

RECLAMATION

Managing Water in the West

Environmental Assessment

Warren Act Contract for Kern-Tulare Water District and Lindsay-Strathmore Irrigation District

EA-12-069



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

January 2014

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	Need for the Proposed Action.....	1
1.3	Relevant Legal and Statutory Authorities.....	2
1.3.1	Warren Act.....	2
1.3.2	Reclamation Project Act	2
1.3.3	Central Valley Project Improvement Act	2
1.3.4	Water Quality Standards	2
1.4	Scope.....	3
1.5	Resources of Potential Concern.....	3
Section 2	Alternatives Including the Proposed Action	5
2.1	No Action Alternative.....	5
2.2	Proposed Action.....	5
2.2.1	Lindsay-Strathmore Irrigation District	5
2.2.2	Kern-Tulare Water District	5
2.2.3	Environmental Commitments	6
Section 3	Affected Environment and Environmental Consequences	9
3.1	Affected Environment	9
3.1.1	CVP Facilities	9
3.1.2	Lindsay-Strathmore Irrigation District	9
3.1.3	Kern-Tulare Water District	10
3.2	Resources Eliminated from Further Analysis.....	11
3.3	Water Resources	11
3.3.1	Affected Environment.....	11
3.3.2	Environmental Consequences.....	12
3.4	Land Use.....	15
3.4.1	Environmental Consequences	15
3.5	Biological Resources	16
3.5.1	Affected Environment.....	16
3.5.2	Environmental Consequences.....	18
3.6	Socioeconomic Resources	19
3.6.1	Affected Environment.....	19
3.6.2	Environmental Consequences.....	19
Section 4	Consultation and Coordination	21
4.1	Public Review Period	21
4.2	Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.).....	21
4.3	Endangered Species Act (16 U.S.C. § 1531 et seq.).....	21
Section 5	Preparers and Reviewers	22
Section 6	Acronyms and Abbreviations	22
Section 7	References	23

List of Tables

Table 2-1	Environmental Protection Measures and Commitments.....	6
Table 3-1	Resources Eliminated from Further Analysis.....	11
Table 3-2	Water Quality Monitoring Requirements for LSID’s Non-Project Water	13
Table 3-3	Water Quality Monitoring Requirements for KTWD’s Non-Project Water.....	14
Table 3-4	Special Status Species Potentially Occurring with the Proposed Action Area ..	16

List of Figures

Figure 2-1	Proposed Course of Wutchumna Water to LSID via the FKC.....	7
Figure 2-2	Proposed Conveyance Facilities and Possible Exchange Partners and Intermediaries for KTWD’s non-CVP Water.....	8

Appendices

Appendix A	Response to Comments
Appendix B	Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals: Water Quality Monitoring Requirements
Appendix C	Cultural Resources Determination
Appendix D	Indian Trust Assets Detemination

Section 1 Introduction

The Bureau of Reclamation (Reclamation) provided the public with an opportunity to comment on the draft Environmental Assessment (EA) and draft Finding of No Significant Impact between January 24, 2014 and February 24, 2014. One comment letter was received from Arvin-Edison Water Storage District (AEWSD). The comments and Reclamation's responses may be found in Appendix A. Changes from the draft EA that are not minor editorial changes are indicated by vertical lines in the left margin of this document.

1.1 Background

Kern-Tulare Water District (KTWD) and Lindsay-Strathmore Irrigation District (LSID) (collectively the Districts) have Central Valley Project (CVP) Friant Division repayment contracts with Reclamation.

The Warren Act (Act of February 21, 1911; Chapter 141, 36 Stat. 925) authorizes Reclamation to enter into contracts to impound, store, or convey non-project water when excess capacity is available in Federal facilities.

Reclamation and the Districts currently have Warren Act Contracts in place for the conveyance of up to 10,000 acre-feet (af) per year of each District's non-CVP water during contract years 2009 through 2013 (March 1, 2009 – February 28, 2014). The execution of those contracts was evaluated in EA and FONSI number 08-086; those documents are incorporated by reference.

Due to regulatory, contractual, and policy changes, the Districts may now store, convey, or divert non-CVP water according to Article 18 of their repayment contracts, with Reclamation's approval but without the need for separate Warren Act contracts. Additionally, since issuance of the 5-year Warren Act contract referenced in EA/FONSI 08-086, Reclamation's Mid-Pacific Region has been given authority to approve Warren Act requests exceeding 10,000 acre-feet in a single contract year.

Pursuant to the terms of their repayment contracts, the Districts request Reclamation's approval to each store, convey, divert, or exchange up to 30,000 acre-feet (af) per year of non-CVP water in Friant Division and Cross-Valley Unit facilities.

1.2 Need for the Proposed Action

The Districts have a need to better regulate their varied water resources and provide for overall water management flexibility. To accomplish this, the Districts need Reclamation's approval to: store, convey, divert or exchange non-CVP water in Friant Division and Cross-Valley Unit facilities; or exchange non-CVP water for CVP water.

1.3 Relevant Legal and Statutory Authorities

Several Federal laws, permits, licenses and policy requirements have directed, limited or guided the National Environmental Policy Act 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):

1.3.1 Warren Act

The Warren Act (Act of February 21, 1911; Chapter 141, 36 Stat. 925) authorizes Reclamation to enter into contracts to impound, store, and/or convey non-project water when excess capacity is available in federal facilities.

1.3.2 Reclamation Project Act

Section 14 of the Reclamation Project Act of 1939 (53 Stat. 1197; 43 U.S.C., subsection 389) authorizes the Secretary, for the purpose of orderly and economical construction or operation and maintenance of any project, to enter into such contracts for exchange or replacement of water, water rights, or electric energy or for the adjustment of water rights, as in his judgment are necessary and in the interests of the United States and the project.

1.3.3 Central Valley Project Improvement Act

The Central Valley Project Improvement Act of 1992, Title 34 (of Public Law 102-575), Section 3408(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-CVP 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).

Reclamation completed the Final Programmatic Environmental Impact Statement (PEIS) for the Central Valley Project Improvement Act (CVPIA) in October 1999 that analyzed alternatives and implementation of the CVPIA. The Record of Decision (ROD) was signed in January 9, 2001. The PEIS and ROD are incorporated in this document by reference.

1.3.4 Water Quality Standards

Water quality and monitoring requirements are established by Reclamation to protect water quality in the Friant-Kern Canal (FKC) and Madera Canal by ensuring that conveyance of non-CVP water does not negatively impact water quality for downstream water users. The current standards are contained in Appendix B. These standards may be as amended, updated, and/or superseded by Reclamation in the future and the then-existing water quality standards shall apply to this Action.

1.4 Scope

This EA has been prepared to examine the impacts on environmental resources as a result of storing, conveying, or diverting the Districts' non-CVP water in Friant Division and Cross Valley Unit facilities; or exchanging non-CVP water for CVP water.

The geographic scope of the EA (Figure 2-1, Figure 2-2) would be: the service areas of the Districts; the service areas of possible intermediaries and partners; Friant Division and Cross Valley Unit facilities; and non-Federal facilities including the California Aqueduct and the Cross Valley Canal (CVC).

The temporal scope of the EA would be for up to 30 years, from the 2013 through 2042 Contract Years (March 1, 2013 - February 28, 2043). Reclamation would review the EA at five-year intervals, and supplement if Reclamation determines that there are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

1.5 Resources of Potential Concern

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

- Water Resources
- Land Use
- Biological Resources
- Socioeconomic Resources

(This Page Intentionally Left Blank)

Section 2 Alternatives Including the Proposed Action

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, Reclamation would neither approve the storage, conveyance, or diversion of non-CVP water in Federal facilities according to the Warren Act; nor approve the exchange of the Districts' non-CVP water for CVP water as proposed below. Reclamation would continue to deliver CVP water in accordance with the terms and conditions of the Districts' CVP repayment and water service contracts.

