

RECLAMATION

Managing Water in the West

Nine Year Annual Transfer of Settlement Contract Water to Vista Verde-Owned Lands within Westlands Water District

FONSI-12-038

Recommended by:



Date: 7-13-12

Ben Lawrence
Natural Resources Specialist
South-Central California Area Office

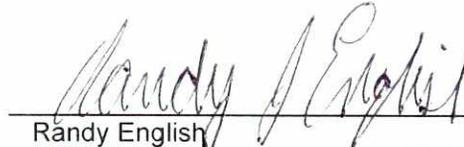
Concurred by:



Date: 7/30/12

Chuck Siek
Supervisory Natural Resources Specialist
South-Central California Area Office

Concurred by:



Date: 7/31/12

Randy English
Chief, Resources Management Division
South-Central California Area Office

Approved by:



FOR: Michael P. Jackson

Date: 7/31/12

Area Manager
South-Central California Area Office



Introduction

Background

In accordance with section 102(2)(c) of the National Environmental Policy Act of 1969, as amended, the South-Central California Area Office of the Bureau of Reclamation (Reclamation), has determined that an Environmental Impact Statement is not required for the approval of a nine-year (2012 to 2021) annual transfer of settlement contract water within Westlands Water District (WWD). This Finding of No Significant Impact (FONSI) is supported by Reclamation's Final Environmental Assessment (EA) number EA-12-038, *Vista Verde Nine Year Annual Transfer of Settlement Contract Water to Vista Verde-Owned Lands within Westlands Water District*, which is hereby incorporated by reference. The transfer covered by this action is a continuation of an existing arrangement.

When Reclamation initiated construction of the Central Valley Project (CVP) to manage and control water through the central portion of California, certain San Joaquin River water rights holders were offered "Settlement Contracts". These contracts supplied water from CVP facilities to replace water lost from other sources as a result of development of the CVP. Through these Settlement Contracts, the San Joaquin River water was exchanged for water that can be pumped from the Sacramento-San Joaquin Delta and delivered through CVP facilities.

Dudley & Indart is a settlement contractor and entitled to water rights water. The Vista Verde Farms (Vista Verde) lands are designated by the Dudley & Indart parties to receive a portion of the Settlement contract water supply (Contract water) for lands which are adjacent to the WWD northeastern boundary and south of the city of Mendota and the Dudley & Indart service area. Vista Verde also owns land located entirely within WWD which is more productive and is suitable for cultivation of higher value crops. Since 2001 they have operated under agreements to transfer their Contract water from the lower productivity land in the north to their higher productivity land to the south.

These transfers were authorized under a series of environmental documents issued by Reclamation. The first of these was an Environmental Assessment/FONSI, issued in 2000 (FONSI #00-58) for annual transfers between 2000 and 2004. In 2005, Reclamation approved FONSI #05-36 for the annual transfer of Contract water owned by Vista Verde for the 2005 year only. In 2007, Reclamation approved FONSI #07-73 for temporary annual transfers between 2007 and 2011. Vista Verde did not transfer water under this program in 2000 or 2006.

Proposed Action

Reclamation proposes to approve a series of annual water transfers during each of the next nine years (July 1, 2012 – December 31, 2020) for an annual volume up to 1,140 AF of Contract water from the Dudley & Indart Settlement Contract (Contract), under Contract Number 14-06-200-4448A to lands owned by Vista Verde within WWD. No new infrastructure, modifications of

facilities, or ground disturbing activities will be needed for movement of this water. No native or untilled land will be cultivated with water involved with these actions.

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA between June 26, 2012 and July 11, 2012. No comments were received during the comment period.

Findings

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

Water Resources

The Action will not affect CVP operations or change existing diversion points. Up to 1,140 AF/y of the transferred water will simply be conveyed via the San Luis Canal rather than the Delta Mendota Canal. CVP obligations to deliver water to other contractors or fish and wildlife areas will be unaffected.

Floodplains, Wetlands and Waterways

The proposed action does not involve construction, dredging or other modification of regulated water features. No permits under the Clean Water Act [CWA] (33 U.S.C. 1251) would be needed.

Land Use

Existing land use patterns will not be affected. The properties covered by this action are in agricultural use, and will continue to be used for agriculture.

Biological Resources

Under the Proposed Action, no negative impacts to plants or wildlife are anticipated as no native, untilled lands will be irrigated or receive the transferred water. The water will be delivered to established croplands through existing canals. No species listed or proposed to be listed as endangered or threatened under the Endangered Species Act will be affected. No critical habitat for any listed species is located within the proposed action area and therefore no critical habitat will be affected.

Cultural Resources

The transfer will facilitate the flow of water through existing facilities to existing users. No new construction or ground disturbing activities will occur. The pumping, conveyance, and storage of water will be confined to existing wells, pumps, and CVP facilities. These activities have no potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1).

