RECLAMATION

Managing Water in the West

Final Environmental Assessment

Reclamation Approvals Associated with Harris Farms' and Shows Family Farms' Multiyear Banking and Transfer Program

EA-18-004

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

June 2018

Mission Statements

The Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, and affiliated 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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Section 1 Introduction

The Bureau of Reclamation (Reclamation) provided the public with an opportunity to comment on the Draft Finding of No Significant Impact (FONSI) and Draft Environmental Assessment (EA) between February 15, 2018 and March 2, 2018. One comment letter was received. The comment letter and Reclamation's response to comments are included in Appendix A. Changes between this Final EA and the Draft EA, which are not minor editorial changes, are indicated by vertical lines in the left margin of this document.

1.1 Background

Harris Farms, Inc. (Harris) and Show Family Farms, LP (Shows) farm lands in various water districts in the San Joaquin Valley, including the following districts within the Central Valley Project (CVP) place-of-use: San Luis Water District (San Luis), Semitropic Water Storage District (Semitropic), and Westlands Water District (Westlands) (Figure 1)[1].

In 2013, Harris entered into a long-term water banking agreement (through December 31, 2035) with Semitropic in which Harris became a banking partner with 10,500 acre-feet (AF) of guaranteed storage capacity in the Semitropic water bank and up to 3,500 AF of firm recovery and recharge capacity in a given year (Harris Farms and Semitropic 2013). In 2014, Shows entered into a long-term water banking agreement (through December 31, 2035) with Semitropic in which Shows became a banking partner with 300 AF of guaranteed storage capacity in the Semitropic water bank and up to 100 AF of firm recovery and recharge capacity in a given year (Shows and Semitropic 2014).

Historically, Reclamation has annually approved transfers of CVP water supplies from Friant Division CVP contractors and/or South-of-Delta CVP contractors to Semitropic banking partners. In order to better manage available and future water supplies, Harris and Shows have requested long-term approvals of transfers of available CVP water from Reclamation under their respective proposed multi-year banking and transfer program.

1.2 Need for the Proposed Action

Harris and Shows need to maximize available water supplies due to fluctuating hydrological years in order to have a reliable water supply to sustain existing agricultural operations. The proposed multi-year banking and transfer program would allow banking of available water

[1] Harris and Shows are not affiliated, and nothing in this Environmental Assessment should be interpreted as suggesting or creating a partnership or joint venture between them. Their respective actions are included in a single Environmental Assessment for convenience only and because those action are on substantially the same terms, but each of Harris and Shows will act independently of the other in accordance with their respective agreements and water supplies.

supplies during wet hydrological years, such as this one, for use during dry years, such as the recent severe drought experienced throughout California. The purpose of the Proposed Action is to provide Harris and Shows with operational flexibility and facilitate better management of available water supplies to meet existing water supply needs.

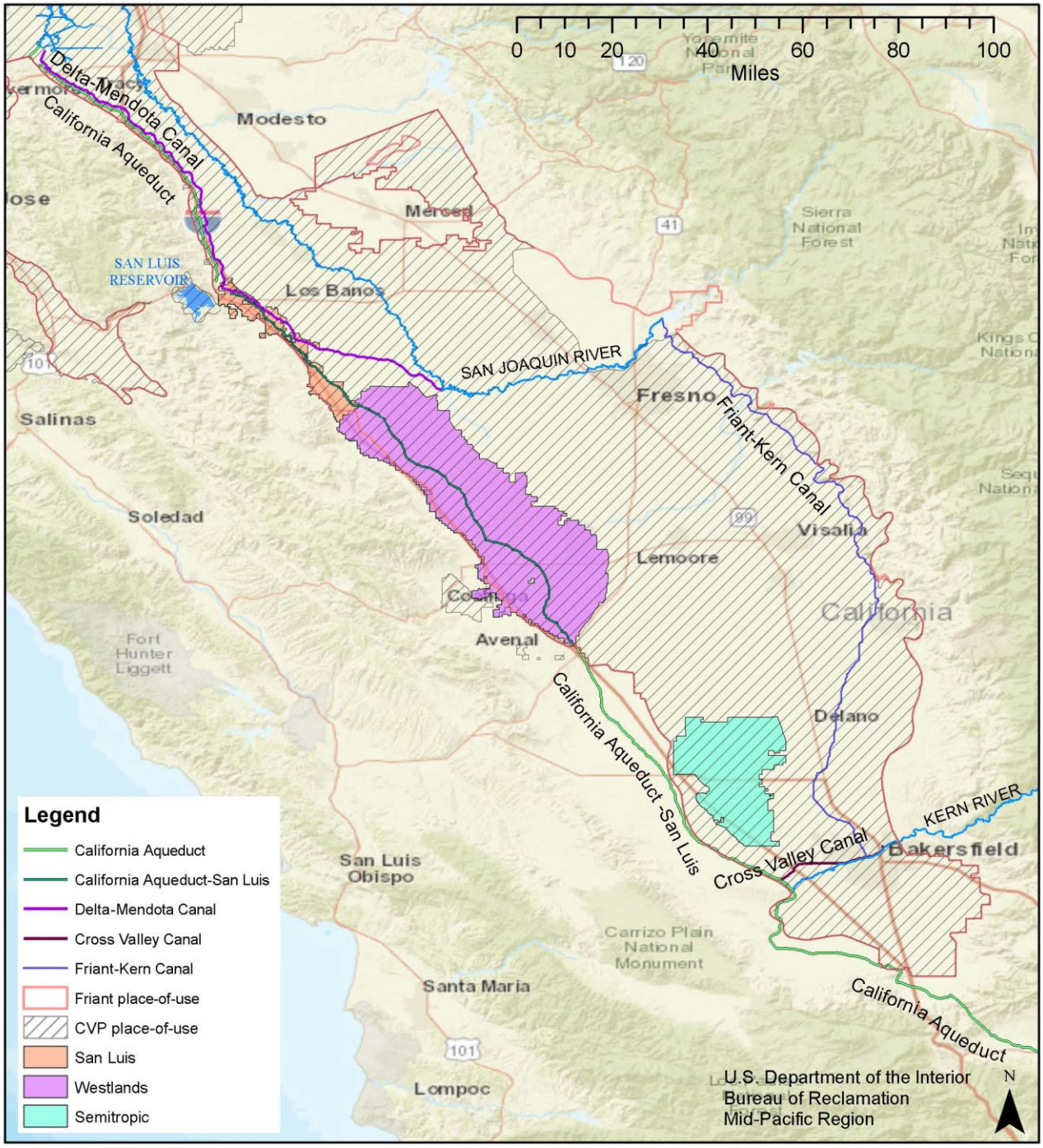

Figure 1 Water Districts Where Harris and Shows are located within the CVP Place-of-Use

