

RECLAMATION

Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT

Increase in Quantity for the Friant Division and Cross Valley Accelerated Water Transfer Program, 2011-2015

FONSI-11-063

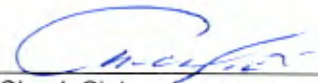
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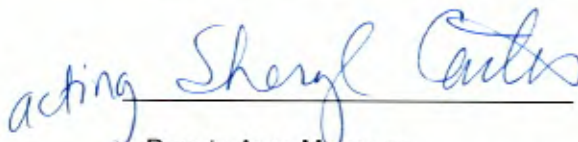
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U.S. Department of the Interior
Bureau of Reclamation
South-Central California Area Office

December 2011

Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act of 1969, as amended, the South-Central California Area Office of the Bureau of Reclamation (Reclamation), has determined that the approval to increase the total quantity for the Friant Division and Cross Valley (CV) Central Valley Project (CVP) contractors' Accelerated Water Transfer Program (AWTP) is not a major Federal action that will significantly affect the quality of the human environment and an Environmental Impact Statement is not required. This Finding of No Significant Impact (FONSI) is supported by Reclamation's Supplemental Environmental Assessment (SEA) number SEA-11-063, *Increase in Quantity for the Friant Division and Cross Valley Accelerated Water Transfer Program, 2011-2015*, and is hereby incorporated by reference.

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft SEA during a 15-day public review period from November 28, 2011 through December 12, 2011. No comments were received.

Background / Proposed Action

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 AWTP. The most recent AWTP for Friant Division and CV CVP contractors was analyzed under Environmental Assessment (EA) number EA-10-052, which analyzed a five-year AWTP from 2011 through 2015, and a FONSI was signed in February 2011. Both EA and FONSI are hereby incorporated by reference.

Due to what is referred to as a wet year, the Friant Division and CV contractors have fully utilized the AWTP in order to shift CVP water supplies from areas of low demand (at the time of request) to areas of greater demand. As a result, the annual quantity of 255,000 acre-feet (AF) for Contract Year 2011 (March 1, 2011 through February 29, 2012) is rapidly being used up and an increase is needed in order to accommodate anticipated future transfers and/or exchanges for the rest of the year, as well as subsequent years as part of the current AWTP if hydrologic conditions continue in trend. The scope of the SEA is the same as that covered in EA-10-052, except for the increase in total quantity that the participants can transfer and/or exchange per Contract Year. The annual quantity will increase by another 45,000 AF, which will allow for up to 300,000 AF of CVP water to be transferred and/or exchanged under the AWTP for Contract Years 2011 through 2015 (ending February 29, 2016).

Findings

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

Water Resources

The Proposed Action will not increase or decrease the amount of CVP water each district receives under contract with Reclamation. Transfers between districts will help supplement any

surface water shortage that a particular water district, or districts, could be experiencing at that current time. Exchanges under the AWTP will be “bucket-for-bucket”. There will be no significant impacts to participating districts and their respective Friant Division or CV CVP water supplies.

Due to variations in weather and hydrological conditions, agricultural water needs are time sensitive, and usually arise on short-notice, and don’t necessarily coincide with available wet year surface water. The Proposed Action will allow Friant Division and CV CVP contractors to continue efficiently shifting CVP water supplies from areas of low demand (at the time of approval) to areas of greater demand. The Proposed Action will help alleviate the need of some landowners to pump groundwater since surface water supplies will be more available to districts in need of immediate supplies. As a result, there will be beneficial impacts to groundwater resources.

The AWTP requires that the CVP contractor provide Reclamation with advance notice of any proposed transfer and/or exchange so that Reclamation can determine if the action is consistent with the Proposed Action description and coordinate with the Friant Water Authority to make sure that excess capacity exists within Friant Division facilities. In addition, coordination will ensure that Reclamation’s obligations to deliver water to other CVP contractors, wildlife refuges, and other requirements will not be significantly impacted by the Proposed Action. There will be no significant impacts to Friant Division facilities.

Land Use

The Proposed Action will utilize existing facilities to convey waters allowed under the AWTP and will not require construction of new facilities or modifications to existing facilities that would result in ground disturbance. Exchanges will be “bucket for bucket” so participating districts will not experience a net gain or loss in water supply that can impact agricultural production. Transfers will help supplement any shortage of surface water supplies that will be used to irrigate and maintain existing agricultural production. Waters involved with the Proposed Action will be used on existing farmland and will not be used to put new land into production. There will be no significant impacts to land use.

Biological Resources

The Proposed Action will be identical to conditions for biological resources under the No Action Alternative. The Proposed Action will 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. The transfers and exchanges are water management actions to support existing uses and conditions. No native or untitled lands (fallow for three or more consecutive years) will be cultivated without prior surveys for threatened and endangered species as a result of the Proposed Action. Therefore, the Proposed Action will have no significant impacts on federally listed species, critical habitat, or candidate species.

Cultural Resources

The Proposed Action involves the transfer and/or exchange of water through existing facilities, which will not result in modifications, new construction, or changes in land use. Because the Proposed Action will result in no physical alterations of existing facilities and no ground

disturbance, Reclamation concludes that the Proposed Action has no potential to affect historic properties pursuant to the regulations at 36 CFR Part 800.3(a)(1), and no additional consideration under Section 106 of the National Historic Preservation Act is required.

Indian Trust Assets (ITA)

Approval of the AWTP will not involve any construction on lands or impact water, hunting, and fishing rights associated with the nearest ITA listed in the affected environment. Therefore, the Proposed Action does not have a potential to impact ITA.

Global Climate

Greenhouse gases (GHG) generated by the Proposed Action are expected to be extremely small compared to sources contributing to potential climate change since the exchange of water will be conveyed mostly via gravity and little, if any, additional pumping from electric motors will be required. While any increase in GHG emissions will add to the global inventory of gases that will contribute to global climate change, the Proposed Action will result in potentially minimal to no increases in GHG emissions and a net increase in GHG emissions among the pool of GHG will not be detectable. There will be no significant impacts on the global climate.

It is possible that climate change could affect the Proposed Action rather than vice versa; however, it would be difficult to measure/define the impact(s), if any. Operations of the CVP are flexible to coincide with hydrologic conditions. Therefore, effects related to changes in the global climate will not result in significant impacts to the Proposed Action.

Cumulative Impacts

Impacts analyzed in Section 3 of the SEA and EA-10-052 are considered part of the cumulative impacts analysis since the AWTP itself is a program which streamlines the acknowledgement process for several transfer and/or exchange actions.

The Proposed Action, when taken into consideration similar past, existing, and reasonably foreseeable actions will have beneficial impacts to groundwater resources since landowners will not have to rely on groundwater pumping to irrigate their crops. There will be no significant cumulative impacts to Friant Division facilities since coordination with Reclamation and the Friant Water Authority is required to make sure that excess capacity exists within Friant Division facilities. In addition, coordination will ensure that Reclamation's obligations to deliver water to other CVP contractors, wildlife refuges, and other requirements will not be significantly impacted or indirectly impact third parties. The Proposed Action will not increase or decrease the amount of CVP water each district receives under contract with Reclamation. Transfers and/or exchanges will be between willing participants. The Proposed Action will not contribute to significant cumulative impacts to water resources.