Reclamation's Cultural Resources Branch issued a determination on May 18, 2012 that the Proposed Action has no potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1).

Indian Sacred Sites

The Action is not of a type with the potential to affect Indian Sacred Sites. The conveyance of water through existing facilities to existing farming operations will not restrict or impair use of such Sites.

Indian Trust Assets

The Action is not of a type with the potential to affect Indian Trust Assets (ITA). There will be no new construction or ground disturbing activity, and all areas affected by the action are already developed for agriculture.

Reclamation's ITA Branch issued a determination on May 18, 2012 that there are no ITA within the proposed action area and therefore the proposed action does not have a potential to affect ITA.

Environmental Justice

Conditions for minority and low-income residents of the area will continue as they currently exist. Areas in agricultural use will continue to be farmed, and the same economic and employment opportunities will be available. The action will not result in disproportionate adverse effects to protected communities.

Socioeconomic Resources

The properties covered by the Action will continue to be used for agriculture. Socioeconomic conditions such as type and rate of employment in the area will continue according to existing trends. Cost and availability of irrigation water will vary over time depending on outside influences beyond the scope of this action, such as market forces and weather trends.

Air Quality

Air emissions will continue according to current trends. Agricultural operations on the covered properties are expected to use approximately the same number and type of machinery as has been used in recent years, and emissions will be comparable.

Global Climate

The area covered by the Action will continue to be farmed as it has in the recent past, with similar operation of farm machinery, valves and pumps. Greenhouse gas emissions will continue according to current trends.

Cumulative Impacts

Each year, weather patterns and hydrological conditions create variations in the water supply for the region. As more or less water is available for use, transfers occur between different operators or areas to balance supply and demand. This results in a number of water service actions and approvals by Reclamation each year. This trend has been established over many years and is expected to continue into the foreseeable future. Each water service action involving Reclamation undergoes environmental review prior to approval.

The transfer of water between the two properties owned by Vista Verde would be the same as the baseline condition, as this would preserve an existing arrangement and allow current practices to

continue. As there would be no impact to water diverted from the Delta, points of diversions, or CVP operations and this water would continue to be conveyed as it has been previously under the annual transfers, there would be no cumulative impacts as a result of the Proposed Action.

RECLAMATION

Managing Water in the West

Nine Year Annual Transfer of Settlement Contract Water to Vista Verde-Owned Lands within Westlands Water District

EA-12-038



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

July 2012

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.

Table of Contents

Section 1	Introduction.....	1
1.1	Background.....	1
1.2	Purpose and Need.....	1
1.3	Reclamation’s Legal and Statutory Authorities and Jurisdiction Relevant to the Proposed Federal Action.....	3
1.4	Scope.....	3
1.5	Resources Eliminated from Further Analysis.....	3
1.6	Resources Requiring Further Analysis.....	5
Section 2	Alternatives Considered.....	7
2.1	No Action Alternative.....	7
2.2	Proposed Action.....	7
Section 3	Affected Environment and Environmental Consequences.....	9
3.1	Water Resources.....	9
3.1.1	Affected Environment.....	9
3.1.2	Environmental Consequences.....	10
3.2	Biological Resources.....	10
3.2.1	Affected Environment.....	10
3.2.2	Environmental Consequences.....	12
3.3	Socioeconomic Resources.....	13
3.3.1	Affected Environment.....	13
3.3.2	Environmental Consequences.....	13
3.4	Air Quality.....	14
3.4.1	Affected Environment.....	14
3.4.2	Environmental Consequences.....	15
3.5	Global Climate.....	15
3.5.1	Affected Environment.....	16
3.5.2	Environmental Consequences.....	16
Section 4	Consultation and Coordination.....	16
4.1	Public Review Period.....	16
4.2	Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.).....	16
4.3	Endangered Species Act (16 U.S.C. § 1531 et seq.).....	17
4.4	Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.).....	17
Section 5	List of Preparers and Reviewers.....	17
Section 6	References.....	18

List of Tables and Figures

Figure 1-1	Proposed Action Area.....	2
Table 3-1	Settlement Contract (No. 14-06-200-4448A) Water Supply.....	9
Table 3-2	Special Status Species That Could Occur Within the Affected Area.....	11
Table 3-3	San Joaquin Valley Attainment Status.....	15

List of Acronyms and Abbreviations

AF/y	Acre-Feet per Year
APE	Area of Potential Effect
CAA	Clean Air Act
CFR	Code of Federal Regulations
CO ₂	Carbon dioxide
CVP	Central Valley Project
CVPIA	Central Valley 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
mg/m ³	Milligram per cubic meter
M&I	Municipal and Irrigation
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
PM _{2.5}	Particulate matter less than 2.5 microns in diameter
PM ₁₀	Particulate matter between 2.5 and 10 microns in diameter
PPM	Parts per million
Reclamation	Bureau of Reclamation
SIP	State Implementation Plan
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
µg/m ³	Microgram per cubic meter
WWD	Westlands Water District

Section 1 Introduction

The Bureau of Reclamation (Reclamation) provided the public with an opportunity to comment on the Draft Finding of No Significant Impact and Draft Environmental Assessment (EA) between June 26 and July 11, 2012. Reclamation received no comment letters during this period. Changes from the Draft EA that are not minor editorial changes are indicated by a vertical line in the left margin of this document.