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 not approve a series of transfers of up to 15,000 AF per year of available CVP water supplies over a 9-year period. Instead, Harris and Shows would need to request separate approvals from Reclamation as each water management action opportunity becomes available. Each action would require separate environmental review and approval from Reclamation. This process would take time that could impact their ability to maximize available water supplies to sustain existing agricultural operations during dry years.

2.2 Proposed Action

Under the Proposed Action, Reclamation would approve a series of transfers of up to 15,000 AF per year of available CVP water supplies over a 9-year period. Transfers of CVP water would be from south-of-Delta CVP contractors to Harris and Shows either for direct agricultural use on their lands located within Westlands, San Luis, and Semitropic or for banking in Semitropic and/or the Kern Water Bank for later use on their lands within those same districts.

CVP water supplies that may be transferred, exchanged, and/or banked, subject to Reclamation's approval, under the Proposed Action include:

- Friant Division CVP Class 1 and Class 2 water[2], Uncontrolled Season Class 1 and Class 2 water, Section 215 water (un-storable flood flows from Millerton), and San Joaquin River Restoration Program Unreleased Restoration Flows (collectively, "Friant CVP water").

- South-of-Delta CVP agricultural water, Section 215 water (un-storable flood flows from the Delta), San Joaquin River Restoration Program Recaptured/Recirculated Friant CVP water, or any other transferrable CVP water made available from any South-of-Delta CVP contractor (collectively, "South-of-Delta CVP water").

[2] Friant Division 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 water is considered as the next approximate 1,400,000 AF supply of non-storable CVP water which becomes available in addition to the Class 1 supply and, due to the uncertainty of its availability, is considered to be undependable in character and is furnished only if and when it can be made available as determined by Reclamation per Contract Year.

- Cross Valley South-of-Delta CVP water supplies exchanged for Friant Division CVP water (Article 5 exchanges) or any other transferrable CVP water made available from any Cross Valley CVP contractor.

Harris and Shows anticipate they would acquire and store up to 15,000 AF of CVP water in Semitropic and/or the Kern Water Bank in any 12-month period. Similarly, Harris and Shows anticipate they may recover up to 5,000 AF from Semitropic and/or the Kern Water Bank via Semitropic in any 12-month period pursuant to their banking agreements with Semitropic, less the 10 percent losses described below. This water would be available for return to Harris and Shows in Westlands, San Luis, and Semitropic.

CVP contractors that may transfer and/or exchange their available CVP water supplies amongst the participants of the exchange programs are listed below by CVP Division.

Table 1 CVP Contractors that may Transfer and/or "Exchange" CVP water

Friant Division CVP Contractors	
Arvin-Edison Water Storage District	Chowchilla Water District
City of Fresno	City of Lindsay
City of Orange Cove	County of Madera
Delano-Earlimart Irrigation District	Exeter Irrigation District
Fresno County Waterworks No. 18	Fresno Irrigation District
Garfield Irrigation District	Gravelly Ford Water District
Hills Valley Irrigation District	International Water District
Ivanhoe Irrigation District	Kaweah Delta Water Conservation District[1]
Kern-Tulare Water District	Lewis Creek Water District
Lindmore Irrigation District	Lindsay-Strathmore Irrigation District
Lower Tule River Irrigation District	Madera Irrigation District
Orange Cove Irrigation District	Porterville Irrigation District
Saucelito Irrigation District	Shafter-Wasco Irrigation District
Southern San Joaquin Municipal Utility District	Stone Corral Irrigation District
Tea Pot Dome Water District	Terra Bella Irrigation District
Tri-Valley Water District	Tulare Irrigation District
Cross Valley CVP Contractors	
County of Fresno[2]	County of Tulare[3]
Hills Valley Irrigation District	Kern-Tulare Water District[4]
Lower Tule River Irrigation District	Pixley Irrigation District
Tri-Valley water District	
Delta Division CVP Contractors	
Banta Carbona Irrigation District	Byron-Bethany Irrigation District
City of Tracy	Coelho Family Trust
Del Puerto Water District	Eagle Field Water District
Fresno Slough Water District	James Irrigation District
Laguna Water District	Mercy Springs Water District
Oro Loma Water District	Pajaro Valley Water Management Agency
Panoche Water District	Patterson Water District
Reclamation District No. 1606	San Luis Water District
Tranquillity Irrigation District	Tranquillity Public Utility District
West Stanislaus Irrigation District	The West Side Irrigation District
San Felipe Division CVP Contractors	
San Benito County Water District	Santa Clara Valley Water District
San Luis Unit CVP Contractors	
City of Avenal	City of Coalinga
City of Huron	Panoche Water District

Pacheco Water District	San Luis Water District
Westlands Water District	
San Joaquin River Exchange Contractors	
Central California Irrigation District	Firebaugh Canal Company
Columbia Canal Company	San Luis Canal Company

[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]Including its subcontractors: Fresno County Service Areas #5, #10, and #14 and Fresno County Water Works #34.
[3]Including its subcontractors: Alpaugh Irrigation District, Atwell Island Water District, City of Lindsay, Smallwood Vineyards, Hills Valley Irrigation District, Saucelito Irrigation District, Stone Corral Irrigation District, Strathmore Public Utilities District, Styrotek, Inc., and City of Visalia.
[4]Previously combined with Rag Gulch Water District

2.2.1 Required Conveyance

Conveyance of water under the Proposed Action would occur through existing facilities. No construction or modification of facilities would be needed in order to complete the Proposed Action. Depending upon the source of the water, one of several delivery paths would be required to effectuate the transfers and/or exchanges as well as return of banked water. The most commonly expected water sources and related conveyance methodologies are described below.