2.2 Proposed Action

Reclamation would approve storage, conveyance, and/or diversion of non-CVP water in Federal facilities when excess capacity exists, according to the Article 18 of the Districts' repayment contracts. Reclamation would also approve exchange of the Districts' non-CVP water for CVP water, in order to facilitate delivery. Approvals would be for varying lengths of time between the 2013 through 2042 Contract Years (March 1, 2013 - February 28, 2043).

2.2.1 Lindsay-Strathmore Irrigation District

Reclamation proposes to approve storage, conveyance, and/or diversion of up to 30,000 af/year of LSID's non-CVP water in Federal facilities, when excess capacity exists, according to Article 18 of LSID's Friant Division repayment contract. LSID's non-CVP water originates in the Kaweah River, passes through Bravo Lake, and enters the Upper Wutchumna Ditch. Before introduction into the FKC, the Wutchumna water must be tested at specific points (Table 3-2) to confirm that it meets Reclamation's water quality requirements in effect at the time of conveyance; the current standards can be found in Appendix B. The water would be pumped from the Wutchumna Ditch into the FKC, and ultimately into LSID's distribution system and service area (Figure 2-1).

After introduction into the Friant-Kern Canal, the Wutchumna water/non-project water would be allowed to remain for up to 30 days. After 30 days, LSID would be required to pay appropriate storage fees for the water, or else it would be deemed unused water donated to the United States for CVP purposes.

2.2.2 Kern-Tulare Water District

Reclamation proposes to approve storage, conveyance, and/or diversion of up to 30,000 af/yr of KTWD's non-CVP water in Federal facilities when excess capacity exists, per the terms of KTWD's partial assignment of the Southern San Joaquin Municipal Utility District's Friant Division repayment contract. KTWD's non-CVP supplies include Kern River and State Water Project (SWP) water. Before introduction into the FKC, KTWD's non-CVP water must be tested

at specific points (Table 3-3) to confirm that it meets Reclamation's water quality requirements in effect at the time of conveyance; the current standards can be found in Appendix B. The two sources of non-CVP water would be introduced into the FKC from: the CVC through existing siphons; the CVC through the CVC/FKC Intertie; or the Lerdo Canal via North Kern Water Storage District's distribution system. Once introduced into the FKC, the non-CVP water could be stored, delivered directly to KTWD's service area, or delivered to KTWD through an intercept exchange for CVP water from the FKC. Physical delivery of the water to KTWD would require pumping over three check structures: the Shafter Check, the Poso Creek Check, and the Lake Woollomes Check. Alternatively, an intercept exchange can be made with Arvin-Edison Water Storage District (AEWSD) which requires no additional lifts. When an intercept exchange with AEWSD is not available, the water could be pumped over the Shafter Check and exchanged with Shafter-Wasco Irrigation District, beyond the Poso Check to exchange with Southern San Joaquin Municipal Water District, or beyond the Woollomes Check for delivery to Kern-Tulare or exchanged with Delano-Earlimart Irrigation District. Possible intermediaries needed to facilitate these exchanges may include the North Kern Water Storage District and Kern County Water Agency (KCWA) Improvement District No. 4 (ID#4) (Figure 2-2).

After introduction into the Friant-Kern Canal, the non-project water would be allowed to remain for up to 30 days. After 30 days, KTWD would be required to pay appropriate storage fees for the water, or else it would be deemed unused water donated to the United States for CVP purposes.

2.2.3 Environmental Commitments

Reclamation and the Districts must implement the following environmental protection measures to reduce environmental consequences associated with the Proposed Action (Table 2-1).

Environmental consequences for resource areas assume the measures specified would be fully implemented. Copies of all reports must be submitted to Reclamation.

Table 2-1 Environmental Protection Measures and Commitments

Resource Concern	Protection Measure
Biological & Land	The non-Project water involved in these actions must not be used to cultivate native or untilled land (fallow for three years or more).
Land	The Proposed Action must not require new construction or modification of existing facilities.
Land & Water	The Proposed Action must not increase or decrease water supplies that would result in development.
Water Quality	The Districts must comply with all provisions of Reclamation's water quality and monitoring requirements for the FKC that are in effect at the time of pump-in. The current (2008) Water Quality Monitoring Plan for the Proposed Action is attached as Appendix B.
Water Quality	LSID must additionally implement the monitoring plan specified in Table 3-2. The table may be amended if necessary to meet Reclamation's future water quality and monitoring requirements.
Water Quality	KTWD must additionally implement the monitoring plan specified in Table 3-3. The table may be amended if necessary to meet Reclamation's future water quality and monitoring requirements.