1.1 Background

When Reclamation initiated construction of the Central Valley Project (CVP) to manage and control water through the central portion of California, certain San Joaquin River water rights holders were offered "Settlement Contracts". These contracts supplied water from CVP facilities to replace water lost from other sources as a result of development of the CVP. Through these Settlement Contracts, the San Joaquin River water was exchanged for water that can be pumped from the Sacramento-San Joaquin Delta and delivered through CVP facilities.

Dudley & Indart is a settlement contractor and entitled to water rights water. The Vista Verde Farms (Vista Verde) lands are designated by the Dudley & Indart parties to receive a portion of the Settlement contract water supply (Contract water) for lands which are adjacent to the Westlands Water District (WWD) northeastern boundary and south of the city of Mendota (See Figure 1-1) and the Dudley & Indart service area. Vista Verde also owns land located entirely within WWD which is more productive and is suitable for cultivation of higher value crops. Since 2001 they have operated under agreements to transfer their Contract water from the lower productivity land in the north to their higher productivity land to the south.

These transfers were authorized under a series of environmental documents issued by Reclamation. The first of these was an Environmental Assessment/FONSI, issued in 2000 (FONSI #00-58) for annual transfers between 2000 and 2004. In 2005, Reclamation approved FONSI #05-36 for the annual transfer of Contract water owned by Vista Verde for the 2005 year only. In 2007, Reclamation approved FONSI #07-73 for temporary annual transfers between 2007 and 2011. Vista Verde did not transfer water under this program in 2000 or 2006.

This EA analyzes potential environmental effects from initiating a new series of temporary annual transfers that would occur during each of the next nine years, similar to the transfers that occurred during 2001-2005 and 2007 through 2012.

1.2 Purpose and Need

Chronic water shortages have occurred and are expected to continue to occur in WWD, creating a need to transfer water to balance supply with demand. The purpose of the proposed transfer is to provide a supplemental source of water for Vista Verde property within WWD to maintain higher value crops. Without the transfer, Vista Verde would need to acquire supplemental water on the spot market at increased cost.

