

RECLAMATION

Managing Water in the West

Final Environmental Assessment

Accelerated Water Transfers and Exchanges, Central Valley Project, South of Delta Contractors Years 2011- 2015

EA-10-51



U.S. Department of the Interior
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South-Central California Area Office
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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

Ag	Agriculture
APE	Area of Potential Effect
AWTP	accelerated water transfer program
CAA	Clean Air Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CO ₂	carbon dioxide
CV Contractors	Cross Valley Contractors
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
CWA	Clean Water Act
EA	Environmental Assessment
EPA	Environmental Protection Agency
FWCA	Fish and Wildlife Coordination Act
ESA	Endangered Species Act
GHG	greenhouse gases
ITA	Indian Trust Asset
MBTA	Migratory Bird Treaty Act
M&I	Municipal and Industrial
NHPA	National Historic Preservation Act
NRHP	National Register of Historic Places
Reclamation	Bureau of Reclamation
RRA	Reclamation Reform Act
SIP	State Implementation Plan
SJV	San Joaquin Valley
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SOD	South of Delta Central
USFWS	United States Fish and Wildlife Service

Section 1 Purpose and Need for Action

1.1 Background

The Central Valley Project Improvement Act (CVPIA) (Title 34 of Public Law 102-575) was signed into law in 1992 to mandate changes in management of the Central Valley Project (CVP). In addition to protecting, restoring, and enhancing fish and wildlife, one of the other purposes of the CVPIA is to increase water-related benefits provided by the CVP to the State of California through expanded use of voluntary water transfers and improved water conservation. To assist California urban areas, agricultural water users, and others in meeting their future water needs, Section 3405(a) of the CVPIA authorizes all individuals or districts who receive CVP water under water service or repayment contracts, water rights settlement contracts or exchange contracts to transfer, subject to certain terms and conditions, all or a portion of the water subject to such contract to any other California water users or water agency, State or Federal agency, Indian Tribe, or private non-profit organization for project purposes or any purpose recognized as beneficial under applicable State law.

After enactment of the CVPIA, the Bureau of Reclamation (Reclamation) has historically acknowledged water transfers and/or exchanges between CVP contractors geographically situated within the same region and who are provided water service through the same CVP facilities under an accelerated water transfer program (AWTP).

1.2 Purpose and Need

The purpose of the Proposed Action is to continue to implement an AWTP that facilitates efficient water management by allowing contractors within the same geographical areas to conduct annual transfer of the type historically carried out under an accelerated program which streamlines Reclamation's approval process. The AWTP is needed to reduce redundant reviews and costs associated with Reclamation's approvals.

The south of Delta (SOD) CVP Contractors and eligible Cross Valley (CV) Contractors (See Figure 1-1 for Area Map) need to relocate or shift CVP water supplies to meet irrigation (agricultural/Ag) demand or municipal and industrial (M&I) requirements. This would allow the temporary redistribution of water supplies within the Proposed Action area.

The AWTP, if approved, would allow water transfers and/or exchanges between SOD CVP Contractors. This includes the Delta Division, San Luis Unit, San Felipe Unit and CV Contractors with CVP water served from CVP Delta Division facilities or through the State Water Project Banks Pumping Plant, which sometimes acts as a Joint Point of Diversion.

The AWTP would help water districts to meet the following water management related objectives:

- Avoid long-term overdraft by achieving a balanced groundwater budget

- Create a sufficient water supply for all uses
- Integrate groundwater management with use of CVP and other surface water supplies as available
- Coordinate the use of groundwater and surface water resources, known as conjunctive use, in order to optimize water supplies and help alleviate groundwater overdraft
- Maintain and enhance groundwater recharge and maximize groundwater recharge as geologic conditions allows
- Make use of current distribution systems to fully utilize all water supplies
- Create sufficient recharge capacity, demand, or storage to fully utilize available CVP water supplies
- Avoid or correct groundwater levels that are too low to support existing wells or too high to protect the root zone or prevent groundwater recharge
- Provide water supplies that meet drinking water quality standards to municipalities, as applicable
- Prevent contamination of groundwater from spills, leaks, confined animal feeding operations, and stormwater runoff
- Minimize long-term dissolved solids concentrations in groundwater
- Maximize cropland preservation
- Develop cooperative agreements between water agencies and land use planning agencies
- Monitor groundwater characteristics

Working toward achieving the above objectives (as appropriate and applicable to each district) would be defined as good water management from the perspective of the water districts.

1.3 Scope

The scope of this environmental assessment (EA) is to analyze the environmental effects of annual water transfers and exchanges, for the period March 2011 through February 29, 2016, and also the No Action Alternative of not approving the transfers. All SOD CVP Contractors and CV Contractors with a long-term or interim water service contract are eligible to participate in the AWTP.

Approvals under the AWTP have been determined to be in compliance with the CVPIA Section 3405(a). This section of the CVPIA authorizes all individuals or districts who receive CVP water under water service or repayment contracts, water rights settlement contracts or exchange contracts entered into prior to or after the date of enactment of the CVPIA, to transfer all or a portion of the water for improved water management.

The AWTP would allow the CVP Contractor to provide advance notice of transfers and exchanges meeting set criteria, as described on Pages 13 and 14, to Reclamation and receiving Reclamation's written acknowledgement rather than written approval. This analysis of the implementation of the described AWTP pertains not only to water transfers of the type or kind of transfers previously carried out before the passage of the CVPIA but is expanded to include other eligible transfer/exchange actions, which have had prior environmental analysis completed and have been pre-determined to meet the CVPIA provisions without requiring individual review by Reclamation.

1.4 Authority and Guidelines for the Accelerated Water Transfer Program:

All water transfers are subject to the following authorities and guidelines as amended, updated and/or superseded:

- Title XXXIV CVPIA October 30, 1992, Section 3405(a)
- Reclamation Reform Act (RRA), October 12, 1982, Section 226
- Long-term Renewal Water Service Contracts for the Delta Division, San Luis Unit, and/or San Felipe Division
- Interim Renewal Water Service Contracts for SOD CVP Contractors who have not entered into a long-term water service contract during the term of this EA
- Department of the Interior Final CVPIA Administrative Proposal on Water Transfers, April 16, 1998
- Reclamation and United States Fish and Wildlife Service (USFWS) Region 1, Final Administrative Proposal on Water Transfers April 16, 1998
- Reclamation's Regional Director's Letter Delegation of Regional Functional Responsibilities to the Area Offices – Water Transfers, Number 08-01 March 17, 2000

1.5 Commitments from Applicable Biological Opinions

Reclamation and certain CVP Contractors are subject to commitments from two biological opinions that govern transfers, among other things. These are the “Biological Opinion on Implementation of the CVPIA and Continued Operation and Maintenance of the CVP” issued in 2000, and the “Biological Opinion on U.S. Bureau of Reclamation Long Term Contract Renewal of Friant Division and Cross Valley Unit Contracts” issued in 2001. The commitments are listed below. The second opinion governs both exchanges or transfers involving Friant and/or Cross Valley Contractors.

CVPIA Biological Opinion

Transfers will be consistent with section §3405(a)(1) of the CVPIA in that, among other considerations: (1) no transfer will be authorized unless the transfer is consistent with State law, including but not limited to provisions of the California Environmental Quality Act (§3406(a)(1)(D)); (2) no transfer will be authorized if it has a significant adverse impact on the ability to deliver CVP contract water or fish and wildlife obligations under the CVPIA because of limitations in conveyance or pumping capacity (§3406(a)(1)(H)); and (3) no transfer will be authorized if it results in a significant reduction in quantity or quality of water currently used for fish and wildlife purposes, unless it is determined that such adverse effects would be more than offset by the benefits of the proposed transfer. In the event of such a determination, mitigation activities will be developed and implemented as integral and concurrent elements of any such transfer, so as to provide fish and wildlife benefits substantially equivalent to those lost as a consequence of such transfer (§3406(a)(1)(L)).

2001 Friant/Cross Valley Biological Opinion

1. Transfers and exchanges will be executed for one year only for any district that does not have an established listed-species baseline as described in the draft biological opinion on operations and maintenance of the Central Valley Project (CVP) and implementation of the Central Valley Project Improvement Act of 1992 (CVPIA);

2. Transferred or exchanged water will be delivered and applied only to areas that were in cultivation from October 15, 1991 (the date of the Friant biological opinion), until one of the following occur and there is no net loss of potential listed-species habitat as a direct or indirect result of the transfer:

- consultation on the effect of putting the area into cultivation has been completed, or,
- there is an HCP in place that addresses impacts to the area receiving the water, or,
- the CVP Conservation Program has a line-item, specific increase in funding to compensate fully for the transfer and is in place prior to the transfer.