CVP Water Conveyed to Semitropic Water Storage District

CVP water acquired by Harris and Shows could be delivered to Semitropic in the following ways as shown in Figure 2:

- Friant CVP water could be delivered to North Kern Water Storage District (North Kern) or Shafter-Wasco Irrigation District (Shafter-Wasco) directly from their turnouts off the Friant-Kern Canal and conveyed via their internal distribution systems to Semitropic. The Friant CVP water would either be directly used for agricultural purposes on Harris and Shows lands or banked in Semitropic for later recovery and use.

- Friant CVP water could be delivered off the Friant-Kern Canal to Poso Creek Wasteway and conveyed in Poso Creek, less conveyance losses in the creek as applicable, to the Pond-Poso Canal. From the Pond-Poso Canal, Friant CVP water would enter Semitropic for banking and/or delivered for irrigation purposes.

- South-of-Delta CVP water, including Cross Valley Contractors South-of-Delta CVP water exchanged between districts for Friant CVP water, could be delivered to Semitropic directly from its turnouts off the California Aqueduct. The South-of-Delta CVP water would either be directly used for agricultural purposes on Harris and Shows lands or banked in Semitropic for later recovery and use.

- Cross Valley Contractors South-of-Delta CVP water that is exchanged between districts for Friant CVP water could be conveyed to the California Aqueduct via the Friant-Kern Canal and the Cross Valley Canal for delivery to Semitropic. The Friant CVP water would either be directly used for agricultural purposes on Harris and Shows lands or banked in Semitropic for later recovery and use.

- San Joaquin River Restoration Program Recaptured/Recirculated Friant CVP water could be delivered directly to Semitropic from the San Luis Reservoir via the California

Aqueduct. The Recaptured/Recirculated Friant CVP water would either be directly used for agricultural purposes on Harris and Shows lands or banked in Semitropic for later recovery and use.

- If other Semitropic banking partners request a return of previously banked water from Semitropic, and Delano-Earlimart Irrigation District (Delano-Earlimart), Kern-Tulare Water District (Kern-Tulare), and/or Shafter-Wasco have CVP water available, the banking partner could take delivery of the Friant CVP water, and Delano-Earlimart, Kern-Tulare, and/or Shafter-Wasco would transfer a like amount of previously banked water in Semitropic to Harris and Shows for later recovery from the bank.

CVP water delivered to Semitropic for banking would require either the use of Semitropic's spreading facilities, or Semitropic's in lieu banking program (i.e., any water delivered to non-Harris and Shows lands for existing agricultural purposes would be credited to Harris and Shows for later recovery from Semitropic). Ten percent of all CVP water banked in Semitropic would remain within the bank for assumed losses. Semitropic, as a member of the Kern Water Bank, may also bank a portion of Harris and Shows transferred water in Kern Water Bank on their behalf.

Direct Recovery of Banked CVP Water in Semitropic Water Storage District

Direct return of previously banked CVP water could be extracted and used for agricultural purposes on Harris and Shows lands located in Semitropic.

Recovery of Banked CVP Water via "Exchange"

As there are currently no facilities that could reverse pump water up the California Aqueduct, return of previously banked CVP water to the districts located upstream of Kern Water Bank or Semitropic would occur via exchange among districts. Should facilities be installed during the course of the Proposed Action, it could be possible that previously banked CVP water would move up the California Aqueduct for direct delivery rather than exchange.

The ability to transfer previously banked CVP water can be limited by a number of factors at any given time, including State Water Project (SWP) priorities (i.e. pumping capacity, operational constraints, allocated water deliveries etc.), the exchange participants' priorities (including demand and delivery capacity), and CVP priorities. Therefore, the exchange of CVP water would likely be at the discretion of mutually agreeable terms between Harris and Shows, the exchange participant, and the applicable recipient district. Further, such exchanges may be subject to concurrence from Kern County Water Agency, approval by the California Department of Water Resources (DWR), and subject to scheduling approval by Reclamation.

Generally, Semitropic would serve as the exchange participant; however, other exchange participants, such as CVP or SWP contractors, may participate as well. Exchanges would be accomplished by having an exchange participant take delivery of previously banked CVP water for use in their service area, in exchange for an agreed amount of the exchange participant's water held in San Luis Reservoir. The exchange participant's water would then either be directly delivered to the recipient districts located downstream of San Luis Reservoir or held in San Luis Reservoir for later delivery.

Any use of State facilities will require coordination and approval by DWR. Copies of approvals will be provided to Reclamation.

Any use of the Cross Valley Canal will require coordination and approval by the Kern County Water Agency. All approvals will be provided to Reclamation.

2.2.1 Environmental Commitments

All participants in the Proposed Action shall implement the environmental protection measures included in Table 2 to avoid environmental consequences associated with the Proposed Action.

Table 2 Environmental Protection Measures

Resource	Environmental Commitments
Biological Resources	The water would not be used to place untilled or native lands into production, or to convert lands that have been fallowed or untilled for three or more years.
Biological Resources	The Proposed Action cannot alter the flow regime of natural waterways or natural watercourses such as rivers, streams, creeks, ponds, pools, wetlands, etc., so as to have a detrimental effect on fish or wildlife or their habitats.
Water Resources	Return of banked water is required to meet Reclamation's then current water quality requirements.
Water Resources	The water would be used for beneficial purposes and in accordance with Federal Reclamation law and guidelines as applicable.
Water Resources	No CVP water would be used outside of the authorized Place of Use without prior approval from the State Water Resources Control Board and notification to Reclamation.
Various Resources	No land conversions would occur as a result of the Proposed Action.

Environmental consequences for resource areas assume the measures specified would be fully implemented.