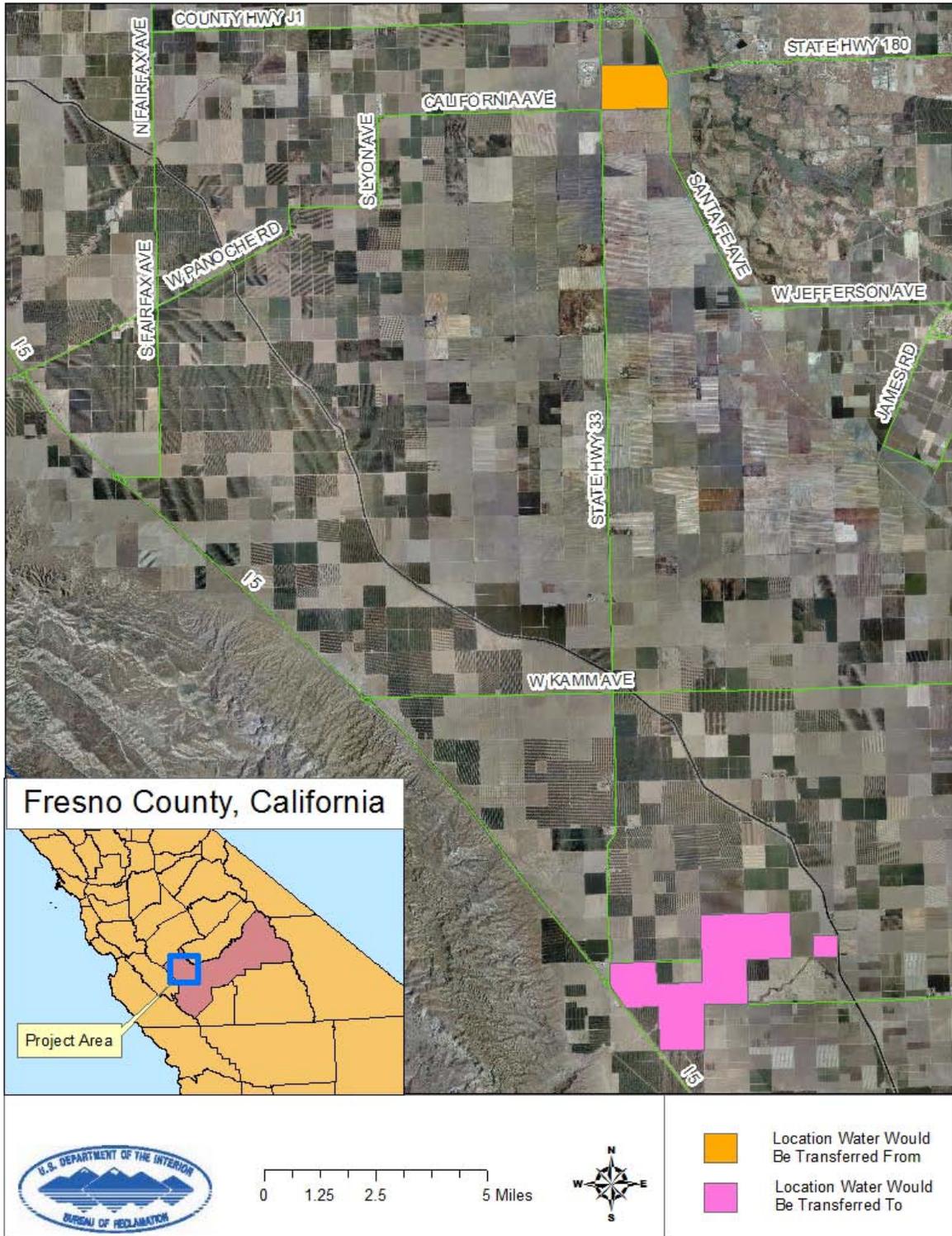


Figure 1-1 Proposed Action Area

1.3 Reclamation's Legal and Statutory Authorities and Jurisdiction Relevant to the Proposed Federal Action

Several Federal laws, permits, licenses and policy requirements have directed, limited or guided the National Environmental Policy Act (NEPA) analysis and decision-making process of this EA and include the following as amended, updated, and/or superseded (all of which are incorporated by reference):

- Contracts for Additional Storage and Delivery of Water – Central Valley Project Improvement Act (CVPIA) of 1992, Title 34 (of Public Law 102-575), Section 3408, Additional Authorities (c) authorizes the Secretary of the Interior to enter into contracts pursuant to Reclamation law and this title with any Federal agency, California water user or water agency, State agency, or private nonprofit organization for the exchange, impoundment, storage, carriage, and delivery of CVP and Non-project water for domestic, municipal, industrial, fish and wildlife, and any other beneficial purpose, except that nothing in this subsection shall be deemed to supersede the provisions of section 103 of Public Law 99-546 (100 Stat. 3051). The CVPIA is incorporated by reference.
- Reclamation's Interim Guidelines for Implementation of Water Transfers under Title XXXIV of Public Law 102-575 (Water Transfer), February 25, 1993.
- Reclamation and United States Fish and Wildlife Service (USFWS) Regional, Final Administrative Proposal on Water Transfers, April 16, 1998.
- Reclamation's Mid-Pacific Regional Director's Letter entitled "Delegation of Regional Functional Responsibilities to the Central Valley Project (CVP) Area Offices – Water Transfers", March 17, 2008.

1.4 Scope

This EA is being prepared to examine the potential impacts of approving annual water transfers of up to 1,140 AF/y of Dudley & Indart's Contract water to Vista Verde lands in WWD in Fresno County. Under this action, Reclamation proposes to approve a series of annual transfers, up to nine (9) years, beginning in 2012. The EA will evaluate the proposed alternative as well as the consequences of taking no action.

1.5 Resources Eliminated from Further Analysis

Reclamation analyzed the affected environment of the Proposed Action and No Action Alternative and has determined that there is no potential for direct, indirect, or cumulative effects to the following resources:

Floodplains, Wetlands and Waterways

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 does not involve construction, dredging or other modification of regulated water features. No permits under the Clean Water Act [CWA] (33 U.S.C. 1251) would be needed.

Land Use

The properties affected by this action are in agricultural use. The proposed action only concerns the source of water to be used on those properties, not how the land will be used. Current trends will persist regardless of the alternative selected.

Indian Sacred Sites

Reclamation is required by EO 13007, to the extent practicable permitted by law, and not clearly inconsistent with essential agency functions, to: (1) accommodate access to, and ceremonial use of, Indian sacred sites by Indian religious practitioners; and (2) avoid adversely affecting the physical integrity of such sacred sites. When appropriate, Reclamation shall, to the greatest extent possible, maintain the confidentiality of sacred sites.

The Proposed Action would not inhibit access to or ceremonial use of an Indian Sacred Site, nor would the Proposed Action adversely affect the physical integrity of such sacred sites.

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.

Reclamation's ITA Branch issued a determination on May 18, 2012 that there are no ITA within the proposed action area and therefore the proposed action does not have a potential to affect ITA.

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.