The Proposed Action is found to not have any additional impacts on land use, biological resources, global climate, and ITA from what was already analyzed in EA-10-052; therefore, will not contribute to significant cumulative impacts to these resources when taken into consideration with other similar past, existing, and reasonably foreseeable actions.

RECLAMATION

Managing Water in the West

Supplemental Environmental Assessment

Increase in Quantity for the Friant Division and Cross Valley Accelerated Water Transfer Program, 2011-2015

(Supplement to EA-10-052)

SEA-11-063



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

December 2011

Mission Statements

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

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

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List of Acronyms, Definitions, and Abbreviations

AF	acre-feet
APE	area of potential effects
AWTP	Accelerated Water Transfer Program
cfs	cubic-feet per second
BO	Biological Opinion
Class 1	Class 1 water is considered as the first 800,000 AF supply of CVP water stored in Millerton Lake, which would be available for delivery from the Friant-Kern Canal and/or Madera Canals as a dependable water supply during each Contract Year.
Class 2	Class 2 water is considered as the next 1,400,000 AF supply of non-storable CVP water which becomes available in addition to the Class 1 supply, and because of its uncertainty as to the availability and time occurrence, would not be dependable in character and would be furnished only if and when available as determined by Reclamation per Contract Year.
Contract Year	March 1 through February 28/29 the following year
CV	Cross Valley
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
Delta	Sacramento-San Joaquin River Delta
DWR	Department of Water Resources
EA	environmental assessment
ESA	Endangered Species Act
FKC	Friant-Kern Canal
FONSI	Finding of No Significant Impact
FWCA	Fish and Wildlife Coordination Act
GHG	green house gases
ITA	Indian Trust Assets
M&I	municipal and industrial
National Register	Nation Register of Historic Places
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
Reclamation	Bureau of Reclamation
RRA	Reclamation Reform Act
SEA	Supplemental Environmental Assessment
USFWS	U.S. 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). The most recent AWTP for Friant Division and Cross Valley (CV) CVP contractors was analyzed under Environmental Assessment (EA) number EA-10-052, which analyzed a five-year AWTP from 2011 through 2015, and a Finding of No Significant Impact (FONSI) was signed in February 2011. Both EA and FONSI are hereby incorporated by reference (Reclamation 2011).

1.2 Purpose and Need

Due to what is referred to as a wet year, the Friant Division and CV contractors have fully utilized the AWTP in order to shift CVP water supplies from areas of low demand (at the time of request) to areas of greater demand. As a result, the annual quantity of 255,000 acre-feet (AF) is rapidly being used up and an increase is needed in order to accommodate anticipated future transfers and/or exchanges for the current year, as well as the subsequent years as part of the current AWTP (Proposed Action).

The purpose of the Proposed Action is to continue facilitating efficient and timely water management practices between Friant Division and CV CVP contractors through annual water transfers and/or exchanges in order to meet agricultural demands and/or municipal and industrial (M&I) or other water requirements.

1.3 Scope

In accordance with Section 102 of the National Environmental Policy Act (NEPA) of 1969 (42 U.S.C. 4321, et seq.), as amended, this Supplemental EA (SEA) has been prepared to examine the potential direct, indirect, and cumulative impacts to the affected environment associated with

the Proposed Action and No Action Alternative. The temporal scope of this SEA analysis covers the 2011 through 2015 Contract Years (March 1, 2011 through February 29, 2016). The list of eligible participants can be found in Tables 1 and 2 in Section 3. Figure 1 shows an overview map of the Friant Division and CV CVP contractors, and Friant Division facilities.

The scope of this SEA is the same as that covered in EA-10-052, except for the increase in total quantity that the participants can transfer and/or exchange per Contract Year. The annual total quantity would increase by another 45,000 AF, which would allow for up to 300,000 AF of CVP to be transferred and/or exchanged under the AWTP per Contract Year. The AWTP covers actions between Friant Division CVP contractors and transfers from Friant Division contractors to CV contractors.

1.4 Related Environmental Documents

The U.S. Fish and Wildlife Service (USFWS) and the National Marines Fisheries Service (NMFS) issued Biological Opinions (BOs), which provide Reclamation with guidelines for operation of the CVP and for renewal of CVP contracts.

- *Biological Opinion on U.S. Bureau of Reclamation Long Term Contract Renewal of Friant Division and Cross Valley Unit Contracts* – USFWS, January 19, 2001
- *Biological Opinion on the Coordinated Operations of the Central Valley Project and State Water Project* – USFWS, December 15, 2008
- *Biological Opinion and Conference Opinion on the Long-Term Operations of the Central Valley Project and State Water Project* – NMFS, June 4, 2009

To be exempt from the "take" prohibition of the Endangered Species Act (ESA), Reclamation must comply with terms and conditions which are pertinent to future water transfers and/or exchanges within the CVP. These Terms and Conditions implement reasonable and prudent measures and outline mandatory reporting and monitoring. Reasonable and prudent measures are actions that the USFWS and NMFS believe are necessary to minimize impacts, i.e., amount of or extent, of incidental take and adverse modification or destruction of designated critical habitat. The Terms and Conditions of the BOs are hereby incorporated by reference.

Reclamation has increased the total quantity allowed for the Friant Division and CV AWTP before, from 255,000 AF to 300,000 AF for Contract Year 2005.

- SEA and FONSI for the, *Accelerated Water Transfer Program – Friant/Cross Valley, 2005* – July 15, 2005.

1.5 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 NEPA analysis and decision-making process of this SEA and include the following 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 Water Service Contracts for Friant Division CVP contractors;
- Long-term 9(d) Repayment Contracts for Friant Division CVP contractors;
- Interim Water Service Contracts for CV contractors;
- Long-term Water Service Contracts – replacing the interim contracts for CV contractors if approved during the term of this EA;
- Reclamation and USFWS Region 1, Final Administrative Proposal on Water Transfers – April 16, 1998; and
- Reclamation's Regional Director's Letter Delegation of Regional Functional Responsibilities to the Area Offices - Water Transfers, Number 93-20 – December 14, 1993.