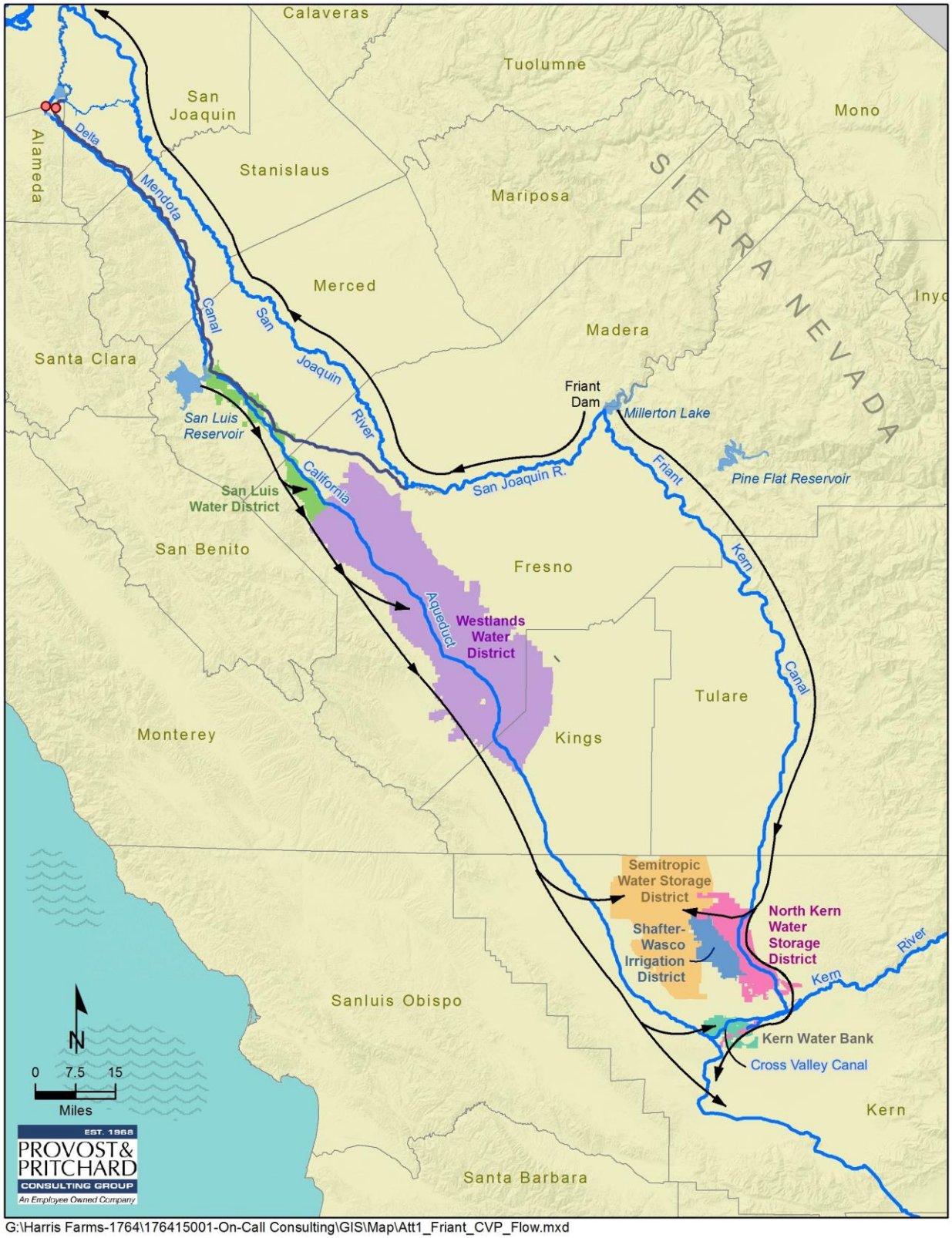

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Figure 2 Generalized Flow Path of CVP Water under the Proposed Action

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 Resources Eliminated from Further Analysis

Reclamation analyzed the affected environment and determined that the Proposed Action did not have the potential to cause direct, indirect, or cumulative adverse effects to the resources listed in Table 3.

Table 3 Resources Eliminated from Further Analysis

Resource	Reason Eliminated
Air Quality	The Proposed Action does not include construction of new facilities or modification to existing facilities. While pumping would be necessary to deliver CVP water, no additional electrical production beyond baseline conditions would occur. No impacts to air quality would occur and a determination of general conformity under the Clean Air Act is not required.
Cultural Resources	The Proposed Action would facilitate the flow of water through existing facilities to existing users. As no construction or modification of facilities would be needed in order to complete the Proposed Action, Reclamation has determined that these activities have no potential to cause effects to historic properties pursuant to 36 CFR Part 800.3(a)(1). See Appendix A for Reclamation's determination.
Environmental Justice	The Proposed Action would not cause dislocation, changes in employment, or increase flood, drought, or disease nor would it disproportionately impact economically disadvantaged or minority populations.
Global Climate	The Proposed Action does not include construction of new facilities or modification to existing facilities. While pumping would be necessary to deliver CVP water, no additional electrical production beyond baseline conditions would occur. As such, there would be no additional impacts to global climate change. Global climate change is expected to have some effect on the snow pack of the Sierra Nevada and the runoff regime. It is anticipated that climate change would result in more short-duration high-rainfall events and less snowpack runoff in the winter and early spring months by 2030 compared to recent historical conditions (Reclamation 2016c). However, the effects of this are long-term and are not expected to impact CVP operations within the nine-year window of this action. Further, CVP water allocations are made dependent on hydrologic conditions and environmental requirements. Since Reclamation operations and allocations are flexible, any changes in hydrologic conditions due to global climate change would be addressed within Reclamation's operation flexibility.
Indian Sacred Sites	The Proposed Action would not limit access to ceremonial use of Indian Sacred Sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites. Therefore, there would be no impacts to Indian Sacred Sites as a result of the Proposed Action.
Indian Trust Assets	The Proposed Action would not impact Indian Trust Assets as there are none in the Proposed Action area.

3.2 Biological Resources

3.2.1 Affected Environment

Reclamation requested official species lists for the Proposed Action Area from the U.S. Fish and Wildlife Service (Service) Sacramento, Bay-Delta, and Ventura offices on February 2, 2018 by accessing the Service's website: https://ecos.fws.gov/ipac/ (Consultation Codes: 08ESMF00-2018-SLI-1060, 08FBDT00-2018-SLI-0116, and 08EVEN00-2018-SLI-0259). Reclamation further queried the California Department of Fish and Wildlife, California Natural Diversity Database (CNDDB) for records of protected species near the Proposed Action Area (CNDDB 2018). This information, in addition to other information within Reclamation's files was combined to create the following list (Table 4).