Reclamation's Cultural Resources Branch issued a determination on May 18, 2012 that the Proposed Action has no potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1).

Environmental Justice

Conditions for minority and low-income residents of the area would continue as they currently exist. Areas currently in agricultural use would continue to be farmed under either alternative under consideration, and the same employment opportunities would be available.

As there would be no impact to the resources listed above as a result of the Proposed Action or the No Action alternative, they will not be considered further.

1.6 Resources Requiring Further Analysis

This EA will analyze the affected environment of the Proposed Action and No Action Alternative in order to determine the potential direct, indirect, and cumulative effects to the following resources:

- Water Resources
- Biological Resources
- Socioeconomic Resources
- Air Quality
- Global Climate

THIS PAGE LEFT INTENTIONALLY BLANK

Section 2 Alternatives Considered

This EA considers two possible actions: the No Action Alternative and the Proposed Action. The No Action Alternative reflects future conditions without the Proposed Action and serves as a basis of comparison for determining potential effects to the human environment.

2.1 No Action Alternative

Under the No Action Alternative, the transfers would not take place. The Contract water would be utilized on the Vista Verde property adjacent to WWD for lower-value crops such as alfalfa. Vista Verde has indicated that in the absence of CVP water, the higher-value crops would be irrigated using water purchased at greater cost on the spot market.

2.2 Proposed Action

Reclamation proposes to approve a series of annual water transfers during each of the next nine years (July 1, 2012 – December 31, 2020) for an annual volume up to 1,140 AF of Contract water from the Dudley & Indart Settlement Contract (Contract), under Contract Number 14-06-200-4448A to lands owned by Vista Verde within WWD.

The Contract water would be made available for transfer through land fallowing. Reclamation would be informed of the fallowed crops and determine the amount of water made available by fallowing and ultimately approve the transfer each year based on this method. The lands served by the Contract water are near Mendota, adjacent to WWD and adjacent to the Mendota Pool. The lands to receive the transfer water are all within WWD. All lands are within the CVP service area. The property from which the water would be transferred and the property that would receive the transferred water are both within Fresno County.

The water involved in this proposed transfer originates from the Contract and is already being delivered south of the Sacramento-San Joaquin River Delta (Delta) to the San Luis Reservoir for delivery to the Contract lands via the Delta Mendota Canal (DMC). Under the Proposed Action, a portion of the Contract water would be delivered to the Vista Verde lands in WWD via the San Luis Canal (SLC) as historically done in 2001 – 2005, and 2007 – 2011. The Proposed Action would require only changing the means of conveyance of a portion of the Contract water from the DMC to the SLC. No additional water would be exported from the Delta and the water would continue to be delivered on an agricultural delivery schedule, so there would be no impact on Delta pumping. All water delivered in this transfer would utilize existing facilities and be used to irrigate existing agricultural lands. No construction is required.

THIS PAGE LEFT INTENTIONALLY BLANK

Section 3 Affected Environment and Environmental Consequences

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

3.1 Water Resources

3.1.1 Affected Environment

The amount of water available each year for CVP contractors is based on the storage of winter precipitation and control of spring runoff. The allocation of water to CVP contractors is determined by State water rights permits, judicial decisions, and State/Federal obligations to maintain water quality, enhance environmental conditions, and prevent flooding. Shortages of water supplies occur annually. To allow land within the WWD to stay in agricultural production with the reduced CVP contract supplies, groundwater pumping has been employed to help meet the irrigation requirements along with annual supplemental water transfers when available.

Vista Verde owns one-half of the Contract (Number 14-06-200-4448A), which is for a total amount of 2,280 AF. The monthly amounts of Contract water that are available are shown in Table 3-1.

Table 3-1 Settlement Contract (No. 14-06-200-4448A) Water Supply

Month	Dudley & Indart Settlement Contract (AF)	Vista Verde Farms Water Supply (AF)
January	0.0	0.0
February	195.0	97.5
March	313.0	156.5
April	277.0	138.5
May	339.0	169.5
June	423.0	211.5
July	489.0	244.5
August	218.0	109.0
September	26.0	13.0
October	0.0	0.0
November	0.0	0.0
December	0.0	0.0
Total	2,280	1,140

The total amount of settlement water is split equally between the two partners that receive water under the Contract, with each being entitled to 1,140 AF/y. The amount of water used by each partner in any given month can be more or less than 50 percent of that month's allocation, as long as the total amount used is equal between the two partners. The partners have agreed to cooperatively work together to utilize the available water supply and allow Vista Verde to transfer up to 1,140 AF/y to its lands in WWD.

3.1.2 Environmental Consequences

No Action

The No Action Alternative would result in the CVP water being used on less productive land for lower value crops. This would cause local deficiencies for the more productive land in WWD, which would have to be made up through purchasing water on the spot market.