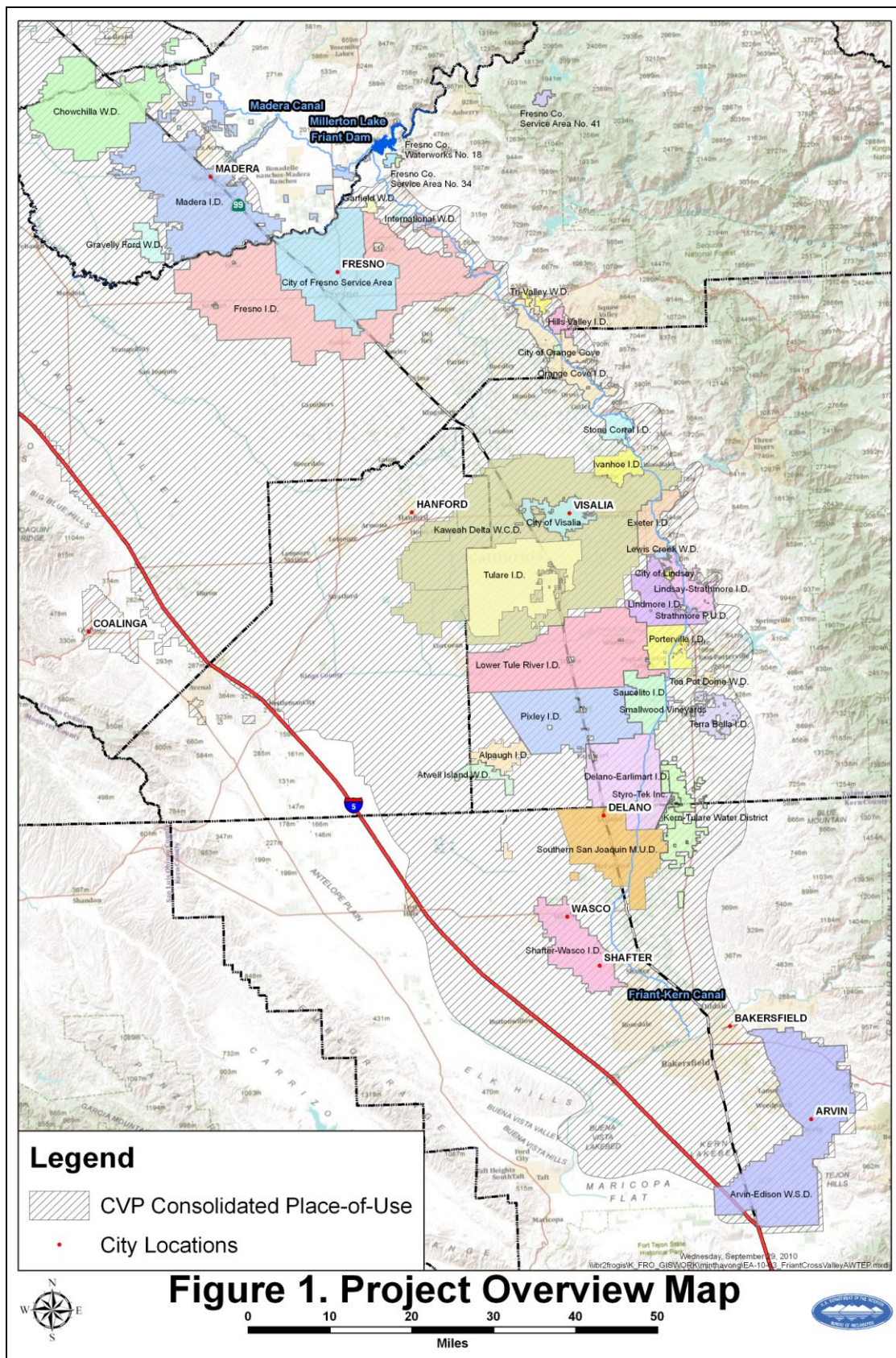
1.6 Potential Issues

Potentially affected resources and cumulative impacts in the project vicinity include: water resources, land use, biological resources, cultural resources, Indian Trust Assets (ITA), and global climate.

The following were eliminated from detailed environmental analysis after internal scoping revealed that there would be no new significant impacts as a result of the Proposed Action from what was already analyzed in EA-10-052: Indian sacred sites, socioeconomic resources, and environmental justice.

The following was eliminated from detailed environmental analysis due to the reasons below:

- Air Quality
 - Comprehensive evaluation of air quality issues were eliminated from detailed environmental analysis because there would be no construction or ground disturbing activities that could lead to the introduction of fugitive dust and exhaust emissions into the Proposed Action areas' air district. Water movement involved with the Proposed Action would be gravity fed through the conveyance facilities and not require the use of any gas and/or diesel pumps that could release emissions that would impact air quality.



Section 2 Alternatives Including the Proposed Action

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

2.1 No Action Alternative

The No Action Alternative would involve the AWTP as approved in EA-10-052. Reclamation would not increase annual total quantity for the AWTP from 255,000 AF to 300,000 AF. Friant Division and CV CVP contractors would be required to get Reclamation's written approval for each proposed transfer or exchange for the remainder of this Contract Year, and separate environmental review would be completed for each action. This would hold true for subsequent years remaining in the AWTP if the total quantity of 255,000 AF is exceeded.

2.2 Proposed Action

Reclamation proposes to increase the total quantity for the Friant Division and CV CVP contractors' AWTP by 45,000 AF per Contract Year, which would now allow the participants to transfer and/or exchange up to 300,000 AF. Eligible participants in the AWTP are listed in Tables 1 and 2. The Proposed Action would cover transfers and/or exchanges between Friant Division contractors and transfers from Friant Division contractors to CV contractors. In addition, federal wildlife refuges could also receive transfers of CVP water from eligible contractors participating in the AWTP. The Proposed Action would utilize existing Friant Division facilities including Millerton Lake, Friant Dam, Madera Canal, and the Friant-Kern Canal. The AWTP would be in effect for Contract Years 2011 through 2015 (March 1, 2011 through February 29, 2016).

The Proposed Action under this SEA does not replace that which is described and analyzed in EA-10-052, but merely supplements it to reflect the increase in total quantity from 255,000 AF to 300,000 AF per Contract Year. Commitments as part of the approved AWTP from EA-10-052 remain applicable and are listed below.

The Proposed Action would be subject to the following conditions:

- transfers and/or exchanges that are > 20% of a contractor's supply must be noticed to the public by the contractor prior to Reclamation's acknowledgement of such transfer and/or exchange;
- there would be no restriction on directionality within the AWTP (transfers do not require return transfers at a later date or year);
- transferred and/or exchanged water could be agricultural, M&I, or other water;

- transferred and/or exchanged water could be used for agricultural, M&I, or other purposes, or for groundwater recharge;
- transfers and/or exchanges would be completed within the same Contract Year;
- transfers would be between willing sellers and willing buyers;
- exchanges would be between willing exchangers;
- exchanges would only count once towards the up to 300,000 AF limit since exchanges would be “bucket-for-bucket” (or those of equivalent amounts where neither district experiences a net gain or loss);
- no new construction or modifications to existing facilities are necessary under this AWTP;
- transfers and/or exchanges must occur within the permitted CVP consolidated Place-of-Use;
- transfers and/or exchanges are limited to existing supply and would not increase overall consumptive use;
- transfers and/or exchanges for agricultural use would be used on lands irrigated within the last three consecutive years;
- transfers and/or exchanges would not lead to any land conversions;
- no native or untilled land (fallow for three consecutive years or more) would be cultivated with the water involved in these actions;
- transfers and/or exchanges would comply with all applicable Federal, State, local, and Tribal law and requirements;
- the transferee would comply with the RRA, as applicable;
- water for transfers may not be made available by shifting to alternative surface water sources that could potentially adversely affect CVP operations or other third party interests; and
- transfers and/or exchanges cannot alter the flow regime of natural water bodies such as rivers, streams, creeks, ponds, pools, wetlands, etc., so as to not have a detrimental effect on fish or wildlife, or their habitats.