Table 4 Federally Listed Threatened and Endangered Species

Species	**Status[1]**	**Effects[2]**	**Potential to occur and summary basis for ESA determination[3]**
Amphibians			
California red-legged frog *Rana draytonii*	T, X	NE	**Present.** There are CNDDB[4] records of this species in the Proposed Action Area and Designated Critical Habitat for this species is present within the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
California tiger salamander Central California DPS[5] *Ambystoma californiense*	T, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area and Designated Critical Habitat for this species is present within the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Santa Cruz long-toed salamander *Ambystoma macrodactylum croceum*	E	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Birds			
California clapper rail *Rallus longirostris obsoletus*	E	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
California condor *Gymnogyps californianus*	E, X	NE	**Absent.** This species, and designated Critical Habitat for this species, do not occur within the Proposed Action Area. There would be *No Effect* to this species or its designated Critical Habitat.

Species	Status[1]	Effects[2]	Potential to occur and summary basis for ESA determination[3]
California least tern *Sterna antillarum browni*	E	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Least Bell's vireo *Vireo bellii pusillus*	E, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area; however there is no designated Critical Habitat for this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species. There would be *No Effect* to this species or its designated Critical Habitat.
Marbled murrelet *Brachyramphus marmoratus*	T, X	NE	**Present.** There are records of this species within the Proposed Action Area, but there is no designated Critical Habitat for this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species. There would be *No Effect* to this species or its designated Critical Habitat.
Southwestern willow flycatcher *Empidonax traillii extimus*	E, X	NE	**Unlikely.** There are no records of this species in or near the Proposed Action Area, and there is no designated Critical Habitat for this species within the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species. There would be *No Effect* to this species or its designated Critical Habitat.
Western snowy plover *Charadrius alexandrinus nivosus*	T, X	NE	**Present.** There are CNDDB records of this species in and near the Proposed Action Area, and designated Critical Habitat for this species is present within the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Yellow-billed cuckoo *Coccyzus americanus*	T, PX	NE	**Unlikely.** This species may have been extirpated from the Proposed Action Area. There is no Designated or Proposed Critical Habitat for this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species. There would be *No Effect* to this species or its proposed Critical Habitat.
Crustaceans			
Conservancy fairy shrimp *Branchinecta conservatio*	E, X	NE	**Possible.** There are CNDDB records of this species near the Proposed Action Area. There is no designated Critical Habitat for this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable vernal pool habitat for this species. There would be *No Effect* to this species or its designated Critical Habitat.
Longhorn fairy shrimp *Branchinecta longiantenna*	E,X	NE	**Possible.** There are CNDDB records of this species near the Proposed Action Area. There is no designated Critical Habitat for this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable vernal pool habitat for this species. There would be *No Effect* to this species or its designated Critical Habitat.

Species	Status[1]	Effects[2]	Potential to occur and summary basis for ESA determination[3]
Vernal pool fairy shrimp *Branchinecta lynchi*	T, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area and designated Critical Habitat for this species is present in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable vernal pool habitat for this species. There would be *No Effect* to this species or its designated Critical Habitat.
Vernal pool tadpole shrimp *Lepidurus packardi*	E, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area and designated Critical Habitat for this species is present in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable vernal pool habitat for this species. There would be *No Effect* to this species or its designated Critical Habitat.
Fish			
Delta smelt *Hypomesus transpacificus*	T, X	NE	**Absent.** This species does not occur in the Proposed Action Area. Designated Critical Habitat for this species overlaps the Proposed Action Area; however, the primary constituent elements of the Critical Habitat are not present within the Proposed Action Area. There would be *No Effect* to this species or its designated Critical Habitat.
Steelhead Northern California DPS[5] *Oncorhynchus mykiss*	T, X	NE	**Absent.** This species does not occur in the Proposed Action Area. Designated Critical Habitat for this species overlaps the Proposed Action Area; however, the primary constituent elements of the Critical Habitat are not present within the Proposed Action Area. There would be *No Effect* to this species or its designated Critical Habitat.
Tidewater goby *Eucyclogobius newberryi*	E, X	NE	**Absent.** This species does not occur in waterways within the Proposed Action Area and designated Critical Habitat for this species is not present within waterways included in the Proposed Action Area. There would be *No Effect* to this species or its designated Critical Habitat.
Insects			
Bay checkerspot butterfly *Euphydryas editha bayensis*	T, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area and designated Critical Habitat for this species is present within the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Ohlone tiger beetle *Cicindela ohlone*	E	NE	**Unlikely.** There are CNDDB records of this species near the Proposed Action Area; however suitable habitat for this species is lacking in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
San Bruno elfin butterfly *Callophrys mossii bayensis*	E	NE	**Absent.** This species does not occur within the Proposed Action Area. There would be *No Effect* to this species.

Species	Status[1]	Effects[2]	Potential to occur and summary basis for ESA determination[3]
Valley elderberry longhorn beetle *Desmocerus californicus dimorphus*	T, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area; however, there is no designated Critical Habitat for this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Zayante band-winged grasshopper *Trimerotropis infantilis*	E, X	NE	**Absent.** This species, and designated Critical Habitat for this species, do not occur within the Proposed Action Area. There would be *No Effect* to this species or its designated Critical Habitat.
Mammals			
Buena Vista Lake ornate shrew *Sorex ornatus relictus*	E, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area, but no designated Critical Habitat for this species is present in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Fresno kangaroo rat *Dipodomys nitratoides exilis*	E, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area, but no designated Critical Habitat for this species is present in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Giant kangaroo rat *Dipodomys ingens*	E	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Riparian brush rabbit *Sylvilagus bachmani riparius*	E	NE	**Unlikely.** There are CNDDB records of this species near the Proposed Action Area; however suitable habitat for this species is lacking the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Riparian woodrat *Neotoma fuscipes riparia*	E	NE	**Unlikely.** There are CNDDB records of this species near the Proposed Action Area; however suitable habitat for this species is lacking the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Salt marsh harvest mouse *Reithrodontomys raviventris*	E	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.