3. All other non-historic CVP transfers and exchanges that do not meet the above criteria will require separate section 7 or section 10 authorization. [carried over from 2000 Interim Opinion Term and Condition IV(F)].

1.6 Potential Issues

This EA analyzes the potential impacts and cumulative effects to the following resources:

- Groundwater Resources
- Surface Water Resources
- Land Use
- Biological Resources
- Cultural Resources
- Indian Trusts Assets
- Indian Sacred Sites
- Environmental Justice
- Socioeconomic Resources
- Air Quality
- Global Climate

Section 2 Alternatives Including the Proposed Action

This EA examines the environmental impacts to resources as a result of the Proposed Action and No Action alternatives in accordance with Section 102 (2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended.

2.1 No Action Alternative

Reclamation would not approve the AWTP. Transfers and exchanges would be approved individually, requiring separate NEPA and Endangered Species Act (ESA) analysis and compliance for each transfer or exchange, and allow Reclamation to complete the evaluation of the transfers or exchanges for approval.

The No Action Alternative would include transfers and exchanges that are historic, routine, and are valid for a single year. The cumulative amount of water transferred or exchanged annually would be limited to 150,000 acre-feet. The amount of water would be limited to the existing supply and would not be approved if it increased overall consumptive use. This alternative pertains to water that would have been consumptively used or irretrievably lost to beneficial use during the year of the transfer or exchange.

2.2 Proposed Action

Reclamation proposes to implement an accelerated process for water transfers and exchanges under Section 3405 of CVPIA that have occurred among SOD and CV CVP Contractors prior to the CVPIA as well as SOD refuges as the recipients of transfers. The Proposed Action would allow Reclamation to acknowledge the proposed transfers and exchanges without any additional environmental analysis for the period March 1, 2011 through February 29, 2016. The cumulative amount of water transferred or exchanged annually would be limited to 150,000 acre-feet. Prior to acknowledgement, each proposed transfer or exchange would be reviewed by the Contracting Officer for consistency with the project description with this EA and all applicable permits, laws and regulations. The following Contractors could take part in the AWTP:

Cross Valley Contractors (Figure 2-1)

CV contractors are CVP contractors that are geographically located within the Friant Division on the eastern side of the San Joaquin Valley in Fresno, Kern, Kings, and Tulare Counties. In summary, there are seven CV contractors. One of the CV contractors, the County of Tulare, has 10 customers which are identified below. The County of Tulare is in the process of assigning a portion of the contract to each of these subcontractors.

¹County of Fresno

²County of Tulare

Hills Valley Irrigation District

³Kern Tulare Water District

⁴Lower Tule River Irrigation District

Pixley Irrigation District

Tri-Valley Water District

¹County of Fresno includes Fresno County Service Area #34

²County of Tulare customers include Alpaugh Irrigation District, Atwell Water District, Hills Valley ID, Saucelito ID⁴, Fransinetto Farms, Stone Corral ID⁴, City of Lindsay⁴, Strathmore Public Utility District, Styrotek, Inc., and City of Visalia

³Kern Tulare Water District and Rag Gulch Water District consolidated on January 1, 2009.

⁴Lower Tule River ID, Saucelito ID, Stone Corral ID and City of Lindsay receive CVP water under more than one contract, as a Friant Division long-term contractor and either Cross Valley interim contractor or sub-contractor.

Delta Division (Figure 2-2)

****Banta Carbona Irrigation District**

Byron-Bethany Irrigation District

City of Tracy

Coelho Family Trust

Eagle Field Water District

Laguna Water District

Oro Loma Water District

Reclamation District No. 1606

Tranquillity Irrigation District

James Irrigation District

+, ++Mercy Springs Water District

Del Puerto Water District

Fresno Slough Water District

Patterson Water District

The West Side Irrigation District

West Stanislaus Irrigation District

Tranquillity Public Utility District

San Felipe Division (Figure 2-3)

San Benito County Water District

Santa Clara Valley Water District

San Luis Unit (Figure 2-4)

Westlands Water District

City of Huron

*Broadview Water District

*Centinella Water District

*Widren Water District

Panoche Water District

Pacheco Water District

City of Avenal

City of Coalinga

San Luis Water District

+Partial assignment to Pajaro Valley Water Management Agency, Westlands Water District Distribution District No. 1, and Santa Clara Valley Water District