Proposed Action

The Proposed Action would not affect CVP operations and would not change existing diversion points. Up to 1,140 AF/y of the transferred water would simply be conveyed via the SLC rather than the DMC. There would be no construction or modification of CVP facilities. The approval of the Proposed Action would not interfere with CVP obligations to deliver water to other contractors or fish and wildlife areas. The amount of land fallowed each year to make water available for these transfers would be determined based on the evapotranspiration of applied water from the crops grown on the Mendota area property.

The surface water available from the Contract has historically made up approximately 40 percent of the average annual water use of the Contract land. Vista Verde Farms has historically relied on alternative water sources, principally groundwater, to supply the remaining 60 percent of the annual water use. After the transfers, groundwater pumping for the Settlement Contract land would continue along historical trends. No additional groundwater would be pumped to make the transfer water available; thus, no groundwater substitution would occur.

Cumulative Impacts

Each year, weather patterns and hydrological conditions create variations in the water supply for the region. As more or less water is available for use, transfers occur between different operators or areas to balance supply and demand. This results in a number of water service actions and approvals by Reclamation each year. This trend has been established over many years and is expected to continue into the foreseeable future. Each water service action involving Reclamation undergoes environmental review prior to approval.

The transfer of water between the two properties owned by Vista Verde would be the same as the baseline condition, as this would preserve an existing arrangement and allow current practices to continue. As there would be no impact to water diverted from the Delta, points of diversions, or CVP operations and this water would continue to be conveyed as it has been previously under the annual transfers, there would be no cumulative impacts as a result of the Proposed Action.

3.2 Biological Resources

3.2.1 Affected Environment

The action area consists of the Vista Verde land within WWD and the Mendota area property, located approximately one mile west of the northwestern boundary of the Mendota Wildlife Area. Other surrounding areas, foothills and adjacent mountain areas are not included in this analysis. Since the Mendota area property is adjacent to WWD and is in agricultural production similar to the WWD land, the following analysis focuses on general biological resources in

WWD, which can be applicable to both the land under contract and the Vista Verde land in WWD which lies adjacent to the San Luis Canal.

Biological resources in WWD are similar to those biological resources found in the agricultural areas of Fresno, Kings, Madera, and Merced Counties. These habitats are dominated by agricultural uses including field crops, orchards, and pastures.

The following was obtained on June 6, 2012, by accessing the U.S. Fish and Wildlife Database http://www.fws.gov/sacramento/ES_Species/Lists/es_species_lists-form.cfm. The list is for the following 7 ½ minute U.S. Geological Survey quadrangles, which are overlapped by Vista Verde Settlement lands near Mendota and the Vista Verde lands within WWD: Tres Pecos Farms, Lillis Ranch, Tranquility, and Coit Ranch. Reclamation further queried the California Natural Diversity Database for records of protected species within the project location (CNDDDB 2012). The two lists, in addition to other information within Reclamation's files were combined to create the following list (Table 3-3).

Table 3-2 Special Status Species That Could Occur Within the Affected Area

Species	Status ¹	Effects ²	Occurrence Potential in Area of Effect ³
Amphibians			
California red-legged frog (<i>Rana draytonii</i>)	T	NE	Absent. No individuals or habitat in area of effect.
California tiger salamander, central population (<i>Ambystoma californiense</i>)	T	NE	Absent. No individuals or habitat in area of effect.
Fish			
Central Valley steelhead (<i>Oncorhynchus mykiss</i>)	T NMFS	NE	Absent. No natural waterways within the species' range would be affected by the proposed action.
delta smelt (<i>Hypomesus transpacificus</i>)	T	NE	Absent. No natural waterways within the species' range would be affected by the proposed action.
Invertebrates			
valley elderberry longhorn beetle (<i>Desmocerus californicus dimorphus</i>)	T	NE	Absent. No records or elderberry shrub habitat in area of effect.
vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	T	NE	Absent. No individuals or vernal pools in area of effect.
Mammals			
Fresno kangaroo rat (<i>Dipodomys nitratoides exilis</i>)	E, X		Absent. No individuals or habitat in area of effect. Critical habitat outside of project site.
giant kangaroo rat (<i>Dipodomys ingens</i>)	E	NE	Absent. No individuals or habitat in area of effect.
San Joaquin kit fox (<i>Vulpes macrotis mutica</i>)	E	NE	Present. There are nearby CNDDDB records and suitable foraging habitat present. No construction of new facilities; no conversion of lands from existing uses.
Plants			