Species	Status[1]	Effects[2]	Potential to occur and summary basis for ESA determination[3]
San Joaquin kit fox *Vulpes macrotis mutica*	E	NE	**Present.** There are multiple CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Tipton kangaroo rat *Dipodomys nitratoides nitratoides*	E	NE	**Present.** There are multiple CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Southern sea otter *Enhydra lutris nereis*	T	NE	**Absent.** This species does not occur within the Proposed Action Area. There would be *No Effect* to this species.
Plants			
Antioch dunes evening-primrose *Oenothera deltoids* ssp. *howellii*	E, X	NE	**Absent.** This species, and designated Critical Habitat for this species, do not occur within the Proposed Action Area. There would be *No Effect* to this species or its designated Critical Habitat.
Bakersfield cactus *Opuntia treleasei*	E	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Ben Lomond spineflower *Chorizanthe pungens* var. *hartwegiana*	E	NE	**Absent.** This species does not occur within the Proposed Action Area. There would be *No Effect* to this species.
Ben Lomond wallflower *Erysimum teretifolium*	E	NE	**Absent.** This species does not occur within the Proposed Action Area. There would be *No Effect* to this species.
California jewelflower *Caulanthus californicus*	E	NE	**Possible.** This species may have been extirpated from the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
California seablite *Suaeda californica*	E	NE	**Absent.** This species does not occur within the Proposed Action Area. There would be *No Effect* to this species.
Colusa grass *Neostapfia colusana*	T, X	NE	**Absent.** This species, and designated Critical Habitat for this species, do not occur within the Proposed Action Area. There would be *No Effect* to this species or its designated Critical Habitat.
Contra Costa goldfields *Lasthenia conjugens*	E, X	NE	**Possible.** There are records of this species near the Proposed Action Area, and designated Critical Habitat for this species is present within the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Coyote ceanothus *Ceanothus ferrisae*	E	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect*

Species	Status[1]	Effects[2]	Potential to occur and summary basis for ESA determination[3]
			to this species.
Fleshy owl's clover *Castilleja campestris* ssp. *succulenta*	E, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area and designated Critical Habitat for this species is present in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Fountain thistle *Cirsium fontinale* var. *fontinale*	E	NE	**Absent.** This species does not occur within the Proposed Action Area. There would be *No Effect* to this species.
Greene's Tuctoria *Tuctoria greenei*	E, X	NE	**Possible.** This species may have been extirpated from the Proposed Action Area, but designated Critical Habitat for this species is present in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Hairy Orcutt grass *Orcuttia pilosa*	E, X	NE	**Possible.** There are CNDDB records of this species near the Proposed Action Area, and designated Critical Habitat for this species is present in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Hartweg's golden sunburst *Pseudobahia bahifolia*	E	NE	**Possible.** There are CNDDB records of this species near the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Hoover's spurge *Chamaesyce hooveri*	T, X	NE	**Possible.** There are CNDDB records of this species near the Proposed Action Area, and designated Critical Habitat for this species overlaps the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Keck's Checker-mallow *Sidalcea keckii*	E, X	NE	**Absent.** This species does not occur in the Proposed Action Area, and designated Critical Habitat for this species is not present in the Proposed Action Area. There would be *No Effect* to this species or its Critical Habitat.
Kern mallow *Eremalche kernensis*	E	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.

Species	Status[1]	Effects[2]	Potential to occur and summary basis for ESA determination[3]
Large-flowered fiddleneck *Amsinckia grandiflora*	E, X	NE	**Absent.** This species does not occur in the Proposed Action Area, and designated Critical Habitat for this species is not present in the Proposed Action Area. There would be *No Effect* to this species or its Critical Habitat.
Marin dwarf-flax *Hesperolinon congestum*	T	NE	**Absent.** This species does not occur within the Proposed Action Area. There would be *No Effect* to this species.
Marsh sandwort *Arenaria paludicola*	E	NE	**Absent.** This species does not occur within the Proposed Action Area. There would be *No Effect* to this species.
Menzies' wallflower *Erysimum menziesii*	E	NE	**Absent.** This species does not occur within the Proposed Action Area. There would be *No Effect* to this species.
Metcalf canyon jewelflower *Streptanthus albidus* ssp. *albidus*	E	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Monterey gilia *Gilia tenuiflora* ssp. *Arenaria*	E	NE	**Present.** There is a CNDDB record of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Monterey spineflower *Chorizanthe pungens* var. *pungens*	T, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area and designated Critical Habitat for this species is present in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Palmate-bracted bird's beak *Cordylanthus palmatus*	E	NE	**Absent.** This species does not occur in the Proposed Action Area. There would be *No Effect* to this species.
Robust spineflower *Chorizanthe robusta* var. *robusta*	E, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area and designated Critical Habitat for this species is present in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
San Benito evening-primrose *Camissonia benitensis*	T	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
San Joaquin Adobe sunburst *Pseudobahia peirsonii*	T	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.

Species	Status[1]	Effects[2]	Potential to occur and summary basis for ESA determination[3]
San Joaquin Orcutt grass *Orcuttia inaequalis*	T, X	NE	**Possible.** There are CNDDB records of this species near the Proposed Action Area, and designated Critical Habitat for this species is present within the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
San Joaquin wooly-threads *Monolopia congdonii*	E	NE	**Possible.** This species may have been extirpated from the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
San Mateo thornmint *Acanthomintha obovata* ssp. *duttonii*	E	NE	**Absent.** This species does not occur in the Proposed Action Area. There would be *No Effect* to this species.
San Mateo woolly sunflower *Eriophyllum latilobum*	E	NE	**Absent.** This species does not occur in the Proposed Action Area. There would be *No Effect* to this species.
Santa Clara Valley dudleya *Dudleya setchellii*	E	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Santa Cruz cypress *Cupressus abramsiana*	T	NE	**Absent.** This species does not occur in the Proposed Action Area. There would be *No Effect* to this species.
Santa Cruz tarplant *Holocarpha macradenia*	T, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area and designated Critical Habitat for this species is present in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Scotts Valley polygonum *Polygonum hickmanii*	E, X	NE	**Absent.** This species does not occur in the Proposed Action Area, and designated Critical Habitat for this species is not present in the Proposed Action Area. There would be *No Effect* to this species or its designated Critical Habitat.
Scotts Valley spineflower *Chorizanthe robusta* var. *hartwegii*	E, X	NE	**Absent.** This species does not occur in the Proposed Action Area, and designated Critical Habitat for this species is not present in the Proposed Action Area. There would be *No Effect* to this species or its designated Critical Habitat.
Showy Indian clover *Trifolium amoenum*	E	NE	**Absent.** This species does not occur in the Proposed Action Area, and designated Critical Habitat for this species is not present in the Proposed Action Area. There would be *No Effect* to this species or its designated Critical Habitat.
Springville Clarkia *Clarkia springvillensis*	T	NE	**Absent.** This species does not occur in the Proposed Action Area. There would be *No Effect* to this species.