++Partial assignment to Westlands Water District Distribution District No. 2

*Full assignment to Westlands Water District

**Partial assignment to City of Tracy

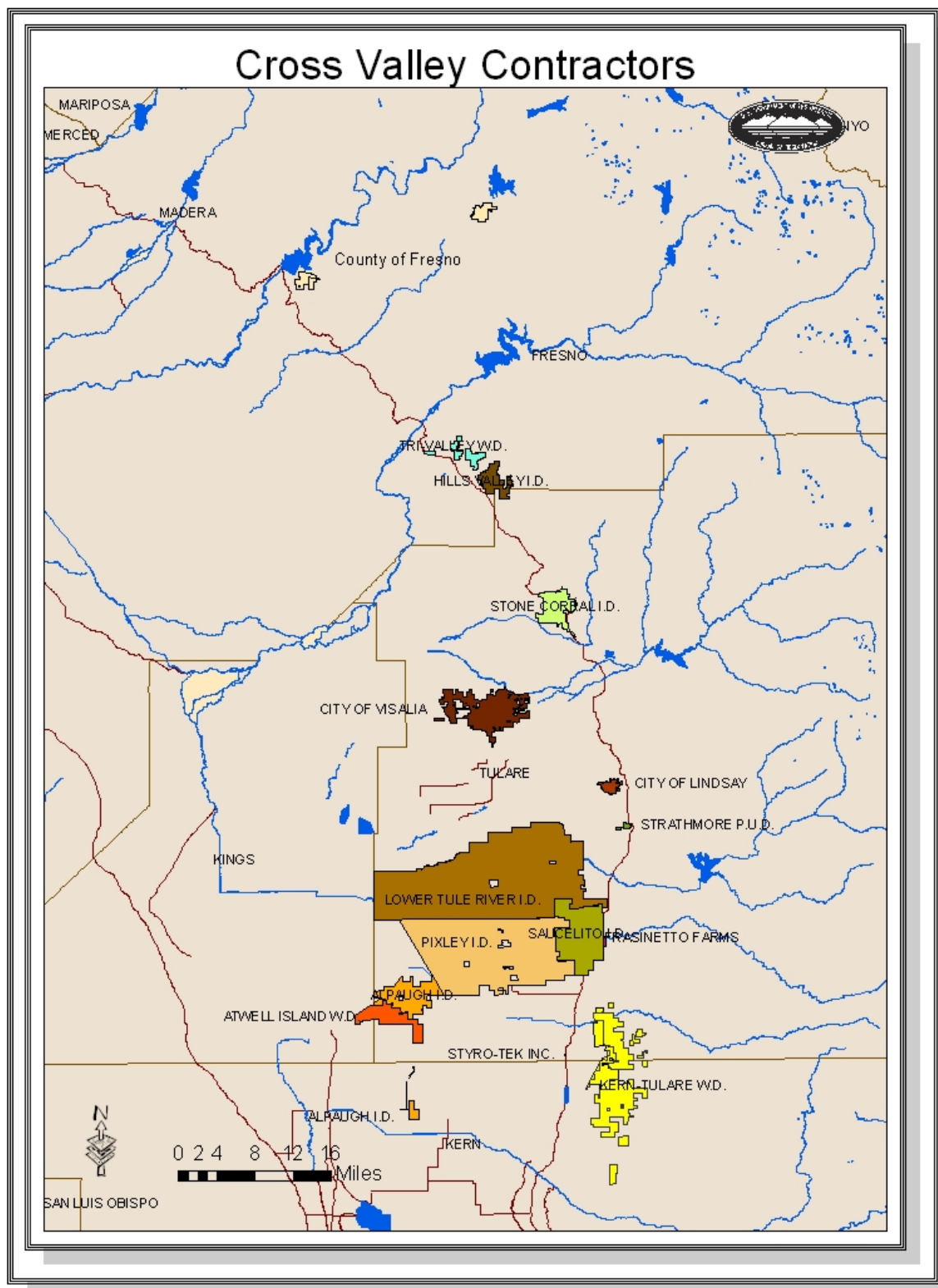


Figure 2-1 Cross Valley Contractor Area Map

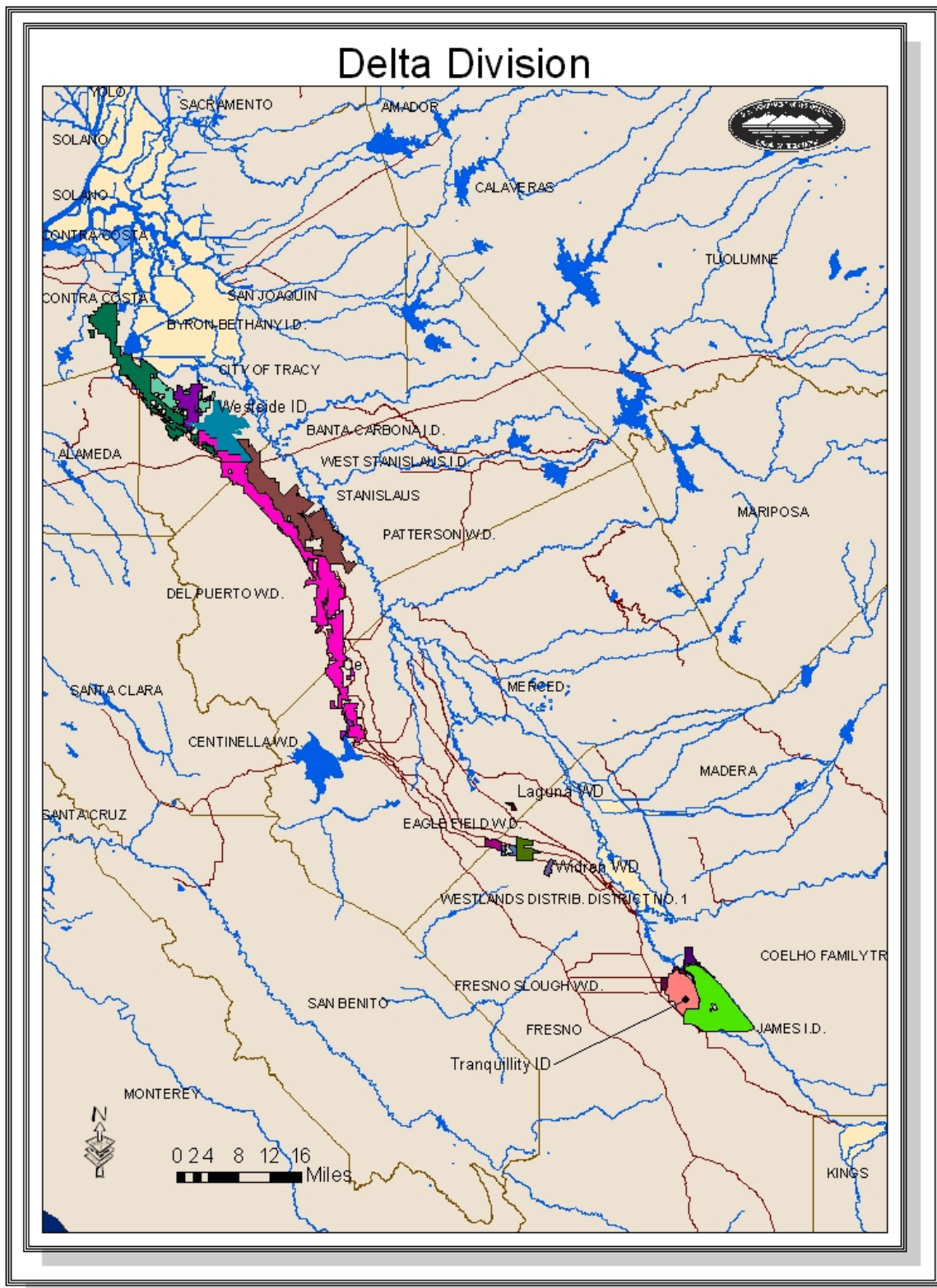


Figure 2-2 Delta Division Area Map

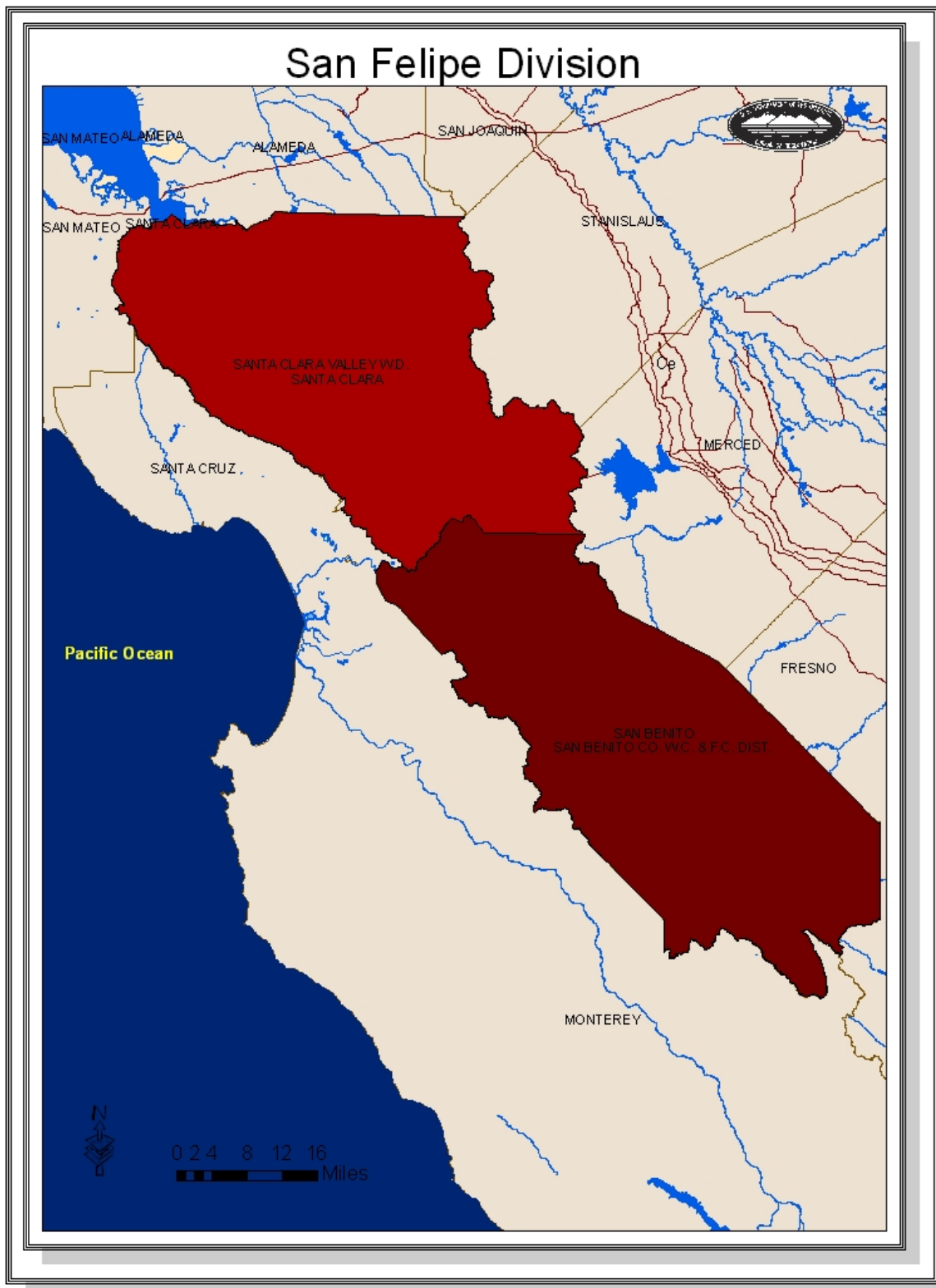


Figure 2-3 San Felipe Division Area Map

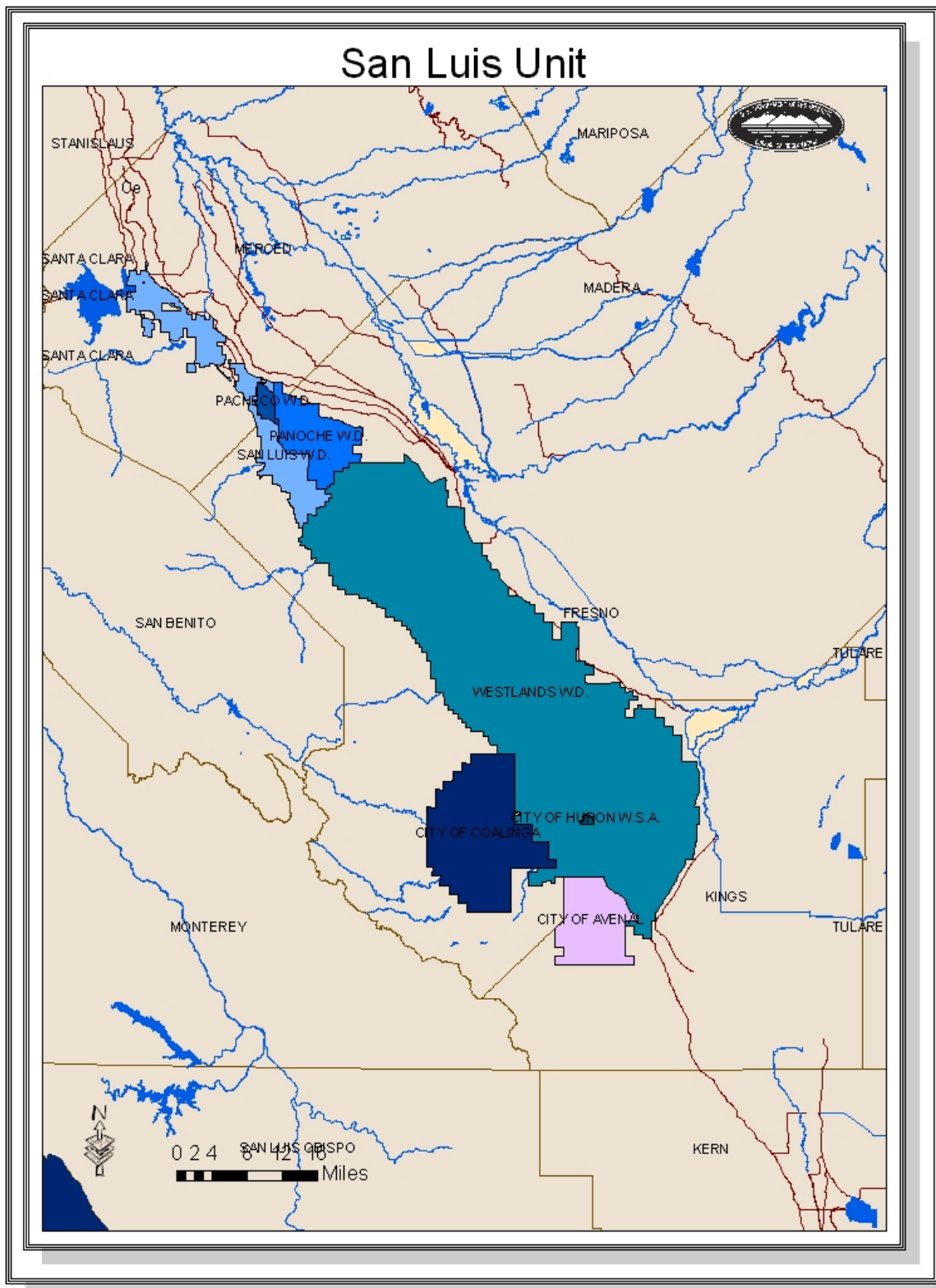


Figure 2-4 San Luis Unit Area Map

SOD CVP Contractors would transfer or exchange up to 150,000 acre-feet of their SOD CVP contract supply each year subject to the following parameters:

- Transfers or exchanges addressed in this EA are transfers or exchanges of CVP water between SOD Contractors (Contractors) all of whom are deemed to be located within the same geographical area. This includes transfers between Delta Division, San Luis Unit, San Felipe Division and the CV Contractor's delta supply as well as SOD refuges as the recipients of transfers.
- Transfers shall be of the type historically carried out among Contractors.*
- Transfers that are greater than 20 percent of a contractor's supply must be publically noticed by the Contractor prior to acknowledgment of such transfer.
- There would be no restriction on directionality – transfers do not require return transfers at a later date or year.
- Transferred water can be either Ag or M&I water.
- The ultimate purpose of use can be for Ag, M&I purposes, fish and wildlife purpose and or groundwater recharge.
- Transfers would be completed between March 1st and February 28th or February 29th of any contract year.
- All transfers and exchanges will be between willing sellers and willing buyers.
- Exchanges must be completed within a one-year period (365 days) from date of initial delivery of exchanged water.
- Transfers and exchanges are limited to a cumulative total of 150,000 acre-feet total annually.
- Transfers or exchanges would occur without new construction or modifications to facilities.
- Transfers or exchanges are limited to existing supply and will not increase overall consumptive use.
- Pertains to CVP water that would have been consumptively used or irretrievably lost to beneficial use during the year of the transfer.
- Transfers or exchanges cannot exceed the average annual quantity of water under contract actually delivered to the Contractor during the last three years of normal deliveries prior to enactment of the CVPIA.
- Transfers or exchanges for Ag would be used on lands irrigated within the last three consecutive years.
- Transfers or exchanges would not lead to any land conversions.
- Transfers or exchanges would comply with all Federal, State, Local or Tribal laws or requirements imposed for the protection of the environment and Indian Trust Assets (ITA).
- The Transferee would comply with RRA.
- Water for transfer or exchange may not be freed up by shifting to an alternative surface water source that could potentially adversely affect CVP operations or other third party interests.

*"Transfers of the type historically carried out among Project Contractors" shall mean transfers that are short-term transfers and the type that historically occurred within the same year for

