

# RECLAMATION

*Managing Water in the West*

**Environmental Assessment**

**Central California Irrigation District  
CALFED Funding Grant for the Oil  
Station System Improvement Project**

**15-18-MP**

## **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.

# Contents

	Page
<b>1.0 Purpose and Need for Action</b> .....	<b>1</b>
1.1 Background.....	1
1.2 Need for the Proposed Action.....	1
<b>2.0 Alternatives Including the Proposed Action</b> .....	<b>4</b>
2.1 No Action Alternative.....	4
2.2 Proposed Action.....	4
2.3 Environmental Protection Measures.....	5
<b>3.0 Affected Environment and Environmental Consequences</b> .....	<b>7</b>
3.1 Resources Not Analyzed in Detail.....	7
3.2 Water Resources .....	8
3.2.1 Affected Environment.....	8
3.2.2 Environmental Consequences.....	8
3.3 Biological Resources .....	9
3.3.1 Affected Environment.....	9
3.4.2 Environmental Consequences.....	11
3.5 Air Quality .....	11
3.5.1 Affected Environment.....	11
3.5.2 Environmental Consequences.....	12
3.7 Cumulative Impacts .....	13
<b>4.0 Consultation and Coordination</b> .....	<b>14</b>
4.1 Public Review Period.....	14
4.2 Endangered Species Act (16 U.S.C. § 1531 et seq.).....	14
4.3 National Historic Preservation Act (16 U.S.C. § 470 et seq.) .....	14
<b>5.0 References</b> .....	<b>15</b>

## List of Figures

Figure 1.....	2
Figure 2.....	3

## List of Tables

Table 1	Environmental Protection Measures.....	5
Table 2	Special Status Species and Critical Habitat .....	9
Table 3	SJVAB Attainment Status and <i>De Minimis</i> Thresholds for Federal Conformity Determinations .....	12
Table 4	Estimated Project Emissions <sup>a</sup> .....	13

## List of Appendices

Appendix A:	Indian Trust Assets Compliance Memo
Appendix B:	Biological Pre-Activity Survey, Oil Station System Improvement Project

# List of Acronyms and Abbreviations

af	Acre-feet
APE	Area of Potential Effect
CALFED	CALFED Bay-Delta Program -- State (CAL) and Federal (FED) agencies participating in Bay-Delta Accord
CCID	Central California Irrigation District
CFR	Code of Federal Regulations
CO <sub>2</sub>	Carbon dioxide
CVP	Central Valley Project
District	Central California Irrigation District
GHG	Greenhouse gases
ITA	Indian Trust Assets
NHPA	National Historic Preservation Act
PM <sub>2.5</sub>	Particulate matter less than 2.5 microns in diameter
PM <sub>10</sub>	Particulate matter between 2.5 and 10 microns in diameter
SHPO	State Historic Preservation Officer
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District

# 1.0 Purpose and Need for Action

## 1.1 Background

The Oil Station service area is located within Central California Irrigation District's (CCID or District) boundaries in Stanislaus County, California, approximately 8 miles southeast of the City of Patterson (see **Figure 1**), and is located within the CALFED Solution Area. The system was constructed in the 1920's with portions piped in the 1950's. It includes a mix of undersized delivery components that strain the system's ability to make deliveries. The system serves approximately 1,100 acres. Due to a number of system deficiencies, about 70% of the service area is irrigated with conventional surface irrigation methods. Some of the key deficiencies of the system include:

- Undersized and cracked headworks pipeline that floods a neighboring walnut orchard at peak flow.
- A steep segment of undersized earthen ditch that accumulates aquatic weeds, leaks onto an adjacent maintenance road and contributes to the silt load of the system.
- An undersized pipeline distribution system with a manually operated and antiquated control box.

Combined, these features fail to provide the dependable service necessary to encourage the growers to convert from current surface irrigation methods to high-efficiency systems like buried drip. As a result, along with the steep slope and highly erodible soil conditions of the region, a large amount of tailwater is generated, discharging silt, pesticides, and other constituents of concern into the San Joaquin River where it contributes to water quality exceedances and habitat degradation.

The Proposed Project will provide improvements to the Oil Station system to address these deficiencies and provide the reliability necessary for growers to make improvements to their irrigation systems. **Figure 2** shows the project layout and components. The Proposed Project is consistent with the goals of the District and the Westside San Joaquin Watershed Coalition, and is a high priority for both agencies.

## 1.2 Need for the Proposed Action

CCID needs to conserve water, provide distribution systems with adequate capacity for the service area so growers can implement high-efficiency irrigation systems, and reduce the discharge of agricultural surface runoff to the San Joaquin River. The proposed project is expected to conserve approximately 1,055 af per year through a combination of tailwater recapture and operational loss elimination.