The type of exchanges of CVP water between eligible contractors in this EA analysis is defined as “bucket-for-bucket” or those of equivalent amounts. Unbalanced exchanges are outside the scope of this SEA and would require separate Reclamation approval and environmental review.

The Proposed Action does not cover:

- transfers and/or exchanges that meet the above criteria but are increments of larger actions;
- unbalanced exchanges;
- transfers and/or exchanges involving CV contractors’ CVP water from the Sacramento-San Joaquin River Delta;
- transfers and/or exchanges that involve previously transferred and/or exchanged water;
- transfers and/or exchanges that involve a third party intermediary as an exchanger or transferor;
- transfers and/or exchanges of Section 215 Water; and
- transfers and/or exchanges to non-CVP contractors.

Section 3 Affected Environment and Environmental Consequences

3.1 Water Resources

3.1.1 Affected Environment

3.1.1.1 Participating Water Districts

Table 1. Friant Division Contractors and their CVP Contract Supply		
Contractor	Class 1 (AF/year)	Class 2 (AF/year)
Arvin-Edison Water Storage District	40,000	311,675
Chowchilla Water District	55,000	160,000
City of Fresno	60,000	0
² City of Lindsay	2,500	0
City of Orange Cove	1,400	0
County of Madera	200	0
Delano-Earlimart Irrigation District	108,800	74,500
Exeter Irrigation District	11,500	19,000
Fresno County Waterworks No. 18	150	0
Fresno Irrigation District	0	75,000
Garfield Water District	3,500	0
Gravelly Ford Water District	0	14,000
International Water District	1,200	0
Ivanhoe Irrigation District	6,500	500
¹ Kaweah Delta Water Conservation District	1,200	7,400
Lewis Creek Water District	1,450	0
Lindmore Irrigation District	33,000	22,000
Lindsay-Strathmore Irrigation District	27,500	0
² Lower Tule River Irrigation District	61,200	238,000
Madera Irrigation District	85,000	186,000
Orange Cove Irrigation District	39,200	0
Porterville Irrigation District	16,000	30,000
² Saucelito Irrigation District	21,200	32,800
Shafter-Wasco Irrigation District	50,000	39,600
Southern San Joaquin Municipal Utility District	97,000	50,000
² Stone Corral Irrigation District	10,000	0
Tea Pot Dome Water District	7,500	0
Terra Bella Irrigation District	29,000	0
Tulare Irrigation District	30,000	141,000
¹ Kaweah Delta Water Conservation District is comprised of four districts: Lakeside Irrigation Water District, Kings County Water District, Corcoran Irrigation District, and Tulare Irrigation District. ² Lower Tule River ID, Saucelito ID, Stone Corral ID and City of Lindsay receive CVP water under more than one contract, either as a Friant Division and/or Cross Valley Contractor/Sub-Contractor.		

In summary, there are 29 Friant Division CVP contractors located on the eastern side of the San Joaquin Valley in Merced, Madera, Fresno, Tulare, Kings, and Kern Counties. CVP water for these contractors comes from Millerton Lake via the FKC or the Madera Canal. Water conveyed to these contractors is categorized as either Class 1 or Class 2 water (refer to page iii for definition) depending on its reliability and allocation circumstances. A narrative description of the Friant Division CVP contractors can be found in Appendix D.

Table 2. Cross Valley Contractors and their CVP Contract Supply	
Contractor	CVP Contract Supply (AF/y)
¹ County of Fresno	3,000
² County of Tulare	5,308
Hills Valley Irrigation District	3,346
³ Kern Tulare Water District	53,300
⁴ Lower Tule River Irrigation District	31,102
Pixley Irrigation District	31,102
Tri-Valley Water District	1,142
¹ County of Fresno includes Fresno County Service Area #34 ² County of Tulare customers include Alpaugh Irrigation District, Atwell Water District, Hills Valley ID, Saucelito ID ⁴ , Fransinetto Farms, Stone Corral ID ⁴ , City of Lindsay ⁴ , Strathmore Public Utility District, Styrotek, Inc., and City of Visalia ³ Kern Tulare Water District and Rag Gulch Water District consolidated on January 1, 2009. ⁴ Lower 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.	

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 with a total CVP supply of 128,300 AF/y from the Delta; however, their CVP supplies from the Delta are not a part of the Proposed Action. One of the CV contractors, the County of Tulare, has 10 customers which are identified in Table 2. The County of Tulare is in the process of assigning a portion of the contract to each of these customers. A narrative description of the CV contractors can be found in Appendix C.

3.1.1.2 Groundwater Resources

San Joaquin River Hydrologic Region The San Joaquin River Hydrologic Region covers approximately 9.7 million acres (15,200 square miles) and includes all of Calaveras, Tuolumne, Mariposa, Madera, San Joaquin, and Stanislaus counties, most of Merced and Amador counties, and parts of Alpine, Fresno, Alameda, Contra Costa, Sacramento, El Dorado, and San Benito Counties. The region is heavily reliant on groundwater. Changes in groundwater levels are evaluated on annual water level measurements by the Department of Water Resources (DWR) and cooperators. Water level changes were evaluated at the quarter-township level using a DWR computer program. On average, the subbasin water level has increased by 2.2 feet total from 1970 through 2000. The period from 1970 through 1985 showed a general increase, topping out in 1985 at 7.5 feet above the 1970 water level. The nine-year period from 1985 to 1994 saw general declines in groundwater levels, reaching back down to the 1970 groundwater level in 1994. Groundwater levels rose in 1995 to about 2.2 feet above the 1970 groundwater level, then water levels fluctuated around this value until 2000. (DWR 2003)

Tulare Lake Hydrologic Region The Tulare Lake Hydrologic Region covers approximately 10.9 million acres (17,000 square miles) and includes all of Kings and Tulare Counties and most of Fresno and Kern Counties. The extensive use of groundwater has historically caused subsidence of the land surface primarily along the west side and south end of the San Joaquin Valley. Groundwater levels were generally at their lowest levels in the late 1960s, prior to importation of surface water. Water levels gradually increased to a maximum in about 1987-88 and falling briefly during the 1976-77 drought. Water levels began dropping again during the 1987-92 drought, with water levels showing the effects until 1994. Through a series of wet years after the drought, 1998 water levels nearly recovered to 1987-88 levels. (DWR 2003)

3.1.1.3 Friant Division Facilities

In addition to providing M&I water, the Friant Division of the CVP diverts water from the San Joaquin River to provide supplemental irrigation water to over 1 million acres of farmlands across six counties: Merced, Madera, Fresno, Tulare, Kings, and Kern. The main features of the Friant Division are Friant Dam, FKC, and Madera Canal, which were all constructed by Reclamation between the early 1940s and 1950s.