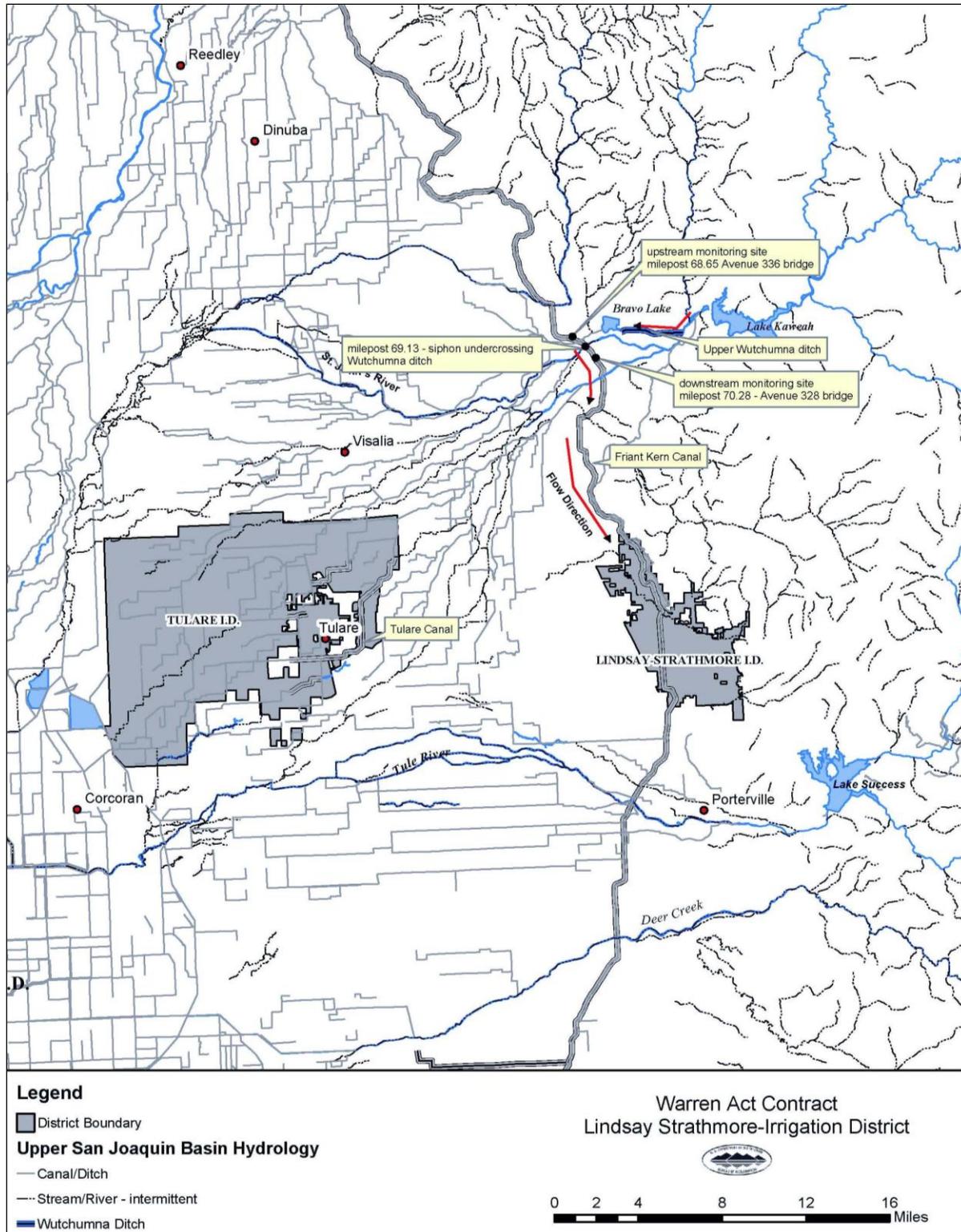


Figure 2-1 Proposed Course of Wutchumna Water to LSID via the FKC

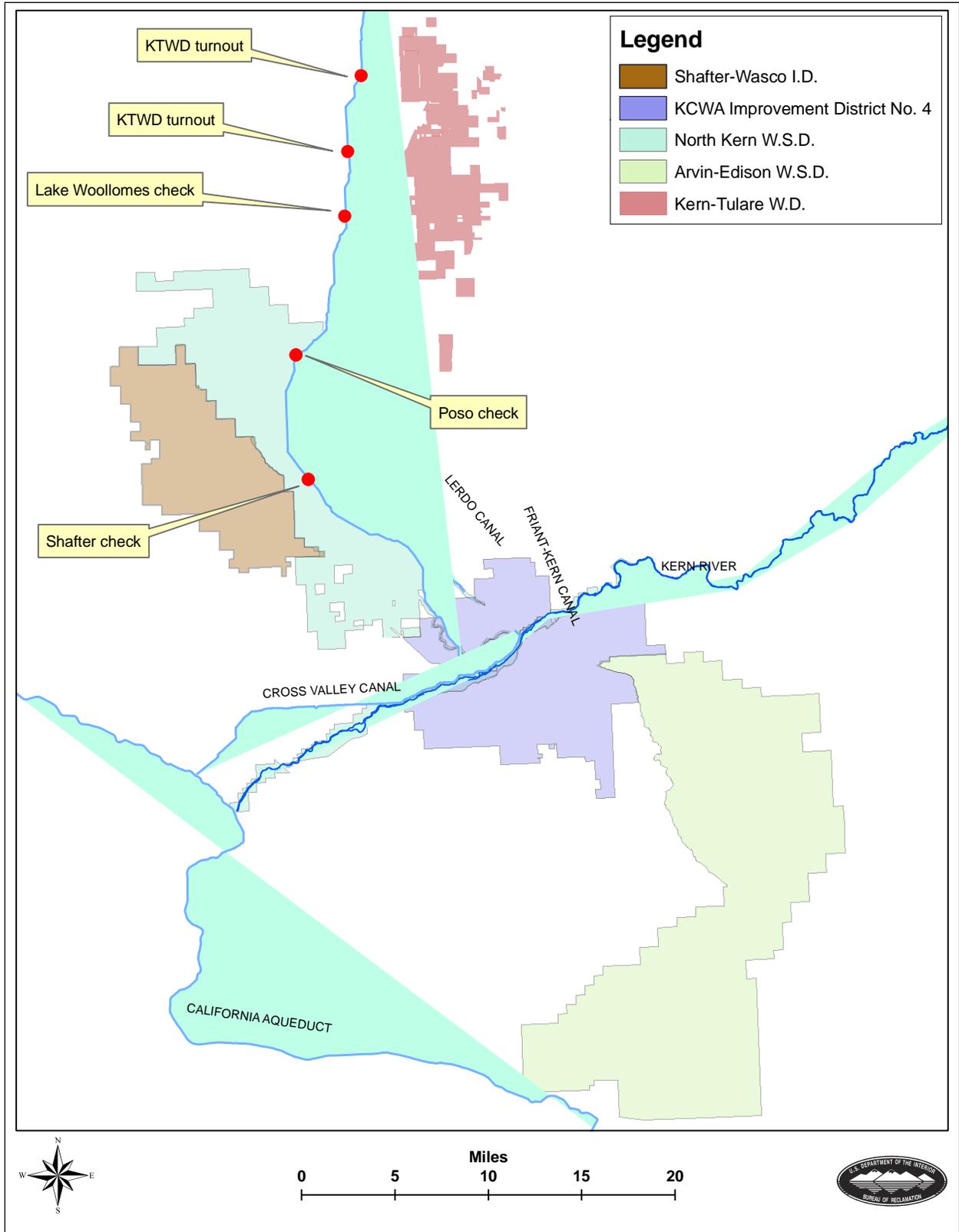


Figure 2-2 Proposed Conveyance Facilities and Possible Exchange Partners and Intermediaries for KTWD's non-CVP Water

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 Affected Environment

3.1.1 CVP Facilities

Friant Dam

Friant Dam is a concrete gravity dam completed in 1942, located in the Sierra Nevada foothills about 15 miles northeast of downtown Fresno. The dam impounds the upper San Joaquin River, which created Millerton Lake as a result. The lake has a capacity of 520,500 acre-feet (af) that is distributed through the FKC and Madera Canal for: irrigation; municipal & industrial (M&I) uses; fish & wildlife uses; and other uses. It is the last reservoir on the river used for flood control. The land surrounding Millerton Lake is undeveloped wilderness managed by the State of California Department of Parks and Recreation for day-use and overnight camping.

Friant-Kern Canal

The FKC carries water over 151.8 miles in a southerly direction from Millerton Lake to the Kern River, four miles west of Bakersfield. The FKC has an initial capacity of 5,000 cubic feet per second (cfs) that gradually decreases to 2,000 cfs at its terminus in the Kern River. The water conveyed in the FKC is from the San Joaquin River and is considered to be of good quality because it originates in the Sierra Nevada. The water is used for M&I and agricultural purposes in Fresno, Tulare, and Kern Counties.

3.1.2 Lindsay-Strathmore Irrigation District

LSID is a repayment contractor formed in Tulare County in 1915, with a maximum annual entitlement of 27,500 af of Friant Division Class 1 water. Land use within LSID is mainly agricultural, consisting of roughly 15,700 acres of which 15,123 are currently irrigated. Most irrigable acres grow permanent crops; the main crops in LSID are oranges and olives. In addition, LSID also provides water to approximately 1,400 homes for M&I purposes.

When surface water is unavailable, LSID operates five groundwater wells. LSID does not overlie a reliable groundwater basin and in addition to surface water runoff flowing into areas down slope from the district, groundwater supplies are inadequate. LSID does not operate recharge areas or have a conjunctive use program. Instead, LSID contractually uses the conjunctive use capacity of Tulare Irrigation District (TID) by delivering a portion of its non-CVP supplies to TID for groundwater banking. Through an agreement with TID, this non-CVP water can then be made available to LSID during dry years.

LSID's source of non-CVP water derives from its ownership of 21 shares of Wutchumna Mutual Water Company (Wutchumna) stock from the Kaweah River, which historically has been

approximately 10,000 af, although in wet years it can be much greater. Approximately 1/3 of this Wutchumna water has been conveyed each year in the FKC to LSID (upon approval of a Warren Act contract), and the remaining 2/3 is delivered to other stockholders of Wutchumna, principally to TID, through private Wutchumna facilities. TID either uses this water for irrigation or direct sinking for recharge of their groundwater. TID returns surface water to LSID through either the FKC or through the Kaweah River system. In a dry year, less water can be delivered to TID for recharge purposes and more water could be conveyed in the FKC to LSID if capacity exists.

