are predominately rural and agricultural with numerous small cities and a few large communities, such as Los Banos. The regional economic indicators of social well being are all measures of the social conditions within a region. Unemployment for

Fresno and Merced Counties ranged from 7.1 to 7.8 percent in 2000 but decreased to between 6.0 and 6.9 percent in 2008 (US Census Bureau 2010b). Both counties' unemployment rates were higher than the state average and per capita income for both counties was lower than the state average. In addition, individuals and families below the poverty level were also higher than the state average (U.S. Census Bureau 2010b; see also Table 3-5).

Table 3-5 County Economic Characteristics

	Fresno County		Merced County		California	
Economic Characteristic	Estimate	%	Estimate	%	Estimate	%
Population 16 years and over	657,981	--	175,698	--	28,139,366	--
Civilian labor force	411,746	--	107,853	--	18,084,737	--
Unemployed	--	6.0	12,172	6.9	--	4.4
Per capita income	20,640	--	18,319	--	29,405	--
Families below poverty level	--	16.5	--	17.7	--	9.6
Individuals below poverty	--	21.2	--	21.0	--	12.9

Source: U.S. Census Bureau 2010b

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.

3.7.2 Environmental Consequences

3.7.2.1 No Action

Contract provisions under the No Action Alternative which stipulate the water pricing structure (80/10/10 tiered pricing) would place an additional financial burden on water contractors including the water supplies of four cities within the San Luis Unit. Because the economy of the Central Valley is heavily dependent on these water supplies, this increased burden, despite the short duration of the renewal and limited circumstances when tiered pricing increases rates, may translate into economic impacts throughout the affected area.

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. However, as described previously, these impacts would likely occur only one year out of four or five years (Reclamation 2009a).

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 substantial economic impacts are anticipated to occur under the period of renewal.

3.7.2.2 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 SLWD and PWD interim contracts would provide continued stability to the agricultural industry within the contractors' service area resulting in beneficial impacts to socioeconomic resources.

3.7.2.3 Cumulative Impacts

The Proposed Action may have slight beneficial impacts to socioeconomic resources over the short-term due to the continued stability within the contractors' service area; however, the duration of the interim renewal period is only for up to two years or until the renewal of the long-term contracts has been executed whichever is sooner. Consequently, the Proposed Action would not have any long-term cumulative impacts to socioeconomic resources.

3.8 Air Quality

Section 176 (C) of the Clean Air Act [CAA] (42 USC 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 USC 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.

3.8.1 Affected Environment

The Proposed Action area lies 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 (O₃), O₃ precursors such as volatile organic compounds (VOC) or reactive organic gases (ROG), and inhalable particulate matter between 2.5 and 10 microns in diameter (PM₁₀) and particulate matter less than 2.5 microns in diameter (PM_{2.5}).

The SJVAB has reached Federal and State attainment status for CO, nitrogen dioxide (NO₂), and sulfur dioxide (SO₂). Federal attainment status has been reached for PM₁₀ but is in non-attainment for O₃, PM_{2.5}, and VOC/ROG (see Table 3-6). There are no established standards for nitrogen oxides (NO_x); however, NO_x does contribute to NO₂ standards (SJVAPCD 2010).

Table 3-6 San Joaquin Valley Attainment Status

Pollutant	Averaging Time	California Standards		National Standards	
		Concentration	Attainment Status	Concentration	Attainment Status
O ₃	8 Hour	0.070 ppm (137 µg/m ³)	Nonattainment	0.075 ppm	Nonattainment
	1 Hour	0.09 ppm (180 µg/m ³)	Nonattainment	--	--
CO	8 Hour	9.0 ppm (10 mg/m ³)	Attainment	9.0 ppm (10 mg/m ³)	Attainment
	1 Hour	20.0 ppm (23 mg/m ³)	Unclassified	35.0 ppm (40 mg/m ³)	Unclassified
NO ₂	Annual arithmetic mean	0.030 ppm (56 µg/m ³)	Attainment	0.053 ppm (100 µg/m ³)	Attainment
	1 Hour	0.18 ppm (338 µg/m ³)	Attainment	--	--
SO ₂	Annual average	--	--	0.03 ppm (80 µg/m ³)	Attainment
	24 Hour	0.04 ppm (105 µg/m ³)	Attainment	0.14 ppm (365 µg/m ³)	Attainment
	1 Hour	0.25 ppm (655 µg/m ³)	Attainment	--	--
PM ₁₀	Annual arithmetic mean	20 µg/m ³	Nonattainment	--	--
	24 Hour	50 µg/m ³	Nonattainment	150 µg/m ³	Attainment
PM _{2.5}	Annual Arithmetic mean	12 µg/m ³	Nonattainment	15 µg/m ³	Nonattainment
	24 Hour	--	--	35 µg/m ³	Attainment
Lead	30 day average	1.5 µg/m ³	Attainment	--	--
	Rolling-3 month average	--	--	0.15 µg/m ³	Unclassified

Source: CARB 2010; SJVAPCD 2010; 40 CFR 93.153

ppm = parts per million

mg/m³ = milligram per cubic meter

µg/m³ = microgram per cubic meter

-- = No standard established

3.8.2 Environmental Consequences

3.8.2.1 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.