Friant Dam/Millerton Lake Friant Dam is located on the San Joaquin River, 25 miles northeast of Fresno, California. Completed in 1942, the dam is a concrete gravity structure, 319 feet high, with a crest length of 3,488 feet. Millerton Lake was created as a result of Friant Dam and first stored water on February 21, 1944. Millerton Lake has a total capacity of 520,528 AF, a surface area of 4,900 acres, and is approximately 15 miles long. The reservoir provides for recreation such as boating, fishing, picnicking, and swimming.

Madera Canal The Madera Canal carries water over 35.9 miles northerly from Friant Dam to furnish lands in Madera County and Merced County with supplemental and new irrigation supply. The Madera Canal was completed in 1945, has an initial capacity of 1,000 cubic-feet per second (cfs), decreasing to 625 cfs at the Chowchilla River. In 1965, the canal lining from the headworks to milepost 2.09 was raised so that 1,250 cfs could be delivered.

Friant-Kern Canal The FKC carries water over 151.8 miles in a southerly direction from Friant Dam to its terminus at the Kern River, four miles west of Bakersfield. The FKC has an initial capacity of 5,000 cfs that gradually decreases to 2,000 cfs at its terminus in the Kern River (Reclamation 2010). The water is used for municipal and industrial, and agricultural purposes in Fresno, Tulare, Kings, and Kern Counties. The FKC is a part of the CVP, which annually delivers about seven million AF of water for agricultural, urban, and wildlife use.

3.1.2 Environmental Consequences

3.1.2.1 No Action Alternative

The No Action Alternative would be the same as the Proposed Action analyzed under EA-10-052. Without the increase in quantity, individual landowners would continue to pump groundwater in order to make up for any potential shortages in surface water supplies, which could contribute to declining groundwater levels in both the San Joaquin River and Tulare Lake Hydrologic Regions.

3.1.2.2 Proposed Action

The Proposed Action would not increase or decrease the amount of CVP water each district receives under contract with Reclamation. Transfers between districts would help supplement any surface water shortage that a particular water district, or districts, could be experiencing at that current time. Exchanges under the AWTP would be “bucket-for-bucket”. There would be no adverse impacts to participating districts and their respective Friant Division CVP water supplies.

Due to variations in weather and hydrological conditions, agricultural water needs are time sensitive, and usually arise on short-notice, and don’t necessarily coincide with available wet year surface water. The Proposed Action would allow Friant Division and CV CVP contractors to continue efficiently shifting CVP water supplies from areas of low demand (at the time of approval) to areas of greater demand. The Proposed Action would help alleviate the need of some landowners to pump groundwater since surface water supplies would be more available to districts in need of immediate supplies. As a result, there would be beneficial impacts to groundwater resources.

The AWTP requires that the CVP contractor provide Reclamation with advance notice of any proposed transfer and/or exchange so that Reclamation can determine if the action is consistent with the Proposed Action description and coordinate with the Friant Water Authority to make sure that excess capacity exists within Friant Division facilities. In addition, coordination would ensure that Reclamation’s obligations to deliver water to other CVP contractors, wildlife refuges, and other requirements would not be adversely impacted by the Proposed Action. There would be no adverse impacts to Friant Division facilities.

3.2 Land Use

3.2.1 Affected Environment

A narrative of the land uses in the water districts involved with the exchanges are contained in the incorporated documents and is not repeated here. Generally, the land use is mainly comprised of irrigated agriculture. Cities along the Highway 99 corridor are expected to expand over the next years.

3.2.2 Environmental Consequences

3.2.2.1 No Action

Under the No Action Alternative, conditions would remain the same as existing conditions. Landowners would resort to pumping groundwater in order make up for any shortages in surface water supplies that would be used to irrigate and maintain crop production.

3.2.2.2 Proposed Action

The Proposed Action would utilize existing facilities to convey waters allowed under the AWTP and would not require construction of new facilities or modifications to existing facilities that would result in ground disturbance. Exchanges would be “bucket for bucket” so participating districts would not experience a net gain or loss in water supply. Transfers would help supplement any shortage of surface water supplies that would be used to irrigate and maintain existing agricultural production. Waters involved with the Proposed Action would be used on

existing farmland and would not be used to put new land into production. There would be no impacts to land use from the increase in transfers and/or exchanges allowed under the AWTp.

3.3 Biological Resources

3.3.1 Affected Environment

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

Reclamation requested an official species list from USFWS via the Sacramento Field Office's website: http://www.fws.gov/sacramento/y_old_site/es/spp_lists/auto_list_form.cfm on November 17, 2011. The list is for Madera, Fresno, Kings, Kern (San Joaquin Valley portion), and Tulare Counties (document number: 111117045524). Reclamation further queried the California Natural Diversity Database for additional data (CNDDDB 2011). This information, in addition to other information within Reclamation's files, was compiled into Table 3.

Table 3. Federally listed species, candidate species, and critical habitat				
<u>Common Name</u>	<u>Scientific Name</u>	<u>Status</u>	<u>ESA det.</u>	<u>Summary basis for ESA determination</u>
Bakersfield cactus	<i>Opuntia treleasei</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Buena Vista Lake shrew	<i>Sorex ornatus relictus</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Buena Vista Lake shrew critical habitat			NE	Critical habitat for this species does not occur in the Proposed Action area.
Blunt-nosed leopard lizard	<i>Gambelia sila</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
California condor	<i>Gymnogyps californianus</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
California condor critical habitat			NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
California jewelflower	<i>Caulanthus californicus</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.

Table 3. Federally listed species, candidate species, and critical habitat				
California red-legged frog	<i>Rana draytonii</i>	T	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.; species likely extirpated from valley floor and southern Sierra Nevada foothills.
California red-legged frog critical habitat			NE	Critical habitat for this species does not occur in the Proposed Action area.
California tiger salamander, central DPS	<i>Ambystoma californiense</i>	T	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
California tiger salamander, central DPS critical habitat			NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Central Valley steelhead (NMFS)	<i>Oncorhynchus mykiss</i>	T	NE	No change in Delta pumping or San Joaquin River flows would occur as a result of the Proposed Action.
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Fisher	<i>Martes pennanti</i>	C	NE	This species does not occur at the lower elevations within the Proposed Action area.
Fresno kangaroo rat	<i>Dipodomys nitratoide exilis</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Fresno kangaroo rat critical habitat			NE	Critical habitat for this species does not occur in the Proposed Action area.
Giant garter snake	<i>Thamnophis gigas</i>	T	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action; species believed to have been extirpated from Tulare Basin except Burrell/Lanare.
Greene's tuctoria	<i>Tuctoria greenei</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Greene's tuctoria critical habitat			NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Hairy Orcutt grass	<i>Orcuttia pilosa</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Hairy Orcutt grass critical habitat			NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Hartweg's golden sunburst	<i>Pseudobahia bahiifolia</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Hoover's spurge	<i>Chamaesyce hooveri</i>	T	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.