Species	Status[1]	Effects[2]	Potential to occur and summary basis for ESA determination[3]
Tiburon paintbrush *Castilleja affinis* ssp. *neglecta*	E	NE	**Present.** There is a CNDDB record of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Yadon's piperia *Piperia yadonii*	E, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area and designated Critical Habitat for this species is present in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Reptiles			
Alameda whipsnake *Masticophis lateralis euryxanthus*	T, X	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area and designated Critical Habitat for this species is present in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species or its designated Critical Habitat.
Blunt-nosed leopard lizard *Gambelia silus*	E	NE	**Present.** There are multiple CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Giant garter snake *Thamnophis gigas*	T	NE	**Present.** There are CNDDB records of this species in the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.
Green sea turtle East Pacific DPS[5] *Chelonia mydas*	T	NE	**Absent.** This species does not occur within the Proposed Action Area. There would be *No Effect* to this species.
San Francisco garter snake *Thamnophis sirtalis tetraenia*	E	NE	**Possible.** There are CNDDB records of this species near the Proposed Action Area. The Proposed Action would not alter or convert any areas of suitable habitat for this species, and would not involve any ground disturbance or construction. There would be *No Effect* to this species.

1 Status = Status of federally protected species protected under the ESA (Endangered Species Act).
E: Listed as Endangered
T: Listed as Threatened
X: Critical Habitat designated for this species
PX: Critical Habitat proposed for this species
2 Effects = ESA Effect determination
NE: No Effect anticipated from the Proposed Action to federally listed species or designated critical habitat
3 Definition of Occurrence Indicators
Present: Species recorded in area and suitable habitat present.
Possible: Species recorded in or near area and habitat suboptimal.
Unlikely: Species recorded in area but habitat marginal or lacking entirely.
Absent: Species not recorded in study area and suitable habitat absent.
4 CNDDB 2018
5 DPS= Distinct Population Segment

3.2.2 Environmental Consequences

No Action

Under the No Action Alternative, transfers of water would be approved on a case-by-case basis following applicable environmental review and approval. As such, the impacts would be the same as those described under the Proposed Action. There would be No Effect to proposed or listed species or Critical Habitat, and no take of migratory birds.

Proposed Action

The Proposed Action would not involve any construction, changes in water diversions from natural waterways, or changes in land use. The water involved in the Proposed Action would be used to support existing demands, and would not be used to convert fallowed lands or lands that have been untilled for three or more years. No native lands would be cultivated as a result of the Proposed Action. As a result, Reclamation has determined that 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.), and there would be no take of birds protected under the Migratory Bird Treaty Act (16 U.S.C. §703 et seq.).

Cumulative Impacts

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

3.3 Water Resources

3.3.1 Affected Environment

The affected environment includes all conveyance facilities and transferring and receiving districts located in the CVP place-of-use (Figures 1 and 2). Friant Division and Cross Valley CVP contractors, and their associated conveyance facilities, were previously described in the Friant Division Accelerated Water Transfer Program EA (EA-15-018; Reclamation 2016a), which analyzed the transfer of available Friant Division CVP water supplies between these CVP contractors over a 5-year time period. South-of-Delta CVP Contractors, including Cross Valley Contractors, and their associated conveyance facilities were previously described in the South-of-Delta Accelerated Water Transfer Program EA (EA-14-064; Reclamation 2016b), which analyzed the transfer of available South-of-Delta CVP water supplies between these CVP contractors over a 5-year time period. EA-15-018 and EA-14-064 are incorporated by reference into this EA. Rather than repeating the same information about the CVP contractors and conveyance facilities covered in EA-15-018 and EA-14-064, the affected environment and environmental consequences section in this EA will focus on those changes or updates not previously covered in EA-15-018 and 14-064.

Harris and Shows

As described previously, Harris and Shows have lands within Westlands, San Luis, and Semitropic. These water districts use groundwater as a secondary source when surface water (CVP and/or SWP) supplies are reduced due to hydrology or operational constraints that limit water supplies moving through the Delta. Land subsidence due to withdrawal of groundwater resources has been studied extensively by U.S. Geological Survey (USGS 2017) and DWR

(2014) in the area. Areas within the Action area that may be susceptible to subsidence include sections of the California Aqueduct within Westlands (Farr et al. 2017).

State Water Project

The SWP is a complex system of reservoirs, pumping and generating plants, and water conveyance facilities, including the California Aqueduct that is operated and maintained by DWR. The principal purpose of the SWP is to supply water to its 29 long-term urban and agricultural water supply contractors (SWP Contractors) in Northern California, the San Francisco Bay Area, the San Joaquin Valley, the Central Coast, and Southern California (DWR 2017).

California Aqueduct

The California Aqueduct is a feature of the SWP and is operated by DWR. Water is exported from the Delta at the Clifton Court Forebay through the Banks Pumping Plant and is pumped into the California Aqueduct. From there, water flows south via gravity into the San Luis Joint-Use Complex, which was designed and constructed by the federal government and is operated and maintained by DWR. The San Luis Canal is the federal section of the California Aqueduct. The San Luis Canal extends 102.5 miles from O'Neill Forebay, near Los Banos, in a southeasterly direction to a point west of Kettlemen City. The principle purpose of the CVP portion of the facility is to furnish approximately 1.25 million AF of water as a supplemental irrigation supply to roughly 600,000 acres located in the western portion of Fresno, Kings, and Merced counties. After Kettlemen City, the California Aqueduct (SWP portion) conveys SWP water to serve southern California mainly for municipal and industrial purposes (M&I) purposes.