Although LSID's previous authorization was for 10,000 af, in wet years their share of Wutchumna water has been much higher, and they have requested authorization to convey larger quantities when available. Any transfer of water rights or appropriation of new supplies would be a separate action not covered by this analysis.

3.1.3 Kern-Tulare Water District

KTWD is located east of the City of Delano in both Kern and Tulare Counties. KTWD has two CVP Cross Valley contracts with Reclamation totaling 53,300 af of CVP water from the Sacramento-San Joaquin River Delta (Delta) and a Friant Division assignment contract for 5,000 af of Class 2 water from Southern San Joaquin Municipal Utility District. Of the 23,434 acres located within KTWD, approximately 19,066 acres are currently irrigated and receive district water service. Land use within KTWD is mainly agricultural, consisting of permanent crops (primarily citrus, subtropical orchards, grapes and nuts). KTWD provides no domestic or residential water service.

To convey KTWD's CVP water supply from the Delta, water is wheeled through the California Aqueduct to Tupman under a contract with DWR. From Tupman, the water is conveyed east in the CVC. The CVP water is then directly delivered to KTWD and/or exchanged via arrangements under Article 5 with AEWSD or others. The CVP water can be introduced into the FKC either directly or through the CVC/FKC Intertie. AEWSD makes CVP water available to KTWD from the FKC. In order to physically deliver the Delta CVP water to KTWD, it must be pumped over three structures in the FKC – similar to the methodology for conveyance of non-CVP water to KTWD as described in the Proposed Action.

In 1976, KTWD contracted with the City of Bakersfield for an average of 23,000 af of Kern River water. Delivery of this non-CVP water is facilitated by exchanges between the City of Bakersfield, KCWA ID#4, and AEWSD or another willing Friant Division Contractor. The non-CVP water under these agreements is delivered to KCWA ID#4 in exchange for SWP water, and then exchanged with a Friant Division Contractor for water made available to KTWD from the FKC. KTWD also has a contract with KCWA for purchase of SWP water, which has been made available from time to time. Water under this contract is exchanged with willing partners in similar to fashion to KTWD's source of Kern River water.

KTWD relies on approximately 12,000 af of groundwater annually, which is pumped by water users within its district from privately owned wells. The depth to groundwater varies from about 200 to over 600 feet. Wells drilled on the west side of KTWD tap into the continental deposits and wells drilled on the east side tap into highly permeable deposits of the Santa Margarita and/or the Olcese Formations. The continental deposits and the formations form an unconfined

aquifer containing water that is classified as suitable for irrigation. Sources of groundwater replenishment include underflow to KTWD from both the east and the west.

Although LSID's previous authorization was for 10,000 af, in wet years their share of Kern River water has been much higher, and they have requested authorization to convey larger quantities when available. Any transfer of water rights or appropriation of new supplies would be a separate action not covered by this analysis.

3.2 Resources Eliminated from Further Analysis

Reclamation analyzed the affected environment and determined that neither Proposed Action nor the No Action Alternative have the potential to cause direct, indirect, or cumulative effects to the following resources:

Table 3-1 Resources Eliminated from Further Analysis

Resource	Reason Eliminated
Cultural Resources	Reclamation determined on December 4, 2012 that the Proposed Action has no potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1). A copy of the determination is attached as Appendix C.
Indian Sacred Sites	The Proposed Action would not limit access to and ceremonial use of Indian sacred sites on Federal lands by Indian religious practitioners or adversely affect the physical integrity of such sacred sites, since there are no known Indian Sacred Sites on the land proposed for lease.
Indian Trust Assets	Reclamation determined on December 3, 2012 that the Proposed Action would not impact ITA as there are none in the Proposed Action area. A copy of the determination is attached as Appendix D.
Environmental Justice	No impact to minority or low-income populations would occur under the No Action Alternative, as conditions would remain the same as existing conditions. The Proposed Action does not propose any features that would result in adverse human health or environmental effects, have any physical effects on minority or low-income populations, and/or alter socioeconomic conditions of populations that reside or work near the Proposed Action.
Air Quality	No new facilities would be needed as a result of the Proposed Action that would cause emissions from construction activities. The pumps that would be used to convey the water under the Proposed Action are electric. These pumps would not emit pollutants at the pump; the source of the pollutants originates at the power plant. Power plants are permitted based on their maximum operating potential. The additional electricity would not result in the power plant exceeding operating capacity, and, thus, the applicable emissions permit.
Global Climate	Neither the Proposed Action nor the No Action alternative would involve physical changes to the environment or construction activities that could impact global climate change. Generating power plants that produce electricity to operate electric pumps produce carbon dioxide that could potentially contribute to GHG emissions; however, the Proposed Action is water that would be delivered from existing or new facilities under either alternative and is therefore part of the existing conditions.

3.3 Water Resources

3.3.1 Affected Environment

See Section 3.1.1 for a description of the affected water sources and Districts.

3.3.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would continue to deliver CVP water in accordance with the terms and conditions of the Districts' CVP repayment and water service contracts.

Lindsay-Strathmore Irrigation District Under the No Action Alternative, LSID would not be allowed to store or convey their Wutchumna water supply through the FKC. Without the Proposed Action, LSID could not use this Wutchumna water in its service area without constructing facilities to obtain this water. The construction of new facilities would duplicate a portion of the CVP facilities. Left in the Kaweah River, the Wutchumna water may not be directly available for use on LSID lands. LSID could sell the Wutchumna water to willing buyers and use the money to purchase local surface water supplies, if available. If surface water supplies are not available to purchase, then crop production within LSID could decrease.

LSID could also deliver the Wutchumna water to TID using non-CVP facilities for groundwater recharge, and could request water from TID's conjunctive use program via an exchange for CVP water from the FKC, when available. LSID has no usable groundwater basin that underlies the district, and does not operate recharge basins or a conjunctive use program. Groundwater pumping within the district would continue to be utilized if and when it is available, and has been historically inadequate and unreliable.

Kern-Tulare Water District Under the No Action Alternative, the non-CVP water would not be stored or conveyed in the FKC for direct delivery into KTWD's service area. Left in the Kern River, either the water could be sold to willing buyers, or KTWD could construct new facilities in order to use their Kern River water supplies on KTWD lands. Similarly, new facilities would be needed to physically deliver SWP water to KTWD. These new facilities would duplicate a portion of the FKC. Although the non-CVP water would not be conveyed to KTWD through CVP facilities, the Kern River and SWP water could continue to be exchanged with AEWSO or other willing participants, at their discretion, for Friant CVP water when available. In addition, KTWD would continue to pump groundwater.

The No Action Alternative could therefore result in construction of new water conveyance facilities, and have the potential to increase groundwater withdrawals in an already overdrafted basin. There would be no effects to CVP facilities, operations, and water quality since non-CVP water would not be introduced into CVP facilities.

Proposed Action

The Proposed Action does not involve any construction activities or require any modifications to CVP facilities. The Proposed Action would not change any existing CVP water delivery diversion points. Since only excess capacity would be used, it would not interfere with normal CVP operations.

Reclamation and the Friant Water Authority would monitor salinity and turbidity in the FKC upstream and downstream of each place where each District's non-project water is pumped into the FKC. The water in the canal would be considered to be degraded if the addition of the non-

project water causes an increase of more than 20 NTU (turbidity) or 50 $\mu\text{S}/\text{cm}$ specific conductance (salinity) between the upstream and downstream sample sites for five consecutive days, or causes the turbidity or salinity of the downstream canal water to exceed 40 NTU or 250 $\mu\text{S}/\text{cm}$ respectively. Reclamation and the Friant Water Authority will revise these standards and conduct more frequent sampling as needed.