Table 3. Federally listed species, candidate species, and critical habitat				
Hoover's spurge critical habitat			NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Keck's checker-mallow	<i>Sidalcea keckii</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Keck's checker-mallow critical habitat			NE	Critical habitat for this species does not occur in the Proposed Action area.
Kern mallow	<i>Eremalche kernensis</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Kern primrose sphinx moth	<i>Euproserpinus euterpe</i>	T	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action; species unlikely to occur in Proposed Action area as it is only known from the Walker Basin and Carrizo Plain.
Lahontan cutthroat trout	<i>Oncorhynchus clarki henshawi</i>	T	NE	Species occurs at a higher elevation than the Proposed Action area.
Least Bell's vireo	<i>Vireo bellii pusillus</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Little Kern golden trout	<i>Oncorhynchus aquabonita whitei</i>	T	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Little Kern golden trout critical habitat			NE	Critical habitat for this species does not occur in the Proposed Action area.
Longhorn fairy shrimp	<i>Branchinecta longiantenna</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Longhorn fairy shrimp critical habitat			NE	Critical habitat for this species does not occur in the Proposed Action area.
Mariposa pussy-paws	<i>Calyptridium pulchellum</i>	T	NE	Critical habitat for this species does not occur in the Proposed Action area; species likely occurs only at too high an elevation to be within the Proposed Action area.
Mountain yellow-legged frog	<i>Rana muscosa</i>	C	NE	Species occurs at a higher elevation than the Proposed Action area.
Paiute cutthroat trout	<i>Oncorhynchus clarki seleniris</i>	T	NE	Species occurs at a higher elevation than the Proposed Action area.
Palmate-bracted bird's-beak	<i>Cordylanthus palmatus</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Ramshaw Meadows sand-verbena	<i>Abronia alpine</i>	C	NE	Species occurs at a higher elevation than the Proposed Action area.

Table 3. Federally listed species, candidate species, and critical habitat				
San Benito evening-primrose	<i>Camissonia benitensis</i>	T	NE	Not within Proposed Action area; limited to serpentine-derived alluvial terraces and deposits near San Benito Mountain, southern San Benito Co. and western Fresno Co.
San Joaquin adobe sunburst	<i>Pseudobahia peirsonii</i>	T	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
San Joaquin kit fox	<i>Vulpes macrotis mutica</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
San Joaquin Valley Orcutt grass	<i>Orcuttia inaequalis</i>	T	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
San Joaquin Valley Orcutt grass critical habitat			NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
San Joaquin woolly-threads	<i>Monolopia congdonii</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Sierra Nevada bighorn sheep	<i>Ovis canadensis californiana</i>	E	NE	Species occurs at a higher elevation than the Proposed Action area.
Southwestern willow flycatcher	<i>Empidonax traillii extimus</i>	E	NE	Species primarily would use higher elevation habitat and only fly over the Proposed Action area.
Southwestern willow flycatcher critical habitat			NE	Critical habitat for this species does not occur in the Proposed Action area.
Springville clarkia	<i>Clarkia springvillensis</i>	T	NE	Species occurs at a higher elevation than the Proposed Action area.
Succulent owl's-clover	<i>Castilleja campestris</i> ssp. <i>succulenta</i>	T	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Succulent owl's-clover critical habitat			NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Tipton kangaroo rat	<i>Dipodomys nitratoides nitratoides</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	T	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	T	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Vernal pool fairy shrimp critical habitat			NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	E	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.

Table 3. Federally listed species, candidate species, and critical habitat				
Vernal pool tadpole shrimp critical habitat			NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	T	NE	No lands fallowed or untilled for three or more years would be converted as a result of the Proposed Action.
Western yellow-billed cuckoo	<i>Coccyzus americanus occidentalis</i>	C	NE	Species would at most only fly over the Proposed Action area; suitable nesting habitat no longer exists in the San Joaquin Valley.
Yosemite toad	<i>Bufo canorus</i>	C	NE	Species occurs at a higher elevation than the Proposed Action area.
C = Candidate E = Endangered NE = No Effect T = Threatened				

3.3.2 Environmental Consequences

3.3.2.1 No Action

The No Action Alternative would not alter CVP operations, water storage or release patterns from CVP facilities. The transfers and exchanges are water management actions to support existing uses and conditions. No native or untilled lands (fallow for three or more consecutive years) would be cultivated without prior surveys for threatened and endangered species as a result of the Proposed Action. Subsequent environmental review and consultations, if applicable would be required to irrigate lands fallowed three or more years.

Therefore, the No Action Alternative would have no effect on federally listed species, critical habitat, or candidate species. Diversions from Millerton Lake would not change. The Proposed Action would not interfere with other management decisions for the Friant Division facilities.

3.3.2.2 Proposed Action

The Proposed Action would be nearly identical to the No Action Alternative with regard to biological resources, as the affected environment has not changed in any meaningful way and the same conditions and restrictions would apply, although the amount of water involved would increase.

3.4 Cultural Resources

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

The Section 106 process is outlined in the Federal regulations at 36 Code of Federal Regulations (CFR) Part 800. These regulations describe the process that the Federal agency (Reclamation) takes to identify cultural resources and the level of effect that the proposed undertaking would have on historic properties. In summary, Reclamation must first determine if the action is the type of action that has the potential to affect historic properties. If the action is the type of action to affect historic properties, Reclamation must identify the area of potential effects (APE), determine if historic properties are present within that APE, determine the effect that the undertaking will have on historic properties, and consult with the State Historic Preservation Office (SHPO), 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. Reclamation uses the Section 106 process to identify and consider impacts to cultural resources that may be affected by actions outlined in this EA.

3.4.1 Affected Environment

The affected environment for cultural resources is the same as that was discussed in EA-10-052 and is not repeated here.

3.4.2 Environmental Consequences

3.4.2.1 No Action

Under the No Action Alternative, operations would remain the same, and no potential impacts to cultural resources would occur.

3.4.2.2 Proposed Action

The Proposed Action involves the increased total quantity of water that could be transferred and/or exchanged under the current AWTP through existing facilities, which would not result in modifications, new construction, or changes in land use. Because the Proposed Action would result in no physical alterations of existing facilities and no ground disturbance, Reclamation concludes that the Proposed Action has no potential to affect historic properties pursuant to the regulations at 36 CFR Part 800.3(a)(1). As the Proposed Action has no potential to affect historic properties, no additional consideration under Section 106 of the National Historic Preservation Act is required (see Appendix A for cultural resources determination).