palmate-bracted bird's-beak (<i>Cordylanthus palmatus</i>)	E	NE	Absent. No individuals or habitat in area of effect.
San Joaquin woolly-threads (<i>Monolopia congdonii</i>)	E	NE	Absent. No individuals or habitat in area of effect.
Reptiles			
blunt-nosed leopard lizard (<i>Gambelia sila</i>)	E	NE	Unlikely. There's a nearby CNDDDB record from 1993 approximately 2 miles to the west of Verde Vista lands located across from Interstate-5. Suitable habitat absent from the project site. No construction of new facilities; no conversion of lands from existing uses.
giant garter snake (<i>Thamnophis gigas</i>)	T	NE	Unlikely. There are nearby CNDDDB reports at Mendota Pool Lands but suitable habitat absent from project site. No construction of new facilities; no conversion of lands from existing uses.
<p>1 Status= Listing of Federally-protected species 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 NE: No Effect</p> <p>3 Definition Of Occurrence Indicators Present: Species recorded in area and suitable habitat present Unlikely: Species recorded in area but habitat suboptimal or lacking entirely Absent: Species not recorded in study area and/or habitat requirements not met</p> <p>4 CNDDDB = California Natural Diversity Database 2012</p>			

Types of vegetation that exist within the project site may support migratory bird species protected under the Migratory Bird Treaty Act (MBTA), such as tricolored blackbird (*Agelaius tricolor*), red tail hawk (*Buteo jamaicensis*), Swainson's hawk (*Buteo swainsoni*), and burrowing owl (*Athea cucularia*) (CNDDDB 2012). Federally listed or special status species that could occur within the action area include San Joaquin kit fox and blunt-nosed leopard lizard (Table 3-3).

3.2.2 Environmental Consequences

No Action

Under the No-Action Alternative, the Contract water would continue to be delivered to the Mendota area lands. There would be no new impacts to wildlife and special status species, as no new facilities would be constructed and deliveries would operate as was intended by the Contract. The conditions of special-status wildlife species and habitats under the No Action Alternative would remain the same as they would be under existing conditions described in the Affected Environment; therefore, no additional effects to special status species or critical habitats are associated with this alternative.

Proposed Action

The proposed action would not interfere with Reclamation's acquisition of water for refuges, as required by the CVPIA.

Under the Proposed Action, no negative impacts to plants or wildlife are anticipated as no native, untilled lands would be irrigated or receive the transferred water. The water would be delivered to established croplands through existing canals. Lands that may be fallowed as a result of these transfers would be disked and/or rotated annually so that no lands revert back to uncultivated status.

The proposed transfers would not have any effect on the Mendota Wildlife Area. The Settlement Contract land that may be fallowed to make water available for transfer has historically been farmed with crops such as cotton and alfalfa. Therefore, there would be very little, if any, change in the amount of forage crops in the area that wildlife might use.

No species listed or proposed to be listed as endangered or threatened would be affected by the Proposed Action. No critical habitat for any listed species is located within the proposed action area and therefore no critical habitat would be affected. The water delivered to the lands in WWD would be used to irrigate existing agricultural lands already in cultivation. No new facilities would be required to bring the water to these locations, and no native or untilled lands would be brought into production by the Proposed Action. Orchards provide some habitat for the San Joaquin kit fox, but the habitat value is relatively small, and would not be affected by the Proposed Action. Although within WWD boundaries, there are a number of records shown by the California Natural Diversity Database for species listed under the Endangered Species Act, none of these records are within the boundaries of the lands to which this water would be applied.

Cumulative Impacts

As the Proposed Action is not expected to result in any direct or indirect impacts to biological resources, there would be no cumulative impacts.

3.3 Socioeconomic Resources

3.3.1 Affected Environment

The proposed transfer would take place in a rural area of western Fresno County. The area from which water would be transferred is near Mendota, and the area to which water will be transferred is near the interchange of California 33 and Interstate 5. According to the U.S. Census Bureau, the population of the County was approximately 930,450 in 2010, and the median annual income was \$46,430.

3.3.2 Environmental Consequences

No Action

Without the proposed action, the affected water allotment would still be used, but for lower-value crops in a different area of the County. The project sponsor would have to purchase water on the spot market to make up the deficiency on their higher-productivity land. Buying water on the spot market is significantly more expensive, and would be expected to hurt the profitability of the overall operation.

Proposed Action

The proposed action is a continuation of an existing arrangement. Therefore current socioeconomic conditions would be expected to continue under the proposed action.

Cumulative Impacts

Farm employment can be affected by a variety of influences such as weather, technology, crop prices and independent land development trends. Neither the proposed action nor the no-action alternative would alter broader, existing socioeconomic patterns.

3.4 Air Quality

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

On November 30, 1993, the 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.

3.4.1 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), 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). Although Federal attainment status has been reached for PM₁₀ the State has not and both are in non-attainment for O₃ and PM_{2.5} (Table 3-2). There are no established standards for nitrogen oxides (NO_x); however, NO_x does contribute to exceedences of NO₂ standards (SJVAPCD 2011).