agricultural purposes prior to enactment of Section 3405(a) of Public Law 102-575, and those that have historically occurred for additional beneficial purposes subsequent to CVPIA, between CVP contractors located within the same geographical areas of the CVP, each of whom had a long-term interim contract with Reclamation for CVP water service that allowed for the transfer and/or exchange of CVP water.

This Proposed Action does not cover:

- Transfers or exchanges that meet the above criteria but are increments of larger actions
- Transfers or exchanges that involve the transfer of previously transferred water
- Transfers or exchanges that involve a third party intermediary as an exchanger
- Transfers or exchanges of Section “215” water

Section 3 Affected Environment and Environmental Consequences

The context for this EA is the CVP service areas for the SOD contractors and includes the valley floor of the San Joaquin Valley within Fresno, Merced, Stanislaus, San Joaquin, Kern, Tulare and Kings Counties, as well as, the Santa Clara Valley within Santa Clara and San Benito Counties.

The Affected Environment for the SOD AWTP as described in EA/FONSI-06-09 has not changed and is therefore not repeated in this document. Refer to EA/FONSI-06-09 for a complete description of the Affected Environment, which is hereby incorporated by reference (Reclamation 2006).

This section identifies the environmental consequences involved with the Proposed Action and the No Action Alternative.

3.1 Groundwater Resources

3.1.1 Environmental Consequences

3.1.1.1 No Action

The No Action Alternative envisions water transfer and exchange operations to continue but each action would require separate environmental analysis, thus, delaying the approval and possibly rendering some transfers or exchanges infeasible. The No Action Alternative could result in continued groundwater pumping in order to meet specific crop demands. However, delivery of water in the manner which has occurred historically would not impact the groundwater aquifer but may slightly improve localized groundwater level depressions.

3.1.1.2 Proposed Action

Some farmers in the Proposed Action area use groundwater to make up for water delivery timing delays, for decreased water deliveries due to dry hydrologic conditions and/or to meet peak demands. Groundwater is typically of low quality and is used as a last resort in most districts. Throughout the northern and central portions of the San Joaquin Valley there has been a significant amount of ground subsidence over the last century due to excessive groundwater overdraft. In wet years, the groundwater is recharged via deliberate man-induced efforts.

Under the Proposed Action, the delivery of transferred or exchanged water would reduce the need for an amount of groundwater pumping in individual districts. Groundwater pumping can deplete the already compromised aquifer in the San Joaquin Valley. Delivery of transferred-in surface water can offset the need for groundwater pumping and improve the quality of the water applied to agricultural lands or for M&I purposes.