3.5 Indian Trust Assets

ITA are legal interests in assets that are held in trust by the U.S. 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. ITA cannot be sold, leased or otherwise alienated without the United States' approval. Assets can be real property, physical assets, or intangible property rights, such as a lease, or right to use something; which may include lands, minerals and natural resources in addition to hunting, fishing, and

water rights. Indian reservations, rancherias, and public domain allotments are examples of lands that are often considered trust assets. In some cases, ITA may be located off trust land. Reclamation shares the Indian trust responsibility with all other agencies of the Executive Branch to protect and maintain ITA reserved by or granted to Indian tribes, or Indian individuals by treaty, statute, or Executive Order.

3.5.1 Affected Environment

The nearest ITA is Table Mountain Rancheria, which is located within the Proposed Action area.

3.5.2 Environmental Consequences

3.5.2.1 No Action Alternative

Under the No Action Alternative, Reclamation would continue the AWTP without increasing the total quantity. Conditions related to ITA would remain the same as existing conditions. There would be no impacts to ITA.

3.5.2.2 Proposed Action

The Proposed Action would not involve any construction on lands or impact water, hunting, and fishing rights associated with the nearest ITA listed in the affected environment. Therefore, the Proposed Action does not have a potential to impact ITA (see Appendix A for ITA determination).

3.6 Global Climate

Climate change refers to significant change in measures of climate that last for decades or longer. Burning of fossil fuels is considered a major contributor to perceived global climate change. Carbon dioxide, which is produced when fossil fuels are burned, is a greenhouse gas (GHG) that effectively traps heat in the lower atmosphere. Some carbon dioxide is liberated naturally, but this may be augmented greatly through human activities. Increases in air temperature may lead to changes in precipitation patterns, runoff timing and volume, sea level rise, and changes in the amount of irrigation water needed due to modified evapotranspiration rates. These changes may lead to impacts to California's water resources and project operations. While there is general consensus in their trend, the magnitudes and onset-timing of impacts are uncertain and are scenario-dependent (Anderson et al. 2008).

3.6.1 Affected Environment

Climate change is an environmental trend and for the purpose of this SEA refers to changes in global or regional climate over time and is expected to have some effect on the snow pack of the Sierra Nevada and the run-off regime. Current data are not yet clear on the hydrologic changes and how they will affect the Friant Division of the CVP as well as other federal, state and local river operations within the action area. Water allocations are made dependent on hydrologic conditions and environmental requirements. Since operations and allocations are flexible, any changes in hydrologic conditions due to climate change would be within the respective operations' flexibility and therefore water resource changes due to climate change would be the same with or without the Proposed Action.

3.6.2 Environmental Consequences

3.6.2.1 No Action Alternative

Individually approved transfers and/or exchanges would be conveyed via gravity and would not result in adverse impacts to global climate.

3.6.2.2 Proposed Action

GHG generated by the Proposed Action is expected to be extremely small, if any, compared to sources contributing to potential climate change since the exchange of water would be conveyed via gravity and no additional pumping from electric motors would be required. While any increase in GHG emissions would add to the global inventory of gases that would contribute to global climate change, the Proposed Action would result in potentially minimal to no increases in GHG emissions and a net increase in GHG emissions among the pool of GHG would not be detectable.

It is possible that climate change would affect the Proposed Action rather than vice versa; however, it would be difficult measure/define the impact(s), if any. As noted in the affected environment, operations of the CVP are flexible to coincide with hydrologic conditions. Therefore, effects related to changes in the global climate would not result in adverse impacts to the Proposed Action.

3.7 Cumulative Impacts

Impacts analyzed in Section 3 of this SEA and EA-10-052 are considered part of the cumulative impacts analysis since the AWTP itself is a program which streamlines the acknowledgement process for several transfer and/or exchange actions.

The Proposed Action, when taken into consideration similar past, existing, and reasonably foreseeable actions would have beneficial impacts to groundwater resources since landowners would not have to rely on groundwater pumping to irrigate their crops. There would be no adverse impacts to Friant Division facilities since coordination with Reclamation and the Friant Water Authority is required to make sure that excess capacity exists within Friant Division facilities. In addition, coordination would ensure that Reclamation's obligations to deliver water to other CVP contractors, wildlife refuges, and other requirements would not be adversely impacted or indirectly impact third parties. The increase in quantity for the AWTP would not increase or decrease the amount of CVP water each district receives under contract with Reclamation. Transfers and/or exchanges would be between willing participants. The Proposed Action would not contribute to cumulative adverse impacts to water resources.

The Proposed Action is found to not have any additional impacts on land use, biological resources, global climate, and ITA from what was already analyzed in EA-10-052; therefore, would not contribute to adverse cumulative impacts to these resources when taken into consideration other similar past, existing, and reasonably foreseeable actions.

Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft SEA and Draft FONSI during a 15-day comment period from November 28, 2011 through December 12, 2011. No comments were received.

4.2 Fish and Wildlife Coordination Act (16 USC § 661 et seq.)

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation consult with fish and wildlife agencies (federal and state) on projects either conducted by the federal agency under a permit or license issued by the federal agency, that would impound, divert, control or otherwise modify a body of water. As the Proposed Action does not involve any construction, permitting, or licenses from Reclamation, FWCA does not apply.

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

Section 7 of the ESA requires Federal agencies, in consultation with the Secretary of the Interior 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 not change the land use patterns of the cultivated or fallowed fields that do have some value to listed species. In addition, the short duration of the water availability, the requirement that no native lands be converted without consultation with the USFWS, and the stringent requirements for transfers under applicable laws would prevent any adverse impact to any federally listed species or any critical habitat. 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. Therefore, the Proposed Action would have no effect on federally protected species or critical habitat and consultation with the USFWS or with the NMFS is not required. The USFWS would be sent a copy of the Draft SEA and FONSI when they are released for public review.

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

The NHPA of 1966, as amended (16 USC 470 *et seq*), is the primary federal legislation which 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 listed cultural resources or those eligible for inclusion in the National Register. Those resources that are on or are eligible for inclusion on the National Register are referred to as historic properties.

The activities associated with the Proposed Action would include no new ground disturbance, no change in land use, and the use of existing conveyance features to move water. Reclamation has

determined that there would be no potential to affect historic properties by the Proposed Action pursuant to 36 CFR 800.3(a)(1). See Appendix A for cultural resources determination.

Section 5 List of Preparers and Reviewers

Michael Inthavong, Natural Resources Specialist, SCCAO
Scott Williams, Archaeologist, MP-153
Patricia Rivera, Indian Trust Assets, MP-400
George Bushard, Repayment Specialist, SCCAO
Shauna McDonald, Wildlife Biologist, SCCAO – Reviewer
Rena Ballew, Repayment Specialist, SCCAO – Reviewer
Michael Eng, Natural Resources Specialist, SCCAO – Reviewer
Chuck Siek, Natural Resources, Specialist, SCCA) – Reviewer

Section 6 References

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Appendix A – ITA, ESA, and Cultural Resources Determinations

Inthavong, Michael T

From: Rivera, Patricia L
Sent: Thursday, November 17, 2011 6:32 PM
To: Inthavong, Michael T
Subject: RE: ITA Request Form - SEA-11-063

Michael,

I reviewed the proposed action to increase the total amount of water that can be transferred/exchanged per year under an Accelerated Water Transfer Program from 255,000 AF to 300,000 AF. This is a supplemental to the previous EA-10-52, where everything remains the same except for the increase in amount allowed. There would be no facility modifications or new construction. I've attached your previous determination for EA-10-52 as reference.