3.8.2.2 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.

3.8.2.3 Cumulative Impacts

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

3.9 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 2010a)

Gases that trap heat in the atmosphere are often called greenhouse gases (GHG). Some GHG, such as carbon dioxide (CO₂), 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: CO₂, methane, nitrous oxide, and fluorinated gasses (EPA 2010a).

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 CO₂ and methane, 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 2010b).

3.9.1 Affected Environment

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).

3.9.2 Environmental Consequences

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 the Proposed Action.

Delivery of CVP water from the Sacramento-San Joaquin River Delta to SLWD and PWD under either alternative would require the use of electric pumps from the Jones Pumping Plant and the O'Neill Pumping Plant. Calculated CO₂ emissions can be found in Table 3-7.

Table 3-7 Calculated CO₂ Emissions

Facility	Purpose of Use	Amount of Water Moved	Annual Kilowatt Hours	CO ₂ emissions (metric tons)
Jones Pumping Plant	Delivery of banked water	10,500 AF	9,939	7.1
O'Neill Pumping Plant	Delivery of banked water	10,500 AF	10,890	7.8
Total				14.9

Source: EPA 2010c

Calculated CO₂ emissions are well below the EPA's threshold for annually reporting GHG emissions (25,000 metric tons/year), which is a surrogate for a threshold of significance (EPA 2009). Accordingly, both the No Action Alternative and the Proposed Action would result in below *de minimis* impacts to global climate change.

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Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft Finding of No Significant Impact and Draft EA between November 15, 2010 and December 14, 2010. Reclamation received one comment letter from the following organizations: Sierra Club, Pacific Coast Federation of Fisherman's Associations, Southern California Watershed Alliance, Crab Boat Owners Association, Inc., California Water Impact Network, and California Sportfishing Protection Alliance and one comment letter from NMFS (see Appendix G). Response to comments can be found in Appendix H.

4.2 Fish and Wildlife Coordination Act (16 USC § 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 USC § 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 Sacramento-San Joaquin River 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.

On December 15, 2010 Reclamation received a concurrence letter from USFWS Sacramento Field Office for the Proposed Action, concurring with Reclamation that effects of the Proposed Action are not likely to adversely affect San Joaquin kit fox, giant garter snake, and Delta smelt and its designated critical habitat (Appendix D). USFWS based their concurrence on Reclamations continued participation in the GBP and compliance with the Biological Opinion for the GBP. The execution of Interim Renewal Contracts for SLWD and PWD will be subject to the terms and conditions as specified in the 2009 GBP Biological Opinion (USFWS 2009).

On February 23, 2011, NMFS issued a Biological Opinion which concluded that the execution of interim renewal contracts to SLWD and PWD were not likely to jeopardize the continued existence on federally listed endangered Sacramento River winter-run Chinook salmon, threatened Central Valley spring-run Chinook salmon, threatened Central Valley steelhead, the threatened Southern DPS of North American green sturgeon, and the designated critical habitat of Central Valley steelhead and the Southern DPS of North American green sturgeon (Appendix E). The BO also concluded that the execution of the SLWD and PWD interim renewal contracts will adversely affect the EFH of the Pacific salmon in the action area and adopts certain terms and conditions of the incidental take statement and the ESA conservation recommendations of the Biological Opinion as the EFH conservation recommendations.

Reclamation will comply with requirements of NMFS' 2011 Biological Opinion for the SLWD and PWD interim renewal contracts including all terms and conditions (Appendix E).

4.4 National Historic Preservation Act (16 USC § 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 Executive Order 13007 – 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. It also requires agencies to develop procedures for reasonable notification of proposed actions or land management policies that may restrict access to or ceremonial use of, or adversely affect, sacred sites. No Indian Sacred Sites were identified during the execution of the previous SLWD and PWD interim renewal contracts. If sites are identified in the future, Reclamation would comply with Executive Order 13007.

4.6 Migratory Bird Treaty Act (16 USC § 703 et seq.)

The Migratory Bird Treaty Act (MBTA) 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.

Impacts to migratory birds related to drainage discharge have been addressed through environmental compliance for the GBP and are not part of the Proposed Action. The Proposed Action would deliver water through existing facilities to existing irrigated agricultural lands which already receive delivered water which would have no effect on birds protected under the MBTA.

4.7 Clean Water Act (16 USC § 703 et seq.)

Section 401

Section 401 of the Clean Water Act [CWA] (33 USC § 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 USC § 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 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.

There is an existing waste discharge permit for the GBP which covers drainage discharges from SLWD and PWD.

Section 404

Section 404 of the CWA authorizes the U. S. Army Corps of Engineers to issue permits to regulate the discharge of “dredged or fill materials into waters of the United States” (33 USC § 1344). 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 section 404 are not required.

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