The Delta Division, Cross Valley and San Luis Unit CVP Contractors are located within the San Joaquin Valley. The aquifer is interconnected beneath the Delta Division, Cross Valley and San

Luis Unit CVP Contractors and the overall water supply available to the contractors collectively is not changing, delivery of water in a manner which has occurred historically would not impact the groundwater aquifer but may slightly improve localized groundwater level depressions.

The San Felipe Division is located in the Santa Clara Valley which does not overlie the same aquifer as the remaining SOD CVP Contractors. The San Felipe Division is comprised of two CVP Contractors which provide mainly M&I water from CVP and State Water Project sources including groundwater. CVP water supplies are also used for agriculture and groundwater replenishment or blending. It is unlikely the San Felipe Division CVP Contractors would transfer water to other SOD CVP Contractors.

The transfers would allow the flexibility of managing the overall water resources including groundwater. The availability of the transfer water is contingent upon fluctuating conditions. The SOD CVP Contractors respond to these fluctuating conditions by using water management actions (i.e., transfers and exchanges) to meet demands. Exchanged water would be returned within 365 days and would not result in major changes in groundwater supplies. The transfers and exchanges in the AWTP would not lead to long-term changes in deliveries or uses. Therefore, the transfer of water from the San Joaquin Valley to the Santa Clara Valley would not result in major reductions in groundwater quality or quantity.

There would be a slight benefit to groundwater resources from the Proposed Action as it would reduce the need for groundwater pumping.

3.1.1.3 Cumulative Impacts

The Proposed Action, when taken into consideration with other past, present, and future projects, would not have an adverse impact on groundwater resources.

This action may reduce groundwater pumping slightly on a localized basis throughout the action area; however, cumulatively this action would have only a minor effect on the current management and use of groundwater resources in the Proposed Action area because the transfers and exchanges would be accomplished within the same geographical area and are of the type historically carried out among the Project Contractors.

3.2 Surface Water Resources

3.2.1 Environmental Consequences

3.2.1.1 No Action

Under the No Action Alternative, transferring CVP supplies would result in water supplies moving to the highest beneficial or economic use. The supply transferred under the No Action Alternative would not affect water supply diversions from the Delta since this would be the same water supply allocated to the districts south of the Delta. Although surface water deliveries to individual contractors could increase or decrease under the No Action Alternative, this change would be driven by the need to meet existing demands within fluctuating hydrological and economic conditions.

3.2.1.2 Proposed Action

Surface water is the primary supply of water for both agricultural and M&I uses in the Proposed Action area. Although some districts have supplies of non-CVP water, the vast majority of the Contractors rely on CVP water as their primary surface water supply.

Implementation of an AWTP facilitates the Contractors' water management related objectives is part of an overall strategy. It is highly unlikely that a district would allow the transference of water out of their service area that could be put to the highest beneficial and economic use within the district. Proposals of transfer greater than 20 percent of the Contractor's contractual supply either individually or cumulatively must be noticed for review. Water transferred under this Proposed Action would be water that the district made available due to farm economic decisions and cropping pattern decisions on the landowner/farmer level. These decisions are made looking at the profitability of the potential crop and the overall farm operations. Water transference also occurs due to weather and hydrologic conditions (i.e., planned irrigation need is offset by rainfall freeing up water supplies that were planned to be utilized) and or timing of allocation increases or conveyance availability.

The supply transferred under the Proposed Action would not affect water supply diversions from the Delta since this would be the same water supply allocated to the districts south of the Delta. No new facilities would be built nor water diverted from the Delta that would not have been diverted. Although surface water deliveries to individual contractors could increase or decrease under the Proposed Action Alternative, this change is driven by the need to meet existing demands within fluctuating hydrologic and economic conditions. Since the individual district has control over the transfer of the water and since it is a reasonable assumption that a district would not make adverse water management decisions, for the good of the district landholders, the surface water supplies within each district would not be negatively impacted from the standpoint of needed water deliveries or "good water management."

Surface water resources under the Proposed Action in the action area would be identical to conditions under the No Action Alternative. The Proposed Action would not alter CVP operations, water storage or release patterns from CVP facilities, or the maximum volume of water delivered to the Contractors as compared to the No Action Alternative.

In addition, the Proposed Action would not cause any additional water to be diverted from the non-CVP sources; therefore, it would not impact non-CVP related surface water supplies.

3.2.1.3 Cumulative Impacts

The Proposed Action would not result in cumulative adverse impacts to surface water resources, water quality, or facilities when considered in combination with past, present, and future projects. This analysis indicates that future projects, including future water transfer projects, may improve CVP water supply flexibility for individual districts but would not change the net CVP water deliveries. These types of programs would modify water supply flexibility but not change CVP contract amounts or deliveries from within the historical ranges.

3.3 Land Use

3.3.1 Environmental Consequences

3.3.1.1 No Action

The No Action Alternative is the same as the Proposed Action with regard to land use impacts. The same amount of water would be applied to support existing lands uses.

Temporary one-year transfers would not drive land use decisions formulated by the entities with the land use approval decision-making authority. This authority is usually held by the counties or the cities. These agencies are mandated to meet anticipated growth addressed in county general plans. Typically the responsibility to address effects to land uses would be with the local government as part of their California Environmental Quality Act (CEQA) compliance for their actions.

3.3.1.2 Proposed Action

It is not expected that transfers or exchanges of water within one year would cause land use changes among the Contractors. Under the Proposed Action, the AWTP would not cause land use changes as it precludes land use changes. These transfers and exchanges would facilitate the completion of crop production in a single growing season based on cropping patterns established early in the contract year and/or would allow continued irrigation of high value permanent crops to prevent investment losses in the trees or vines involved. These transfers or exchanges would also prevent crop revenue loss and would be driven by the economics or the value of the potential crop loss compared to the cost of the water obtained. However, they would not drive the development of new farmland or M&I infrastructure as they would be of short duration and contingent upon certain hydrological conditions.

There would be no construction due to the Proposed Action. It is anticipated that growth would continue to occur as described in county general plans and as projected by the Department of Finance with protections for the environment.

No additional infrastructure would be constructed, no increase in total deliveries, and no conversion of existing natural habitat into farmland or other uses. Rice is not grown in the service areas for CVP water for the CVP Contractors that would be involved in the Proposed Action, which in addition to the requirement not to use the involved water to convert natural habitat, means that there would be no effect on the giant garter snake.

Analysis indicates that future projects, including future water transfer projects, may improve CVP water supply reliability. These types of programs would modify temporary water supply reliability but not change CVP contract amounts or deliveries from within the historical ranges. Therefore, land use would not change under either of the alternatives.

A project would not cause a secondary growth impact unless the growth would not occur without the project. Most CVP Contractors have no land use jurisdiction in the counties. The cities that are Contractors have more land use decision-making authority. The counties and cities have the ability and obligation to ensure that development occurs without harm to sensitive habitat and cultural resources. It should also be noted that the purpose of the Proposed Action is to allow

temporary redistribution of water supplies within the Proposed Action area. The Proposed Action is not designed to improve water supply reliability or water facility capacity. The implementation of the Proposed Action would not change regional growth forecasts as compared to the No Action Alternative.

There would be no impacts to land use as a result of the Proposed Action.

3.3.1.3 Cumulative Impacts

Because there are no direct or indirect adverse impacts to land use, the temporary transfers and exchanges under the Proposed Action would not result in cumulative adverse impacts to land use resources when considered in combination with past, present, and future projects as these transfers and exchanges are the type that has occurred historically.

3.4 Biological Resources

3.4.1 Environmental Consequences

3.4.1.1 No Action

The No Action Alternative would result in continued transfers and exchanges of water that would be approved on a case by case basis. As such the impacts would be the same as described under the Proposed Action. There would be no impacts to fish and wildlife, listed species or critical habitat.

3.4.1.2 Proposed Action

Under the Proposed Action, transferred water would be used to temporarily make up for shortages in supply or improved timing of water deliveries. The limited duration of this supply precludes its use as a reliable source of water. Conversion of native land into agriculture use requires a reliable water supply. Therefore, there would be no loss of native habitat for wildlife species and no affect to listed species or critical habitat.