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

Patricia



United States Department of the Interior

BUREAU OF RECLAMATION
1243 "N" Street
Fresno, CA 93721



IN REPLY REFER TO:

Friant Division
ENV 7.00
SCC-424

November 18, 2011

MEMORANDUM

To: Michael Inthavong
Natural Resource Specialist

From: Shauna McDonald
Wildlife Biologist

Subject: No-Effect Determination for Increase in Quantity for the Friant Division and Cross Valley Accelerated Water Transfer Program, 2011-2015 (Supplement to EA-10-052) (SEA-11-063)

Reclamation proposes to increase the total quantity for the Friant Division and Cross Valley (CV) Central Valley Project (CVP) contractors' Accelerated Water Transfer Program (AWTP) by 45,000 AF per Contract Year, which would now allow the participants to transfer and/or exchange up to 300,000 AF. The Proposed Action would cover transfers and/or exchanges between Friant Division contractors and transfers from Friant Division contractors to CV contractors. In addition, federal wildlife refuges could also receive transfers of CVP water from eligible contractors participating in the AWTP. The Proposed Action would utilize existing Friant Division facilities including Millerton Lake, Friant Dam, Madera Canal, and the Friant-Kern Canal. The AWTP would be effect for Contract Years 2011 through 2015 (March 1, 2011 through February 29, 2016).

The Proposed Action under this SEA does not replace that which is described and analyzed in EA-10-052, but merely supplements it to reflect the increase in total quantity from 255,000 AF to 300,000 AF per Contract Year. Commitments as part of the approved AWTP from EA-10-052 remain applicable and are listed below.

The Proposed Action would be subject to the following conditions:

- transfers and/or exchanges that are > 20% of a contractor's supply must be noticed to the public by the contractor to Reclamation's acknowledgement of such transfer and/or exchange;
- there would be no restriction on directionality within the AWTP (transfers do not require return transfers at a later date or year);

- transferred and/or exchanged water could be agricultural, M&I, or other water;
- transferred and/or exchanged water could be used for agricultural, M&I, or other purposes, or for groundwater recharge;
- transfers and/or exchanges would be completed within the same Contract Year;
- transfers would be between willing sellers and willing buyers;
- exchanges would be between willing exchangers;
- exchanges would only count once towards the up to 300,000 AF limit since exchanges would be “bucket-for-bucket”, or those of equivalent amounts where neither district experiences a net gain or loss;
- no new construction or modifications to existing facilities are covered under this AWTP;
- transfers and/or exchanges must occur within the permitted CVP consolidated Place-of-Use;
- transfers and/or exchanges are limited to existing supply and would not increase overall consumptive use;
- transfers and/or exchanges for agricultural use would be used on lands irrigated within the last three consecutive years;
- transfers and/or exchanges would not lead to any land conversions;
- no native or untitled land (fallow for three consecutive years or more) would be cultivated with the water involved in these actions;
- transfers and/or exchanges would comply with all applicable Federal, State, local, and Tribal law and requirements;
- the transferee would comply with the RRA, as applicable;
- water for transfers may not be made available by shifting to alternative surface water sources that could potentially adversely affect CVP operations or other third party interests; and
- transfers and/or exchanges cannot alter the flow regime of natural water bodies such as rivers, streams, creeks, ponds, pools, wetlands, etc., so as to not have a detrimental effect on fish or wildlife, or their habitats.

The type of exchanges of CVP water between eligible contractors in this EA analysis is defined as “bucket-for-bucket” or those of equivalent amounts. Unbalanced exchanges are outside the scope of this SEA and would require separate Reclamation approval and environmental review.

The Proposed Action does not cover:

- transfers and/or exchanges that meet the above criteria but are increments of larger actions;
- unbalanced exchanges;
- transfers and/or exchanges involving CV contractors’ CVP water from the Sacramento-San Joaquin River Delta;
- transfers and/or exchanges that involve previously transferred and/or exchanged water;
- transfers and/or exchanges that involve a third party intermediary as an exchanger or transferor;
- transfers and/or exchanges of Section 215 Water; and

- transfers and/or exchanges to non-CVP contractors.

The only thing that has changed since EA-10-053 is an increase in the amount of water involved. The Proposed Action remains a short-term action and all the restrictions remain in place, preventing any land use change as a result of the Proposed Action.

With the above limitations and based upon the nature of this action Reclamation has determined there would be No Effect to proposed or listed species or critical habitat under the Endangered Species Act of 1973, as amended (16 U.S.C. §1531 et. seq.).

Inthavong, Michael T

From: Williams, Scott A
Sent: Thursday, November 17, 2011 11:26 AM
To: Inthavong, Michael T
Cc: BOR MPR Cultural Resources Section
Subject: RE: CR Review, SEA-11-063

Project Tracking #11-SCAO-022.

Michael,

I have review the change in scope, increasing the total amount allowed for an Accelerated Water Transfer Program from 255,000 AF to 300,000 AF per year (Friant Division and Cross Valley contractors from Contract Year 2011-2015). As with the previous scope, the Proposed Action involve the transfer and/or exchange of water through existing facilities, which would not result in modifications, new construction, or changes in land use. Because the Proposed Action would result in no physical alterations of existing facilities and no ground disturbance, Reclamation maintains the conclusion that the Proposed Action has no potential to cause effect to historic properties pursuant to the regulations at 36 CFR Part 800.3(a)(1).

As the proposed action has no potential to affect historic properties pursuant to 36 CFR Part 800.3(a)(1), no additional consideration under Section 106 of the National Historic Preservation Act is required.

Thank you for the opportunity to review the proposed action. Please place a copy of this concurrence with the EA administrative record.

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

From: Inthavong, Michael T
Sent: Thursday, November 17, 2011 10:59 AM
To: Perry, Laureen (Laurie) M; Barnes, Amy J
Cc: Goodsell, Joanne E; Dunay, Amy L; Fogerty, John A; Nickels, Adam M; Overly, Stephen A; Bruce, Brandee E; Soule, William E; Williams, Scott A
Subject: CR Review, SEA-11-063

Hi Laurie,

Please assign the following project to one of your team members. Reclamation is proposing to increase the total amount allowed for an Accelerated Water Transfer Program from 255,000 AF to 300,000 AF per year (Friant Division and Cross Valley contractors from Contract Year 2011-2015). No modifications to facilities or construction is involved. This project is related to #11-SCAO-022, and Amy was the CR specialist assigned. I've attached the previous determination for reference.

CA#: A10-1785-8943-332-10-0-0