Lindsay-Strathmore Irrigation District Under the Proposed Action, LSID would pump up to 30,000 acre-feet of non-project water from the Wutchumna Ditch into the FKC each year; this water would be conveyed about 20 miles to the LSID service area. LSID would continue to receive CVP water from the FKC according to the terms and conditions of its CVP water service contract. The Proposed Action would not result in any construction activities or modifications to the FKC, and would not require any additional energy to convey the Wutchumna water. LSID would continue to use TID's conjunctive use program as well as pump groundwater within its district.

The District will provide laboratory analyses of the Wutchumna Ditch water. Reclamation and the Friant Water Authority will regularly monitor the salinity and turbidity of water in the canal to determine changes caused by the addition of the District's non-project water. To verify water quality, the Wutchumna water would be tested prior to pumping into the FKC. The FKC would be tested upstream and downstream of the Wutchumna water's point of discharge. The constituents to be tested and frequency of testing would be as listed in Table 3-2. The tests would be compared against Reclamation's water quality standards (Appendix B): if Reclamation finds that the Wutchumna water quality is unsuitable, then Reclamation and Friant Water Authority staff would work with LSID to modify the operations to improve water quality and/or restrict pumping until standards are met.

Table 3-2 Water Quality Monitoring Requirements for LSID's Non-Project Water

Location	FKC Milepost	Parameter	Frequency	Agency
Friant-Kern Canal Avenue 336 bridge (upstream site)	68.65	Electrical conductivity, turbidity	Monthly*	Friant Water Authority
Wutchumna Ditch	69.13	Title 22 constituents	Annual	LSID
		Electrical conductivity, turbidity	Monthly*	Friant Water Authority
Friant-Kern Canal Avenue 328 bridge (downstream site)	70.28	Electrical conductivity, turbidity	Monthly*	Friant Water Authority

* While Wutchumna water is being pumped into the FKC

Kern-Tulare Water District Under the Proposed Action, KTWD would introduce up to 30,000 acre-feet of water from the SWP and Kern River in the FKC for delivery into KTWD's service area. KTWD would continue to receive CVP water according to the terms and conditions of its Cross Valley water service contract via direct delivery in the FKC and/or exchanges with a

partner. No construction or modifications to the FKC would be required as a result of this action. Some additional energy may be necessary to convey the SWP and Kern River water supplies. KTWD would also continue to use and pump groundwater within its service area.

The District will provide complete laboratory analysis of each source of non-project water. Reclamation and the Friant Water Authority will regularly monitor the salinity and turbidity of water in the canal to determine changes caused by the addition of the District's non-project water. KTWD's non-CVP water would be tested at specific entry points and locations along the FKC, and at routine time intervals as shown in Table 3-3. If the quality of the SWP and/or Kern River water is unsuitable, Reclamation and Friant Water Authority staff would work with KTWD to modify the operations to improve water quality and/or restrict pumping until Reclamation's standards are met.

There will be extra water quality monitoring at the terminus of the FKC where the District's SWP water would be pumped into the canal. This monitoring will identify changes in salinity and turbidity in the water that is delivered at that point to Arvin-Edison WSD and the City of Bakersfield. These measurements will be compared with independent analyses conducted by Reclamation and Kern County Water Agency.

Table 3-3 Water Quality Monitoring Requirements for KTWD's Non-Project Water

Location	FKC Milepost	Parameter	Frequency	Responsible Agency
Farm Bridge	132.45	Electrical Conductivity, turbidity	Monthly*	Friant Water Authority
Discharge from North Kern Water Storage District's Beardsley Canal	133.42	Title 22 constituents	Annually, if introduction from this source is anticipated	Kern-Tulare WD
		Electrical Conductivity, turbidity	Monthly*	Friant Water Authority
Kimberlina Ave Bridge	134.44	Electrical Conductivity, turbidity	Monthly*	Friant Water Authority
Coffee Road (upstream site)	150.23	Electrical Conductivity, turbidity	Monthly*	Friant Water Authority
Terminus at Kern River	152.40	Title 22 constituents	Quarterly	Reclamation**
Cross Valley Canal Intertie	152.40	Electrical Conductivity, turbidity	Weekly	Kern County Water Agency

* While Kern River water is being pumped into the FKC

**Reclamation Baseline Monitoring Program

Cumulative Impacts

Reclamation and the Friant Water Authority routinely monitor water quality in the FKC, and the Proposed Action would not cumulatively impact the FKC. As outlined above, Reclamation would require the non-CVP water introduced into the FKC to meet established water quality standards. If water degradation due to one or more of the pump-ins occurs, the responsible pump-ins would be terminated, and would have to reestablish acceptable quality standards before allowed to operate again.

3.4 Land Use

3.4.1 Environmental Consequences

No Action

Without Reclamation's approval of the Proposed Action, the Districts would not be able to store or convey their non-CVP water in Federal facilities. The Districts would still receive CVP water to be used on existing agricultural lands and for M&I uses, as described in their respective water service contracts.

Hydrological cycles impact available water supplies. During dry years and without Warren Act contracts, landowners in the Districts may be forced to pump groundwater or to fallow and/or retire established permanent crops. Since both of the Districts contain prime farmland, unique farmland, farmland of statewide importance, and farmland of local importance, the No Action Alternative has the potential to adversely impact these resources.

Proposed Action

Under the Proposed Action, Reclamation would approve the Warren Act contracts and allow the districts to store and/or convey their non-CVP water in Friant Division facilities when capacity exists. The Proposed Action would not involve any new construction activities or modifications to existing facilities. The Proposed Action would not increase or decrease water supplies that would result in additional homes to be constructed or served in the respective districts. In addition, untilled lands or lands that have been fallowed for three or more years would not be put into production as a result of the Proposed Action.

The storage and conveyance of this non-CVP water would not have any adverse effects on unique geological or terrain features such as wetlands, wild or scenic rivers, refuges, flood plains, or rivers placed on the nationwide inventory. Compared to the No Action Alternative, the Proposed Action may benefit prime and unique farmlands.

Cumulative Impacts

Current trends in the San Joaquin Valley indicate increased population growth over the next 20 years. It is likely that changes of water usage would occur including requests for changes in water district boundaries, permanent changes of agricultural water to M&I use, contract assignments, changes in land uses, and permanent water transfers. Reclamation does not have authority over water use changes or changes in water district boundaries; however, Reclamation is notified to determine whether these changes would impact repayment under the terms and conditions of the water service contracts in addition to compliance with applicable laws including but not limited to laws designed to protect the human environment. It is reasonable and

foreseeable that agricultural lands would be sold to developers as land becomes more valuable. Each change in land use must undergo environmental review and approvals by the appropriate approving agencies including city and county officials, as well as the Local Area Formation Commission. Once approved, requests for changes in how, where, and when water is applied could occur. These requests for changes are the result of economic pressure and not the result of conveyance or deliveries of federal or non-federal water.

3.5 Biological Resources

3.5.1 Affected Environment

A species list for Kern and Tulare Counties was obtained from http://www.fws.gov/sacramento/es_species/Lists/es_species_lists-form.cfm on January 14, 2014 (document number 140114121108). Table 3-4 lists these species and critical habitat and summarizes their potential for occurrence/effects determinations. The table is also based on data in the California Natural Diversity Database (DFW 2014) and other information in Reclamation's files.