The California Aqueduct/San Luis Canal is concrete-lined canal with a capacity ranging from 8,350 to 13,100 cubic feet per second (cfs). The California Aqueduct-Delta Mendota Canal Intertie was installed north of the O'Neill Forebay pumping plant to provide connectivity between the California Aqueduct and the Delta-Mendora Canal. The intertie allows CVP and SWP water to be moved back and forth between these facilities.

Semitropic Water Storage District

Semitropic is a SWP contractor located in north-central Kern County in the San Joaquin Valley, about 20 miles northwest of the City of Bakersfield. The total area of Semitropic is 220,000 acres with about 138,000 acres irrigated. As a member of the Kern County Water Agency, Semitropic has a contract for 155,000 AF per year of SWP water. The SWP water is pumped from the Delta and conveyed to Semitropic through the California Aqueduct.

Kern County Water Agency

Kern County Water Agency holds the master contract with the State of California for delivery of a maximum yearly supply of 1,000,949 AF of SWP water supplies to 21 subcontracting water agencies (referred to as "Member Units") located within Kern County. The agency has access to SWP water and Kern River water. Water from the SWP reaches the Kern County Water Agency through the California Aqueduct and Cross Valley Canal.

Kern Water Bank

The Kern Water Bank occupies approximately 20,000 acres in Kern County. The primary purpose of the bank is to recharge, store, and recover water in order to improve the water supply

for its participants during periods of water shortages. It also conducts other activities like farming and habitat management.

The Kern Water Bank receives water from the Friant-Kern Canal or the Kern River. When the stored water is requested, the water can be pumped from the ground and delivered through the Cross Valley Canal and the California Aqueduct.

Cross Valley Canal

The Cross Valley Canal is a locally-financed facility completed in 1975 operated by the Kern County Water Agency. The Cross Valley Canal is a joint-use facility owned by various participants, including Cross Valley Contractors and Arvin-Edison Water Storage District. The Cross Valley Canal can convey water from the Aqueduct to the Kern Water Bank, the City of Bakersfield groundwater recharge facility, the Berrenda Mesa Property, the Pioneer Banking Project, the Kern River channel, Arvin-Edison Water Storage District's Intake Canal, or to various member units of Kern County Water Agency and other districts who have access to the Cross Valley Canal. When needed, the Cross Valley Canal is also capable of conveying 500 cfs, in reverse flow-gravity mode, to the Aqueduct.

3.3.2 Environmental Consequences

No Action

Under the No Action Alternative, Reclamation would not approve the multiyear transfer of up to 15,000 AF per year of available CVP water supplies for Harris and Shows. Instead, each action would require separate approval and environmental review. Since the request to transfer water is usually driven by time sensitive needs, requires coordination, and could sometimes only be completed within a short window of opportunity, the delay in the approval could render some of the transfers infeasible. Harris and Shows would be unable to respond quickly and effectively to groundwater banking and transfer opportunities during wet periods and would not be able to increase flexibility in delivery of their water supplies. In drier years, Harris and Shows would need to rely more heavily on local water supplies (including purchasing water on the open market or pumped groundwater) to supplement their water supply shortfalls, which could contribute to declining groundwater levels and subsidence.

Proposed Action

Under the Proposed Action, Reclamation would approve the transfer of up to 15,000 AF per year of available CVP water to Harris and Shows. This would improve water supply reliability and operational efficiency, especially for recovery during water short years and for recharge during wet years, which is necessary to normalize water supplies in a very volatile water supply market. Also, the Proposed Action would allow for better water management by helping to alleviate the need to pump additional groundwater. This could have a beneficial impact to those areas where there is subsidence issues (including but not limited to Westlands) as additional surface supplies and/or previously banked surface water supplies would be available to offset groundwater pumping in those areas.

It is well documented that high concentrations of arsenic occur in groundwater in Kern County, including Semitropic. Any water returned from banking facilities is required to meet Reclamation's then-current water quality standards and monitoring which conform with federal

and state drinking water standards. This is required for all projects that introduce water into our facilities and has thus far been shown to prevent substantial degradation of water quality.

As the water supplies would be from existing CVP allocations, 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. Further, the delivery of CVP water acquired from willing sellers would not affect water supply diversions from the Delta since this would be the same water supply already allocated to the contractors located south-of-delta and no additional diversion would be needed. Therefore, the Proposed Action would not interfere with Reclamation's obligation to deliver CVP water to other CVP contractors, or other environmental purposes. Finally, CVP water would be delivered through existing infrastructure and would not require additional construction or modification of facilities for delivery. Thus, there would be no impact to CVP operations, facilities, or available water supplies.

Cumulative Impacts

Reclamation has reviewed existing or foreseeable projects in the same geographic area that could affect or could be affected by the Proposed Action. Reclamation and CVP contractors have been working on various water management projects, including this one, in order to better manage limited water supplies due to changing hydrologic conditions and regulatory requirements. This and similar projects would have a cumulative beneficial effect on water supply during dry years.

As in the past, hydrological conditions and other factors are likely to result in fluctuating water supplies which drive requests for water service actions. Water districts provide water to their customers based on available water supplies and timing, while attempting to minimize costs. Farmers irrigate and grow crops based on these conditions and factors, and a myriad of water service actions are approved and executed each year to facilitate water needs. It is likely that over the course of the Proposed Action, districts will request to exchange water supplies among themselves. And as such, each water service transaction involving Reclamation would undergo environmental review prior to approval.

The Proposed Action would provide Harris and Shows greater long term flexibility in their water management actions for their lands in Westlands, San Luis, and Semitropic, by using existing water supplies in a timely manner. This would provide a cumulatively beneficial impact to their overall water supplies.

Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft FONSI and Draft EA between February 15, 2018 and March 2, 2018. One comment letter was received. The comment letter and Reclamation's response to comments is included in Appendix A.

4.2 List of Agencies and Persons Consulted

Reclamation is coordinating with the following regarding the Proposed Action:

- Department of Water Resources
- Kern County Water Agency
- Harris Farms, Inc.
- Shows Family Farms, LP
- San Luis Water District
- Semitropic Water Storage District
- Westlands Water District

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Section 5 References

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