The Proposed Action would not result in any impacts to source districts, as the transfers and exchanges would be in response to climatic conditions, crop requirements, economics, or water delivery timing issues. These factors are not under the control of the farmers and must be dealt with on an annual basis. By providing a means for water delivery flexibility, this action would help preserve the farming practice of the source areas, as well as the receiving areas. Under the conditions of the Proposed Action there would be no third party water used to free up the CVP water being transferred or exchanged.

Neither alternative includes any new facilities or construction. Demographic, economic, political, and other factors, independent of transfers and exchanges, are causing changes with direct and indirect effects to biological resources that are beyond the range of Reclamation's responsibilities. All of the transfer and exchange actions are within the range of existing conditions. This includes the area of use, types of use, range of river flows, and reservoir fluctuations. No additional infrastructure would be constructed. There would be no increase in deliveries, and no conversion of existing natural habitat into farmland or other uses.

In some instances, the responsibility to address effects to biological resources would be with the local government as part of their CEQA compliance for their development in a community. Such actions are approved locally and at the state level (however, other federal agencies, such as Housing and Urban Development, may be involved). Further, if a farmer changes from one irrigated crop to another because of economic reasons, Reclamation does not control the farmer's decision. On the other hand, Reclamation would need to consider the effects to biological resources when Reclamation approves new lands being brought into an irrigation district and when Reclamation approves a change in use.

The Department of the Interior is developing strategies to address the impacts on special status species in the CVP service areas. In addition, any federal action that may affect listed species must comply with the ESA. This requirement for compliance is also required for other Federal approvals and permits, including the U.S. Army Corps of Engineers' permits for dredging and filling of wetlands. This type of regulatory compliance is required for several Federal actions and would be included in the overall local planning process.

Biological resources in the Proposed Action would be identical conditions under the No Action Alternative. The Proposed Action would not alter CVP operations, water storage or release patterns from CVP facilities, or the maximum volume of water delivered to the Contractors as compared to the No Action Alternative. Therefore, biological resources conditions under the Proposed Action would be identical to those under the No Action Alternative.

There would be no adverse impacts to biological resources as a result of the Proposed Action.

3.4.1.3 Cumulative Impacts

Cumulatively this action would have a no affect on fish and wildlife in the Proposed Action area. Transfers and exchanges under the Proposed Action would not result in cumulative impacts to biological resources in addition to those occurring in the baseline. These issues were evaluated as part of previous environmental documentation. It is not foreseen that land use plans and resource conservation plans would change without additional environmental documentation. Because there is no difference in the amount of water delivered under CVP operations between the No Action Alternative and Proposed Action, there would be no direct or cumulative adverse impacts to biological resources.

3.5 Cultural Resources

A cultural resource 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 (NRHP). Those resources that are on or eligible for inclusion in the NRHP are referred to as historic properties.

The Section 106 process is outlined in the Federal regulations at 36 CFR Part 800. These regulations describe the process that the Federal agency (Reclamation) takes to identify cultural

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

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

3.5.1 Environmental Consequences

3.5.1.1 No Action

The No Action Alternative would result in continued transfers and exchanges of water that would be approved on a case by case basis. The No Action Alternative would not result in the conversion of additional land or the impact any known cultural sites.

3.5.1.2 Proposed Action

This Proposed Action would not result in the conversion or disturbance of additional land or the impact of any known cultural sites. Consultation was done with Reclamation's Regional Archeologist who confirmed that there were no cultural resource's in the Proposed Action area that would likely be impacted based on the Proposed Action which from an "on the ground perspective" there is no change in Proposed Action from the No Action Alternative. The Proposed Action description ensures that no new lands would be put into production with this water. Further, if a farmer changes from one irrigated crop to another because of economic reasons within already tilled farmland, this should not have any impact on cultural resources.

Cultural resources under the Proposed Action would be identical to conditions under the No Action Alternative. The Proposed Action would not alter CVP operations, water storage or release patterns from CVP facilities, or the maximum volume of water delivered to the Contractors as compared to the No Action Alternative. Existing facilities would be used and would not require any modifications, and no new construction would be required. Therefore, there would be no impact resulting from the Proposed Action.

3.5.1.3 Cumulative Impacts

The cumulative effect of past, present, and future programs under the AWTP would modify temporary water supply flexibility but not change CVP contract amounts or deliveries from within the historical ranges. There would be no cumulative impacts to cultural resources.

3.6 Indian Trust Assets

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.

The nearest ITA is determined by using the distance from the boundary of the district that is closest to an ITA. The nearest ITA to the Proposed Action is the Table Mountain Rancheria.

3.6.1 Environmental Consequences

3.6.1.1 No Action

The No Action Alternative would result in continued transfers and exchanges of water that would be approved on a case by case basis. Under the No Action Alternative there would be no impacts to ITA.

3.6.1.2 Proposed Action

The Proposed Action would utilize existing facilities and would not require any ground disturbance that could impact ITA. The Proposed Action does not have a potential to affect Indian Trust Assets.

3.6.1.3 Cumulative Impacts

There would be no cumulative impacts to ITA when added to other past, present, and future Proposed Actions as existing conditions would not change.

3.7 Indian Sacred Sites

Sacred sites are defined in Executive Order 13007 (May 24, 1996) as "any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site."

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.

3.7.1 Environmental Consequences

3.7.1.1 No Action

The No Action Alternative would result in continued transfers and exchanges of water that would be approved on a case by case basis. Under the No Action Alternative, there would be no impacts to Indian sacred sites since conditions would remain the same as existing conditions.

3.7.1.2 Proposed Action

The Proposed Action involves transferring and exchanging water and utilizing existing conveyance facilities. No construction or ground disturbing activities would be required that would impact known Indian sacred sites and/or prohibit access to and ceremonial use of this resource.

3.7.1.3 Cumulative Impacts

Transfers and exchanges under the Proposed Action would not result in cumulative impacts to Indian sacred sites when added to other past, present, and future Proposed Actions as existing conditions would not change.

3.8 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.

3.8.1 Environmental Consequences

3.8.1.1 No Action

The No Action Alternative would result in continued transfers and exchanges of water that would be approved on a case by case basis. The No Action Alternative would not change the flexibility of water deliveries to the contractors covered. Therefore, the No Action Alternative would have no impact on environmental justice.

3.8.1.2 Proposed Action

The Proposed Action would increase the flexibility of water deliveries to the contractors. This increased flexibility may lead to a further diversification of crops within these districts. This could lead to a shift in the timing needs of farm labor during the year the Proposed Action would occur; however, the need for farm labor is not expected to change as a result of Proposed Action. Therefore, there would be no impact.

3.8.1.3 Cumulative Impacts

Transfers and exchanges under the Proposed Action would not result in cumulative impacts that would disproportionately impact minority and disadvantaged populations as the need for farm labor is not expected to change as a result of the Proposed Action.

3.9 Socioeconomic Resources

3.9.1 Environmental Consequences

3.9.1.1 No Action

The No Action Alternative would result in continued transfers and exchanges of water that would be approved on a case by case basis. The No Action Alternative would not change the flexibility of water deliveries to the contractors covered. Therefore, the No Action Alternative would have no impact on socioeconomic resources.

3.9.1.2 Proposed Action

The Proposed Action would increase the flexibility of water deliveries to the contractors. This increased flexibility may lead to a further diversification of crops within these districts. This could lead to a shift in the timing needs of farm labor during the year the Proposed Action would occur; however, the need for farm labor is not expected to change as a result of Proposed Action. Therefore, there would be no impact.

3.9.1.3 Cumulative Impacts

Reclamation's action would be the approval of an AWTP. Reclamation has made these actions in the past. Transfers and exchanges under the Proposed Action would not result in cumulative impacts that would adversely affect socioeconomic resources. The cumulative effect of past, present, and future programs with the AWTP would modify temporary water supply flexibility but not change CVP contract amounts or deliveries from within the historical ranges. There would be no adverse impact.

3.10 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 Clean Air Act (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 NAAQS 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.

3.10.1 Environmental Consequences

3.10.1.1 No Action

The No Action Alternative would result in continued transfers and exchanges of water that would be approved on a case by case basis. The No Action Alternative would not change the flexibility of water deliveries to the contractors covered. Therefore, the No Action Alternative would have no impact on air quality.