Table 3-4 Special Status Species Potentially Occurring with the Proposed Action Area

<u>Species</u>	<u>Status¹</u>	<u>Effects²</u>	<u>Occurrence in the Proposed Action Area³</u>
Amphibians			
California red-legged frog (<i>Rana draytonii</i>)	T	NE	Absent. No longer occurs on valley floor.
California tiger salamander (<i>Ambystoma californiense</i>)	T, X	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
mountain yellow-legged frog (<i>Rana muscosa</i>)	PE, PX	NE	Absent. Proposed Action is outside the species' range.
Sierra Nevada yellow-legged frog (<i>Rana sierrae</i>)	PE, PX	NE	Absent. Proposed Action is outside the species' range.
Yosemite toad (<i>Bufo canorus</i>)	PT, PX	NE	Absent. Proposed Action is outside the species' range.
Birds			
California condor (<i>Gymnogyps californianus</i>)	E, X	NE	Absent. Not expected to use farm fields on the valley floor.
Least Bell's vireo (<i>Vireo bellii pusillus</i>)	E	NE	Absent. Suitable riparian habitat with a well-developed understory is lacking.
southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	E	NE	Absent. Suitable riparian habitat is lacking.
western snowy plover (<i>Charadrius alexandrinus nivosus</i>)	T	NE	Absent. In Tulare County, snowy plovers are known to use evaporation basins, which are not part of the Proposed Action Area.
western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	PT	NE	Absent. Extensive cottonwood-willow riparian forest no longer occurs in San Joaquin Valley..
Fish			
Central Valley Spring-run Chinook Salmon (<i>Oncorhynchus tshawytscha</i>) (NMFS)	T, X	NE	Absent. Proposed Action is outside the species' range.
Central Valley steelhead (<i>Oncorhynchus mykiss</i>) (NMFS)	T, X	NE	Absent. Proposed Action is outside the species' range.
delta smelt (<i>Hypomesus transpacificus</i>)	T	NE	Absent. Proposed Action is outside the species' range.
Little Kern golden trout (<i>Oncorhynchus aquabonita whitei</i>)	T, X	NE	Absent. Proposed Action is outside the species' range.

<u>Species</u>	<u>Status</u>¹	<u>Effects</u>²	<u>Occurrence in the Proposed Action Area</u>³
North American green sturgeon (<i>Acipenser medirostris</i>) (NMFS)	T, X	NE	Absent. Proposed Action is outside the species' range.
Owens tui chub (<i>Gila bicolor snyderi</i>)	E	NE	Absent. Proposed Action is outside the species' range.
Sacramento River Winter-run Chinook Salmon (<i>Oncorhynchus</i> <i>tshawytscha</i>) (NMFS)	E, X	NE	Absent. Proposed Action is outside the species' range.
Invertebrates			
Conservancy fairy shrimp (<i>Branchinecta conservatio</i>)	E	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Kern primrose sphinx moth (<i>Euproserpinus euterpe</i>)	T	NE	Absent. Proposed Action is outside the species' range.
longhorn fairy shrimp (<i>Branchinecta longiantenna</i>)	E,X	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
valley elderberry longhorn beetle (<i>Desmocerus californicus</i> <i>dimorphus</i>)	T	NE	Possible. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4). Could occur along some conveyance facilities, but no construction would occur as part of the Proposed Action.
vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	T, X	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
vernal pool tadpole shrimp (<i>Lepidurus packardii</i>)	E, X	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Mammals			
Buena Vista Lake shrew (<i>Sorex ornatus relictus</i>)	E, X	NE	Possible. There is a record in part of the Proposed Action Area (KCWA Improvement District #4), but no land use change would occur as part of the Proposed Action.
fisher (<i>Martes pennanti</i>)	C	NE	Absent. Proposed Action is outside the species' range.
Fresno kangaroo rat (<i>Dipodomys nitratoides exilis</i>)	E, X	NE	Absent. Proposed Action is outside the species' range.
giant kangaroo rat (<i>Dipodomys ingens</i>)	E	NE	Absent. Proposed Action is outside the species' range.
San Joaquin kit fox (<i>Vulpes mactotis mutica</i>)	E	NE	Possible. The foxes can use agricultural lands for foraging, but they must have other habitat nearby that they can use for denning (Warrick et al. 2007). The Proposed Action would not do anything to affect agricultural lands as potential kit fox foraging habitat.
Sierra Nevada bighorn sheep (<i>Ovis canadensis californiana</i>)	E	NE	Absent. Proposed Action is outside the species' range.
Tipton kangaroo rat (<i>Dipodomys nitratoides nitratoides</i>)	E	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Plants			
Bakersfield cactus (<i>Opuntia treleasei</i>)	E	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
California jewelflower (<i>Caulanthus californicus</i>)	E	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Greene's tuctoria (<i>Tuctoria greenei</i>)	E	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.

<u>Species</u>	<u>Status</u> ¹	<u>Effects</u> ²	<u>Occurrence in the Proposed Action Area</u> ³
Hoover's spurge (<i>Chamaesyce hooveri</i>)	T, X	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Keck's checker-mallow (<i>Sidalcea keckii</i>)	E, X	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Kern mallow (<i>Eremalche kernensis</i>)	E	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Ramshaw sand-verbena (<i>Abronia alpina</i>)	C	NE	Absent. Proposed Action is outside the species' range.
San Joaquin adobe sunburst (<i>Pseudobahia peirsonii</i>)	T	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
San Joaquin Valley Orcutt grass (<i>Orcuttia inaequalis</i>)	T, X	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
San Joaquin woolly-threads (<i>Monolopia congdonii</i>)	E	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Springville clarkia (<i>Clarkia springvillensis</i>)	T	NE	Absent. Proposed Action is outside the species' range.
Reptiles			
Blunt-nosed leopard lizard (<i>Gambelia sila</i>)	E	NE	Absent. Does not occur in farmlands, lands developed to M&I use (KCWA Improvement District #4), or conveyance facilities.
Giant garter snake (<i>Thamnophis gigas</i>)	T	NE	Absent. The species no longer occurs in this part of the valley, and no land use change or construction would occur as part of the Proposed Action.
¹ Status= Status of federally protected species protected under federal Endangered Species Act. E: Listed as Endangered under the federal Endangered Species Act. NMFS: Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. T: Listed as Threatened under the federal Endangered Species Act. P: Proposed for listing or designation. X: Critical habitat designated under the federal Endangered Species Act. C: Candidate to become a proposed species. ² Effects = Endangered Species Act Effect determination NE: No Effect anticipated from the Proposed Action to federally listed species ³ Definition Of Occurrence Indicators Present: Species observed in the area. Absent: Species not recorded in study area and/or habitat requirements not met ⁴ CNDDDB = California Natural Diversity Database 2012			

3.5.2 Environmental Consequences

No Action

Under the No Action Alternative, ongoing farming activities and various maintenance activities (such as for canals) might continue to affect the Buena Vista Lake shrew, San Joaquin kit fox, and valley elderberry longhorn beetle. The other species in Table 3-4 do not occur in the Proposed Action area.

Proposed Action

As a result of the restrictions placed on the Proposed Action by the environmental commitments, there would be no effect on Federally listed species or critical habitat, or on birds protected by the Migratory Bird Treaty Act.

Cumulative Impacts

As the Proposed Action would not result in any direct or indirect impacts on these biological resources, it would not contribute cumulatively to any such impacts.

3.6 Socioeconomic Resources

3.6.1 Affected Environment

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

3.6.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not approve Warren Act contracts to convey and store non-CVP water in CVP facilities. Use of alternative supplies such as groundwater or alternative contracts could increase costs to the districts or individual farms. Demand for local labor and farm supplies would be reduced. Under the No Action Alternative, there could be temporary adverse impacts to socioeconomic resources due to potential fallowing of farmland. However, this could change with the hydrological conditions.

Proposed Action

Under the Proposed Action, participating districts could convey and store non-CVP water in CVP facilities to supplement their CVP water supply. The Warren Act contracts and exchange agreements would allow the non-CVP water to be distributed to sustain permanent crops. This could help maintain the local agricultural economy.