Table 3-3 San Joaquin Valley Attainment Status

Pollutant	California Attainment Status	National Attainment Status
O ₃	Nonattainment	Nonattainment
CO	Attainment	Attainment
NO ₂	Attainment	Attainment
SO ₂	Attainment	Attainment
PM ₁₀	Nonattainment	Attainment
PM _{2.5}	Nonattainment	Nonattainment
SJVAPCD 2012		

3.4.2 Environmental Consequences

No Action

If the proposed action is not pursued, the CVP water would be used for lower-value crops on less productive land. The water deficit for higher-value crops would be made up with purchases on the spot market at a higher rate. This would result in farming two locations rather than allowing one to remain fallow. This would require the use of more farm machinery and more pumping to route irrigation water. The net result would be slightly increased emissions over current conditions.

Proposed Action

Under the proposed action, current operations would continue. Overall emissions would be unaffected.

Cumulative Impacts

The nonattainment status of the San Joaquin Valley Air Basin is due to a variety of emission sources, such as operation of on-road and off-road internal combustion engines, and uncontrolled fugitive dust. Regulatory agencies throughout the state and region have implemented control measures to reduce the impacts of agriculture on the air basin's attainment status. This action would not contribute to a worsening of air quality on its own, and would not interfere with other ongoing efforts to meet air quality standards.

3.5 Global Climate

In 2006, the State of California issued the California Global Warming Solutions Act of 2006, widely known as Assembly Bill 32, which requires the California Air Resources Board (CARB) to develop and enforce regulations for the reporting and verification of statewide Greenhouse Gas (GHG) emissions. CARB is further directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020.

In addition, the EPA has issued regulatory actions under the CAA as well as other statutory authorities to address climate change issues (EPA 2012). In 2009, the EPA issued a rule (40 CFR Part 98) for mandatory reporting of GHG by large source emitters and suppliers that emit 25,000 metric tons or more of GHG, as CO₂ equivalents (CO_{2e}), per year. The rule is intended to collect accurate and timely emissions data to guide future policy decisions on climate change. It has undergone and is still undergoing revisions.

3.5.1 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 CVP operations.

3.5.2 Environmental Consequences

No Action

If the proposed action is not undertaken, the water currently allotted for high-value crops would be diverted to crops that do not require a transfer agreement and the project sponsor would continue to irrigate the high-value crops by purchasing water from another source on the open market. Farming both locations rather than allowing one to remain fallow would require the use of more farm machinery and more pumping to route irrigation water. The net result would be slightly increased emissions over current conditions.

Proposed Action

Under the proposed action, there would be no impacts to the trends of global climate change as conditions would remain the same as existing conditions under this alternative.

Cumulative Impacts

Impacts from GHG are considered to be cumulative impacts; however, delivery of water with or without the Proposed Action is part of the existing baseline conditions of the Central Valley and is not expected to produce additional GHG that could contribute to global climate change.

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 June 26, 2012 and July 11, 2012. No comments were received during the comment period.

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

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. The implementation of the CVPIA, of which this action is a part, has been jointly analyzed by Reclamation and the FWS and is being jointly implemented. The Proposed Action does not involve construction projects. Therefore the FWCA does not apply.

4.3 Endangered Species Act (16 U.S.C. § 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.

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 agricultural lands, through existing facilities, as has been done in the past, and would not be used for land conversion. No species listed or proposed to be listed as endangered or threatened would be affected. No critical habitat for any listed species is located within the proposed action area and therefore no critical habitat would be affected. Based on the above factors, Reclamation has made a determination of no-effect for the proposed action under the Endangered Species Act for all species expected to be within the action area.

4.4 Migratory Bird Treaty Act (16 U.S.C. § 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.

The Proposed Action would have no take of birds protected by the Migratory Bird Treaty Act.

Section 5 List of Preparers and Reviewers

Bureau of Reclamation

Ben Lawrence, Natural Resources Specialist, SCCAO-412

Jennifer Lewis, Wildlife Biologist, SCCAO-422

Adam Nickels, Archaeologist, MP-153

Patricia Rivera, Indian Trust Assets, MP-400

Erma Leal, Repayment Specialist, SCCAO-445

Chuck Siek, Natural Resources Specialist, SCCAO-411 - reviewer

Randy English, Resources Management Division Chief, SCCAO-400 – reviewer

Provost & Pritchard Consulting Group
Rick Besecker, Water Resources Specialist

Section 6 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

California Natural Diversity Database (CNDDDB). 2012. California Department of Fish and Game's Natural Diversity Database, Version 3.1.1. RareFind 3. Updated, May 2012.

California Air Resources Board. 2011. California Air Basins. Website:
<http://www.arb.ca.gov/knowzone/basin/basin.htm>

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

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

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

Intergovernmental Panel on Climate Change. 2007. Climate Change 2007: Synthesis Report. Website: http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2012. Ambient Air Quality Standards and Valley Attainment Status. Website:
<http://www.valleyair.org/aqinfo/attainment.htm>. Accessed: June 2012.