3.10.1.2 Proposed Action

The supply transferred under the Proposed Action would not affect air quality. No new facilities would be built. Although surface water deliveries to individual contractors could increase or decrease under the Proposed Action Alternative, this change is driven by the need to meet existing demands within fluctuating hydrological and economical conditions.

Air quality under the Proposed Action in the action area would be identical to conditions under the No Action Alternative. As has occurred historically, transfers and exchanges of this CVP water would occur via gravity flow or electric pumps. No construction would occur as a result of these transfers and exchanges. Therefore, the Proposed Action would have no impact on air quality.

3.10.1.3 Cumulative Impacts

The Proposed Action would not result in cumulative adverse impacts to air quality when considered in combination with past, present, and future projects. These types of programs would modify water supply flexibility but not change CVP contract amounts or deliveries from within the historical ranges. A conformity analysis would not be required.

3.11 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 2008a)

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 2008a).

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 2008b).

3.11.1 Environmental Consequences

3.11.1.1 *No Action*

The No Action Alternative would result in continued transfers and exchanges of water that would be approved on a case by case basis. No new facilities would be built. Although surface water deliveries to individual contractors could increase or decrease under the No Action Alternative as in the Proposed Action, this change is driven by the need to meet existing demands within fluctuating hydrological and economical conditions. Transfers and exchanges could be approved on a case by case basis; however, they would occur via gravity flow or electric pumps. Therefore, the No Action Alternative would have no impact on the global climate.

3.11.1.2 *Proposed Action*

The Proposed Action would involve no physical changes to the environment, no construction activities, and therefore, would not impact global climate change. However, global climate change is expected to have some effect on the snow pack of the Sierra Nevadas 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 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.

3.11.1.3 *Cumulative Impacts*

All transfers and/or exchanges would utilize existing conveyance facilities. Conveyance would be by gravity or electric pumps. Overall, there would be no adverse cumulative impacts from the Proposed Action and other related projects.

Section 4 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA during a public review period from December 30, 2010 through January 31, 2011. A set of comments were received (attached as Appendix B) from Arvin-Edison Water Storage District (AEWSD) and are addressed below:

Response to AEWSD comment #1:

Only SOD and CV CVP contractors as described in Section 2.2 of this EA were analyzed to participate in this AWTP. AEWSD is considered a Friant Division CVP contractor and was therefore excluded from this AWTP. Exchanges between AEWSD and CV contractors were analyzed in the existing Article 5 Exchange Program, EA-10-36, and does not affect the 150,000 AF analyzed under this AWTP.

Response to AEWSD comment #2:

Friant Division CVP contractors were not included in the analysis this AWTP. Because CV contractors are geographically located within the Friant Division but get their water from the Delta, Reclamation envisioned that the CV contractors would get their water via exchanges due to direct conveyance hurdles. Exchanges involving CV contractors were already analyzed under the existing Article 5 Exchange Program and/or any other environmental document that has been previously approved, and is not a part of this AWTP. Other such actions would require separate environmental review and Reclamation approval.

Section 5 Consultation and Coordination

5.1 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 Proposed Action does not involve federal water development projects. Therefore the FWCA does not apply.

5.2 Endangered Species Act (16 USC § 1531 et seq.)

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

Reclamation has determined that transfers, exchanges and conveyance of this CVP water would have no effect on threatened and endangered species and no consultation is required under section 7 of ESA. This determination is based on the transfers and exchanges would not change pumping conditions in the Delta to protect fish. Reclamation and DWR would continue to make decisions on whether to pump and convey this water based on external conditions independent of the transfers and exchanges. Water is pumped from the Delta in accordance with the biological opinions governing long-term operations of the Jones Pumping Plant and other regulatory requirements to protect water quality resources. Reclamation will continue to operate the pumps in a manner consistent with the biological opinions and any judicial order modifying those biological opinions. Similar amounts of water are pumped and conveyed by DWR based on demands and capacity although the label on the water may differ.

The transfers and exchanges are water management actions to support existing uses and conditions. No native lands would be cultivated. Lands fallowed for three or more years would require surveys for wildlife species including threatened and endangered species prior to application of this water. Subsequent environmental review and consultations, if applicable, would be required to irrigate lands fallowed three or more years. Therefore, the Proposed Action would have no effect on federally listed threatened or endangered species or their designated habitats.

5.3 National Historic Preservation Act (16 USC § 470 et seq.)

The NHPA of 1966, as amended (16 USC 470 et seq.), requires that federal agencies give the Advisory Council on Historic Preservation an opportunity to comment on the effects of an undertaking on historic properties, properties that are eligible for inclusion in the National Register. The 36 CFR Part 800 regulations implement Section 106 of the NHPA.

Section 106 of the NHPA requires federal agencies to consider the effects of federal undertakings on historic properties, properties determined eligible for inclusion in the National

Register. Compliance with Section 106 follows a series of steps that are designed to identify interested parties, determine the APE, conduct cultural resource inventories, determine if historic properties are present within the APE, and assess effects on any identified historic properties.

Due to the nature of the Proposed Action, there would be no effect on any historical, archaeological or cultural resources, and no further compliance actions are required.

5.4 Indian Trust Assets

ITA are legal interests in property held in trust by the United States for federally-recognized Indian tribes or individual Indians. An Indian trust has three components: (1) the trustee, (2) the beneficiary, and (3) the trust asset. ITA can include land, minerals, federally-reserved hunting and fishing rights, federally-reserved water rights, and in-stream flows associated with trust land. Beneficiaries of the Indian trust relationship are federally-recognized Indian tribes with trust land; the United States is the trustee. By definition, ITA cannot be sold, leased, or otherwise encumbered without approval of the United States. The characterization and application of the United States trust relationship have been defined by case law that interprets Congressional acts, executive orders, and historic treaty provisions.

The Proposed Action would not affect ITA because there are none located in the Proposed Project area.

5.5 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.

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

The 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.

5.7 Executive Order 11988 – Floodplain Management and Executive Order 11990 – Protection of Wetlands

Executive Order 11988 requires Federal agencies to prepare floodplain assessments for actions located within or affecting flood plains, and similarly, Executive Order 11990 places similar requirements for actions in wetlands. The Proposed Action would not affect either concern.

5.8 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.

No pollutants would be discharged into any navigable waters under the Proposed Action so no permits under Section 401 of the CWA are required.

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.

Section 6 List of Preparers and Reviewers

Patti Clinton, Natural Resources Specialist, SCCAO
Michael Inthavong, Natural Resources Specialist, SCCAO
Shauna McDonald, Wildlife Biologist, SCCAO
Dawn Ramsey, Archaeologist, MP-153
Patricia Rivera, ITA, MP-400
Erma Clowers, Repayment Specialist/Project Manager, SCCAO
Chuck Siek, Supervisory Natural Resources Specialist (reviewer), SCCAO
Rain Healer, Natural Resources Specialist (reviewer), SCCAO
Cathy James, Repayment Specialist (reviewer), SCCAO

Section 7 References

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

Environmental Protection Agency (EPA). 2010a: Website – Climate Change, Basic Information. <http://www.epa.gov/climatechange/basicinfo.html>

Environmental Protection Agency (EPA). 2010b: Website – Climate Change, Science. <http://www.epa.gov/climatechange/science/index.html>

Reclamation (Bureau of Reclamation). 2006. *Accelerated Water Transfers and Exchanges, South of Delta Contractors, Water Year 2006-2010*. EA/FONSI-06-09. March 2, 2006.

Appendix A – Reclamation Determination Documentation

Inthavong, Michael T

To: Inthavong, Michael T
Subject: FW: draft Ea-10-51 Accelerated Water Transfer Program

From: McDonald, Shauna A
Sent: Thursday, October 07, 2010 11:43 AM
To: Clinton, Patricia L
Cc: Winckel, Joy; Welsh, Michael
Subject: RE: draft Ea-10-51 Accelerated Water Transfer Program

Hi Patti. I reviewed this EA for Reclamation's proposed action implementing an accelerated process to approve water transfers and exchanges under Section 3405 of CVPIA that have occurred among SOD CVP Contractors prior to the CVPIA as well as those that have been predetermined to meet CVPIA and have had prior environmental analysis. The proposed transfers and exchanges would be for the contract years 2011-2015 (a contract year begins March 1st and ends February 28th of the following year).