Cumulative Impacts

There would be no adverse cumulative impacts to socioeconomic resources as a result of the Proposed Action. The Proposed Action could result in a stronger local agricultural economy during the contracts' timeframe.

(This Page Intentionally Left Blank)

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 January 24, 2014 and February 24, 2014. One comment letter was received. The comments and Reclamation's responses may be found in Appendix A.

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 amendments enacted in 1946 require consultation with the Service and State fish and wildlife agencies "whenever the waters of any stream or other body of water are proposed or authorized to be impounded, diverted, the channel deepened, or the stream or other body of water otherwise controlled or modified for any purpose whatever, including navigation and drainage, by any department or agency of the United States, or by any public or private agency under Federal permit or license". Consultation is to be undertaken for the purpose of "preventing the loss of and damage to wildlife resources".

The Proposed Action does not involve any new impoundment or diversion of waters, channel deepening, or other control or modification of a stream or body of water as described in the statute. In addition, no construction or modification of water conveyance facilities are required for movement of this water. Consequently, Reclamation has determined that 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.

Reclamation has determined that the Proposed Action would not affect any Federally listed or proposed species or critical habitat. Therefore, no consultation is needed. The U.S. Fish and Wildlife Service (USFWS) was sent a copy of the EA and FONSI when they were released for public review.

Section 5 Preparers and Reviewers

Nicholas Kilb, Natural Resources Specialist, SCCAO
Ben Lawrence, Natural Resources Specialist, SCCAO
Rain Emerson, Natural Resources Specialist, SCCAO- Reviewer
Shauna McDonald, Wildlife Biologist, SCCAO
William E. Soule, M.A., Archaeologist, MP-153
Patricia Rivera, Native American Affairs Specialist, MP-400 – Indian Trust Assets
Michael C. S. Eacock, Natural Resources Specialist, SCCAO
Randy English, Supervisory Natural Resources Specialist, SCCAO – Reviewer

Section 6 Acronyms and Abbreviations

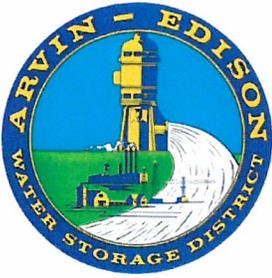
AEWSD	Arvin-Edison Water Storage District
af	acre-feet
cfs	cubic feet per second
CNDDB	California Natural Diversity Database
CVP	Central Valley Project
CVC	Cross-Valley Canal
DEID	Delano-Earlimart Irrigation District
Delta	Sacramento-San Joaquin River Delta
DFW	California Department of Fish and Wildlife
EA	Environmental Assessment
FKC	Friant-Kern Canal
FONSI	Finding of No Significant Impact
ID#4	Irrigation District #4
LSID	Lindsay-Strathmore Irrigation District
KCWA	Kern County Water Agency
KTWD	Kern-Tulare Water District
M&I	Municipal and Industrial
PEIS	Programmatic Environmental Impact Statement
Reclamation	United States Bureau of Reclamation
ROD	Record of Decision
SWP	State Water Project
TID	Tulare Irrigation District
USFWS	US Fish and Wildlife Service

Section 7 References

California Department of Fish and Wildlife (DFW). 2014. California Natural Diversity Database (CNDDDB), Government Version.

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

Appendix A Response to Comments



ARVIN-EDISON WATER STORAGE DISTRICT

February 24, 2014

Via Electronic Mail: (blawrence@usbr.gov)

Via Facsimile: (559-487-5397)

DIRECTORS

Edwin A. Camp
President
Jeffrey G. Giumarra
Vice President
John C. Moore
Secretary/Treasurer
Howard R. Frick
Ronald R. Lehr
Dennis B. Johnston
Charles Fanucchi
Donald Valpredo
Kevin E. Pascoe

Ben Lawrence
United States Department of the Interior
Bureau of Reclamation
1243 N Street
Fresno, CA 93721

Re: *Storage and Conveyance of Non-Project Water for Kern-Tulare Water District and Lindsay-Strathmore Irrigation District EA Comments*

STAFF

Steven C. Collup
Engineer-Manager
David A. Nixon
Assistant Manager
Jeevan S. Muhar
Staff Engineer
Christ P. Krauter
General Superintendent

Dear Mr. Lawrence:

Thank you for providing Arvin-Edison Water Storage District (AEWSD) the opportunity to comment on the Storage and Conveyance of Non-Project Water for Kern-Tulare Water District and Lindsay-Strathmore Irrigation District draft Environmental Assessment and Findings of No Significant Impact (EA/FONSI) regarding the proposed 30-year Warren Act Contract involving Non-Project water supplies (Project).

AEWSD is generally supportive of water management programs such as described in the EA/FONSI. We do however request clarification and/or additions to the final EA/FONSI on following points (**bold underline**).

Specific Reference to Article 18 of Repayment Contracts

AEWSD understands that Reclamation is referencing the Article 18 of each district's repayment contract. The pertinent contract provision has the following language:

"...Delivery of such non-project water in and through Project facilities shall not be allowed to the extent such deliveries do not...reduce the quantity or quality of water available to other Project contractors."

Please include the above language in Section 1.3.4 (Water Quality Standard).

"Floating" Concept

The draft EA states water left in storage would be allowed to "float" for the duration of the approval. "Float" is not a defined term nor is it in the repayment contract itself. In addition, as written, given the draft EA contemplates a 30-year approval; the district would be allowed to "float" water from year 1 into year 30. It appears this statement is an oversight by USBR as AEWSD and other long term contractors are not provided this same water management flexibility.

Reference to Water Quality Policy

The Water Quality Policy (WQP) in Appendix A was not attached to the draft EA/FONSI.

AEWSD 3

After each reference to the WQP the sentence should include language stating "...the **then current** WQP". AEWSD understands its Reclamation's intent to administer these 30-year programs with the "then current" standards, if appropriate, and not necessarily the present WQP version as they are subject to change "from time to time".

Finally, Tables 3-2 and 3-3 (Water Quality Monitoring Requirements) should be consistent for each different and require the same protocol, testing of constituents, and frequency. For example, LSID should include Title 22 and Bacteria and KTWD should include Electrical Conductivity, pH and turbidity.

General Comments

AEWSD 4

In addition to the above, various editorial suggestions and comments were provided to the contractors' administrative draft EA/FONSI on June 12, 2013. A copy of such is attached for your reference.

Thank you, and again we appreciate the opportunity to provide input into your Project. If you have questions or comments, please contact me.

Sincerely,



Steve Collup
Engineer-Manager

Enclosure

cc: Jeevan Muhar, Staff Engineer
Steve Dalke, Kern-Tulare Water District
Scott Edwards, Lindsay-Strathmore Irrigation District
Scott Taylor, USBR (Fresno)

AEWSD 1

Reclamation does not believe this level of contract detail is necessary for the environmental documentation.

AEWSD 2

The term “float” has been removed. The referenced text has been revised to more clearly describe the allowed storage time.

AEWSD 3

The referenced Appendix has been included in the final document. We apologize for the omission.

The document text has been updated to clarify that water quality determinations are to be made using standards in effect at the time of discharge.

The referenced tables have been updated to more accurately describe testing requirements and the responsible agencies.

AEWSD 4

Thank you for the suggested edits. The final document is marked with lines in the left margin where edits were adopted that are not minor or editorial.

Appendix B Policy for Accepting Non-Project Water into the Friant-Kern and Madera Canals: Water Quality Monitoring Requirements

Appendix C Cultural Resources Determination

From: [Soule, William E](#)
To: [Kilb, Nicholas D](#)
Cc: [BOR MPR Cultural Resources Section](#)
Subject: RE: Request for Determinations, EA-12-069 Storage and Conveyance of Non-Project Water for Kern-Tulare Water District and Lindsay-Strathmore Irrigation District
Date: Tuesday, December 04, 2012 8:23:09 AM
Attachments: [image001.png](#)
[image002.png](#)

Nick:

Re: 13-SCAO-041: Storage and Conveyance of Non-Project Water for Kern-Tulare Water District (KTWD) and Lindsay-Strathmore Irrigation District (LSID).

The proposed undertaking is the approval by Reclamation of requests by KTWD and LSID to each store, convey, divert, and exchange 30,000 acre-feet of water per year of non-CVP water in Friant and Cross-Valley Division facilities. This is the type of action that does not have the potential to cause effects on historic properties assuming that historic properties were present, pursuant to 36 CFR Part 800.3(a)(1).

The proposed undertaking is the replacement of existing 5-year Warren Act contracts for 10,000 acre-feet per year from 2009-2014 with new contracts for 30,000 acre-feet each (KTWD and LSID) per year. The Warren Act authorizes Reclamation to enter into contracts to impound, store, and convey non-CVP water when excess capacity is available in federal facilities. Reclamation will also approve the exchange of non-CVP water for CVP water in order to facilitate delivery. The approvals would be for varying lengths of time between the 2013 and 2042 Contract Years (March 1, 2013 - February 28, 2042).

There will be no land use change, new infrastructure, modification of existing infrastructure, or ground disturbing activities required for this action. This email is intended to convey the completion of the Section 106 process for this undertaking. Accordingly, I concur with the inclusion of a statement in Section 3.4 of EA-12-069 that this action has no potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1). Thank you for providing the opportunity to comment on this action.

Sincerely,

Bill

William E. Soule, M.A., Archaeologist
U.S. Bureau of Reclamation, Mid-Pacific Region
2800 Cottage Way, MP-153
Sacramento, CA 95825
Phone: 916-978-4694
Email: wsoule@usbr.gov

From: Kilb, Nicholas D
Sent: Monday, December 03, 2012 1:56 PM

To: BOR MPR Cultural Resources Section

Subject: Request for Determinations, EA-12-069 Storage and Conveyance of Non-Project Water for Kern-Tulare Water District and Lindsay-Strathmore Irrigation District

The subject line of my last email was incorrect. It should have been for EA-12-069 Storage and Conveyance of Non-Project Water for Kern-Tulare Water District and Lindsay-Strathmore Irrigation District.

Thanks,
Nick Kilb

From: Kilb, Nicholas D

Sent: Monday, December 03, 2012 1:37 PM

To: BOR MPR Cultural Resources Section; Rivera, Patricia L; Robbins, Eleanor J (Ellie); Williams, Mary D (Diane)

Subject: RE: Request for Determinations, CEC-12-083 Soil Vapor Testing for VOCs in Contra Costa Canal Access Road

Hi all,

Attached is a request for determinations. I've also attached a (rough) draft EA, with a project description and maps. If you have any questions or concerns, please feel free to contact me.

- Request Date: December 3, 2012
- Requesting Office: SCCAO
- Requestor: Nick Kilb
- Project Name: Storage and Conveyance of Non-Project Water for Kern-Tulare Water District and Lindsay-Strathmore Irrigation District
- Target Date for Completion: January 15, 2013
- Cost Authority: A1R-1752-9652-220-00-2-5
- Reclamation Point(s) of Contact: Nick Kilb
- Project Description/Reclamation's Role: see attached.
- Other Agencies Involved: Lindsay-Strathmore Irrigation District, Kern-Tulare Water District
- Level of NEPA Anticipated: EA
- Project Location: Lindsay-Strathmore Irrigation District, Kern-Tulare Water District, Friant-Kern Canal south of MP 68.65, Cross-Valley Canal – see attached EA for maps.

- Supplemental Information: See attached Admin Draft EA.

Thank You,
Nicholas (Nick) Kilb
Natural Resources Specialist, NEPA Team
Bureau of Reclamation

South-Central California Area Office
1243 "N" Street
Fresno, CA 93721-1813
559-487-5044
nkilb@usbr.gov

RECLAMATION
Managing Water in the West



Save a tree.
Please don't print this e-mail unless it's necessary.

Appendix D Indian Trust Assets Detemination

From: [Rivera, Patricia L](#)
To: [Kilb, Nicholas D](#)
Cc: [Robbins, Eleanor J \(Ellie\)](#)
Subject: RE: Request for Determinations, CEC-12-083 Soil Vapor Testing for VOCs in Contra Costa Canal Access Road--
Ellie this is admin
Date: Monday, December 03, 2012 1:52:44 PM
Attachments: [image003.png](#)

Nick,

I reviewed the proposed action to approve storage, conveyance, and/or diversion of non-CVP water in Federal facilities when excess capacity exists, according to Article 18 of the Districts' repayment contracts. Reclamation would also approve exchange of the Districts' non-CVP water for CVP water, in order to facilitate delivery. Approvals would be for varying lengths of time between the 2013 through 2042 Contract Years (March 1, 2013 - February 28, 2043).

[Lindsay-Strathmore Irrigation District](#)

Reclamation proposes to approve storage, conveyance, and/or diversion of LSID's non-CVP water in Federal facilities when excess capacity exists, according to Article 18 of LSID's Friant Division repayment contract. LSID's non-CVP water originates in the Kaweah River, passes through Bravo Lake, and enters the Upper Wutchumna Ditch. The water would be pumped from the Wutchumna Ditch into the FKC, and ultimately into LSID's distribution system and service area. Any amount of Wutchumna water left in storage in the FKC would be allowed to "float" for the duration of the approval, when Reclamation determines that excess capacity exists. Water quality requirements would need to be satisfied and maintained for as long as the Wutchumna water is stored and conveyed in the FKC. LSID would then be able to withdraw any remaining stored Wutchumna water from the FKC as needed.

[Kern-Tulare Water District](#)

Reclamation proposes to approve storage, conveyance, and/or diversion of KTWD's non-CVP water in Federal facilities when excess capacity exists, per the terms of KTWD's partial assignment of the Southern San Joaquin Municipal Utility District Friant Division repayment contract. KTWD's non-CVP supplies include Kern River and State Water Project (SWP) supplies. These two sources of non-CVP water would be introduced into the FKC from: the CVC through existing siphons; the CVC through the CVC/FKC Intertie; or the Lerdo Canal via North Kern Water Storage District's existing lateral. Once introduced into the FKC, the non-CVP water could be stored, delivered directly to KTWD's service area, or delivered to KTWD through an intercept exchange for CVP water from the FKC. Any amount of KTWD's non-CVP water left in storage in the FKC would be allowed to "float" for the duration of the approval, when Reclamation determines that excess capacity exists. Water quality requirements would need to be satisfied and maintained for as long as the non-CVP water is stored and conveyed in the FKC. KTWD would then be able to withdraw any of their remaining stored non-CVP water from the FKC as needed. To physically deliver the water all the way to KTWD would require pumping over three check structures: the Shafter Check, the Poso Creek Check, and the Lake Woollomes Check. Alternatively, an intercept exchange can usually be made with Arvin-Edison Water Storage District (AEWSD) which requires no additional lifts. When an intercept exchange with AEWSD is not available, it may also be possible to pump the water over just one check (Shafter Check), and then exchange with Shafter-Wasco Irrigation District (SWID). Possible

intermediaries needed to facilitate these exchanges may include the North Kern Water Storage District and Kern County Water Agency Improvement District No. 4 .

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

Patricia Rivera
Native American Affairs Program Manager
Bureau of Reclamation
Mid-Pacific Region
Sacramento, California 95825
(916) 978-5194 (Office)
(916) 978-5290 (Fax)

privera@usbr.gov
RECLAMATION
Managing Water in the West