As explained in the DEA, Reclamation has determined that transfers, exchanges and conveyance of this CVP water would have no effect on threatened and endangered species and no consultation is required under section 7 of ESA. This determination is in part based on the fact that the transfers and exchanges would not change pumping conditions in the Delta. The transfers and exchanges are water management actions to support existing uses and conditions. No native lands would be cultivated as a result of the Proposed Action. Lands fallowed for three or more years would require surveys for wildlife species including threatened and endangered species prior to application of this water. No lands used to grow rice are present in the districts transferring water.

Thanks.

Shauna A. McDonald
Wildlife Biologist
Bureau of Reclamation
South-Central California Area Office
Fresno, CA 93721
(559) 487-5202
(559) 487-5397 (fax)
smcdonald@usbr.gov

Inthavong, Michael T

From: Ramsey, Dawn
Sent: Monday, October 04, 2010 11:00 AM
To: Clinton, Patricia L
Cc: Barnes, Amy J; Bruce, Brandee E; Dunay, Amy L; Fogerty, John A; Goodsell, Joanne E; Leigh, Anastasia T; Nickels, Adam M; Overly, Stephen A; Perry, Laureen (Laurie) M
Subject: South of Delta Accelerated Water Transfer Program Section 106 Complete (11-SCAO-003)

Tracking No. 11-SCAO-003

Project: South of Delta Accelerated Water Transfer Program

Patti:

I have reviewed the draft EA for the 2010 Accelerated Water Transfers and Exchanges Central Valley Project Contractors South of Delta Contractors. The EA outlines a proposed action and no action alternative to continue to implement an accelerated water transfer program (AWTP) that facilitates efficient water management by allowing contractors within the same geographical areas to conduct annual transfer of the type historically carried out under an accelerated program which streamlines the Bureau of Reclamation (Reclamation)'s approval process. Both the no action and proposed action alternatives have no potential to effect historic properties pursuant to 36 CFR Part 800.3(a)(1)

The proposed action is to implement an accelerated process to approve water transfers and exchanges under Section 3405 of Central Valley Project Improvement Act (CVPIA) that have occurred among South of Delta CVP Contractors prior to the CVPIA as well as those that have been predetermined to meet CVPIA and have had prior environmental analysis. After reviewing the cultural resource section of the EA I have no changes to make to the document.

This completes the Section 106 process. Please retain a copy of this e-mail for your files. Please note that if project plans or actions change, these revisions may require additional Section 106 consideration.

Sincerely,
Dawn

Dawn Ramsey Ford
Archaeologist
U.S. Bureau of Reclamation
Mid-Pacific Region
2800 Cottage Way, MP-153
Sacramento, CA 95825
916-978-5042
dramsey@usbr.gov

Inthavong, Michael T

From: Rivera, Patricia L
Sent: Wednesday, September 01, 2010 7:35 AM
To: Clinton, Patricia L
Subject: RE: ITA form for EA-10-51 AWTP

Patti,

I reviewed the proposed action to approve the Central Valley Project Contractors (CVP) South of Delta Contractors (SOD) CVP Contractors transfer or exchange of up to 150,000 acre-feet of their SOD/CVP contract supply of water from 2011-2015 subject to the following parameters:

- Transfers or exchanges addressed in this EA are transfers or exchanges of CVP water between SOD Contractors (Contractors) all of whom are deemed to be located within the same geographical area. This includes transfers between Delta Division, San Luis Unit, San Felipe Division and the CV Contractor's delta supply as well as SOD refuges as the recipients of transfers.
- Transfers shall be of the type historically carried out among Contractors.
- Transfers that are greater than 20 percent of a contractor's supply must be publically noticed by the Contractor prior to acknowledgment of such transfer.
- There will be no restriction on directionality – transfers do not require return transfers at a later date or year.
- Transferred water can be either Ag or M&I water.
- The ultimate purpose of use can be for Ag, M&I purposes, fish and wildlife purpose and or groundwater recharge.
- Transfers will be completed between March 1st and February 28th of any contract year.
- All transfers and exchanges will be between willing sellers and willing buyers.
- Exchanges must be completed within a one-year period (365 days) from date of initial delivery of exchanged water.
- Transfers and exchanges are limited to a cumulative total of 150,000 acre-feet total annually.
- Transfers would occur without new construction or modifications to facilities.
- Transfers are limited to existing supply and will not increase overall consumptive use.
- Pertains to CVP water that would have been consumptively used or irretrievably lost to beneficial use during the year of the transfer.
- Transfer cannot exceed the average annual quantity of water under contract actually delivered to the Contractor during the last three years of normal deliveries prior to enactment of the CVPIA.
- Transfers for Ag would be used on lands irrigated within the last three consecutive years.
- Transfers will not lead to any land conversions.
- Transfers will comply with all Federal, State, Local or Tribal laws or requirements imposed for the protection of the environment and Indian Trust Assets.
- The Transferee would comply with RRA.
- Water for transfer may not be freed up by shifting to an alternative surface water source that could potentially adversely affect CVP operations or other third party interests.

"Transfers of the type historically carried out among Project Contractors" shall mean transfers that are short-term transfers and the type that historically occurred within the same year for agricultural purposes prior to enactment of PL 102-575, and those that have historically occurred for additional beneficial purposes subsequent to CVPIA, between CVP contractors located within the same geographical

areas of the CVP, each of whom had a long-term interim contract with Reclamation for CVP water service that allowed for the transfer and/or exchange of CVP water.

This Proposed Action does not cover:

- Transfers that meet the above criteria but are increments of larger actions
- Transfers that involve the transfer of previously transferred water
- Transfers that involve a third party intermediary as an exchanger
- Transfers of Section "215" water

The proposed action does not have a potential to affect Indian Trust Assets. The project location is inside Table Mountain Rancheria.

Patricia

Appendix B – Public Comments Received

ARVIN-EDISON WATER STORAGE DISTRICT

20401 BEAR MOUNTAIN BOULEVARD

MAILING ADDRESS: P.O. Box 175
ARVIN, CALIFORNIA 93203-0175

TELEPHONE (661) 854-5573

FAX (661) 854-5213

EMAIL arvined@aewsd.org

January 31, 2011

DIRECTORS

DIVISION 1
RONALD R. LEHR
DIVISION 2
JEFFREY G. GIUMARRA
DIVISION 3
HOWARD R. FRICK
DIVISION 4
DONALD M. JOHNSTON
DIVISION 5
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ENGINEER-MANAGER
STEVEN C. COLLUP

ASSISTANT MANAGER
DAVID A. NIXON

STAFF ENGINEER
JEEVAN S. MUHAR

VIA USPS, FAX: 559.487.5397 & ELECTRONIC MAIL: csiek@usbr.gov

Chuck Siek
Department of the Interior
BUREAU OF RECLAMATION
1243 "N" Street
Fresno, CA 93721-1813

RE: Draft Environmental Assessment (EA) and Draft Finding of No Significant Impact (FONSI) – Accelerated Water Transfers and Exchanges (AWTP) between South of Delta Contractors for Contract Years 2011-2015 (Draft EA-10-051 / Draft FONSI-10-051)

Dear Mr. Siek:

Thank you for the opportunity to provide comments on the subject matter.

#1

It shall be noted that this AWTP EA and FONSI, which covers up to 150,000 acre-feet (AF) annually of South of Delta contractors' Central Valley Project (CVP) water transferred and/or exchanged, is in addition to the up to 128,300 AF per year of historical actions (exchanges) between Arvin-Edison Water Storage District (AEWSD) and Cross Valley (CV) CVP contractors as specifically approved by contract provisions. Please provide written acknowledgement that the historical action between AEWSD and CV CVP contractors does not and will not factor into the AWTP accounting of 150,000 AF.

#2

AEWSD also has concerns that AWTP water transferred or exchanged by South of Delta Contractors to other CVP Contractors (CV and/or Friant Division) that results in direct delivery and/or discharge into the Friant-Kern Canal (FKC) will exhibit potential significant water quality impacts to AEWSD's surface and groundwater supplies, water banking programs, and associated negative impacts on crops and land uses within its district as well as other contractors/areas in the last reach of the FKC. This action (discharge into the FKC) is not addressed in the EA. A clarification can be added to page 14 that states "This action does not cover: Transfers or exchanges that involve a direct delivery and/or discharge into the Friant-Kern Canal."

Sincerely,


Steve Collup
Engineer Manager

cc: Jeevan Muhar, Staff Engineer
Rena Ballew, USBR Fresno
Ron Jacobsma, Friant Water Authority