Figure 1

**Central California Irrigation District  
Oil Station Service Area  
Location Map**

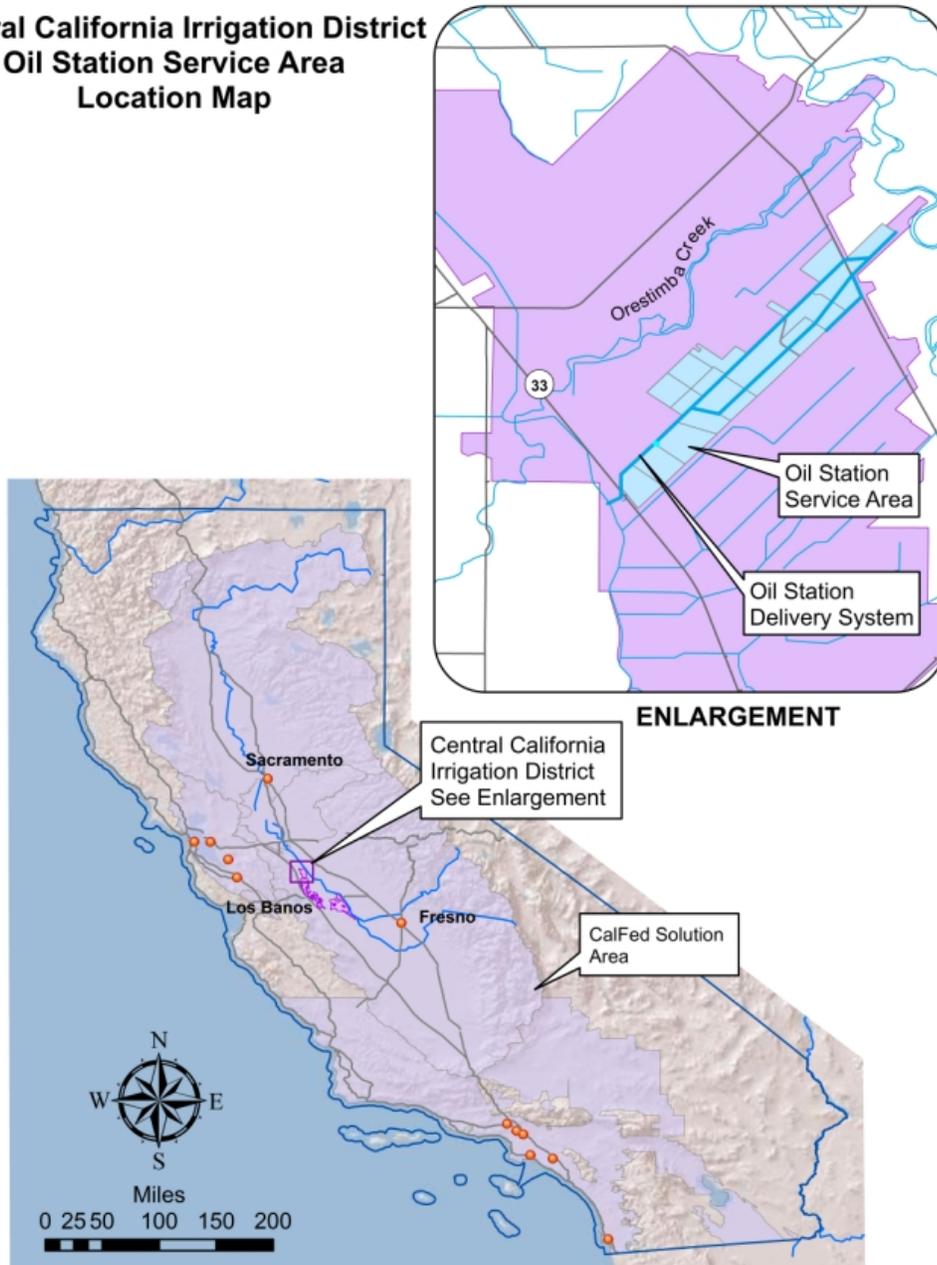
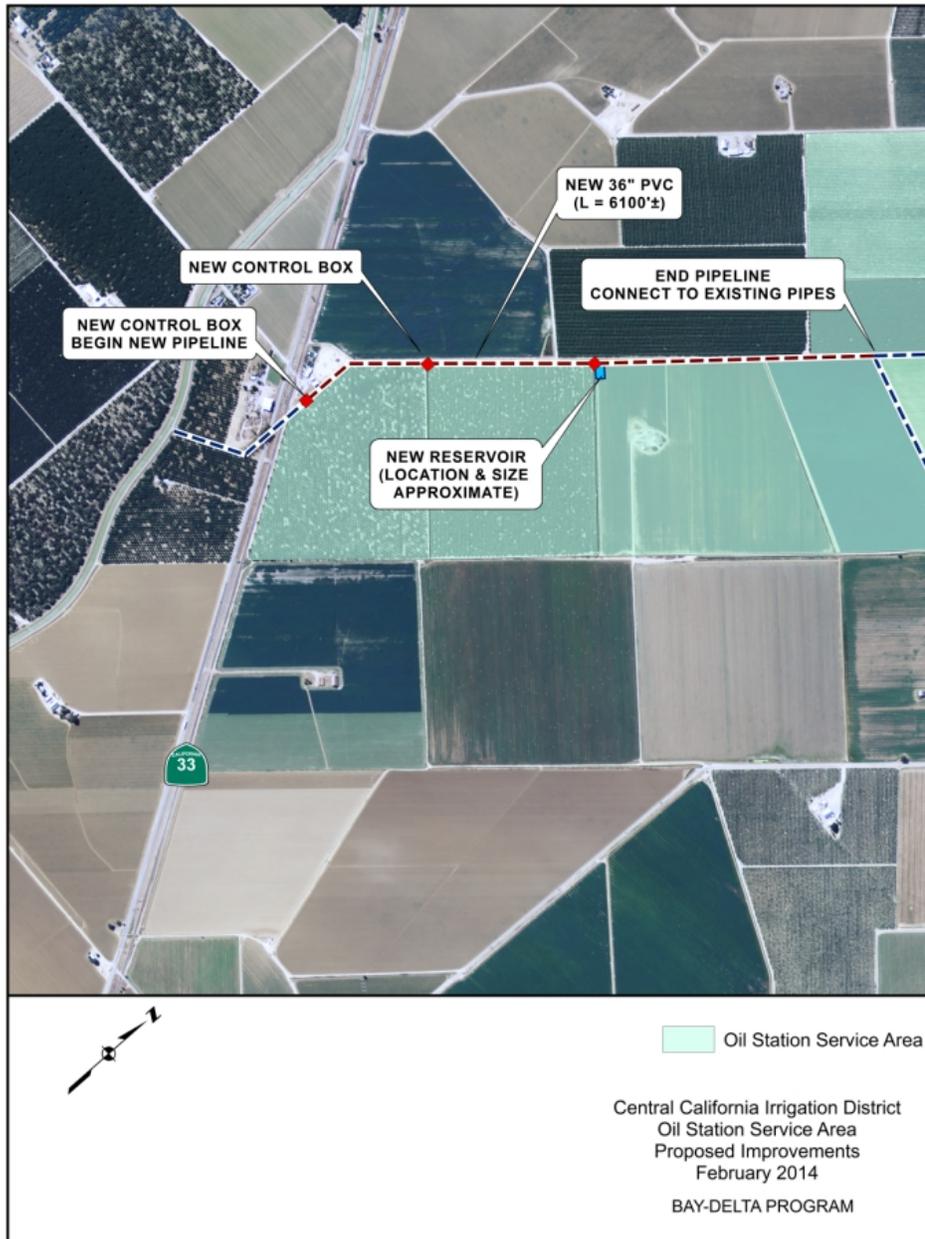


Figure 2



## **2.0 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 that would result from implementation of the Proposed Action.

### **2.1 No Action Alternative**

Reclamation would not award a CALFED Grant and the Proposed Action would not be constructed. The existing system would continue to be a delivery constraint for the service area, and current irrigation methods with excessive tailwater runoff would continue.

### **2.2 Proposed Action**

Reclamation would award a \$418,500 CALFED Grant for the construction of the Oil Station Improvement Project (Proposed Project).

The Proposed Project would replace an existing cast in place pipeline with a 36" PVC Pipeline, and construct a small buffering reservoir with a pump station to provide water delivery service to the Oil Station Service Area. The proposed project is expected to conserve 1,055 af per year through a combination of tailwater recapture and operational spill elimination. It is also expected to improve water quality in the San Joaquin River.

The pipeline will be installed along the same alignment of the existing system. The proposed reservoir would occupy a corner of a farmed field and is expected to be no more than 8 feet wide by 50 feet long and a depth of less than 5 feet. The reservoir will be located midway and adjacent to the pipeline alignment and is to be used for collection and storage of agricultural drainwater that will be incorporated into the pipeline based on demand. A pump station may be required to lift this drainwater into the pipeline. The pump station is expected to have a capacity of approximately 2 cubic feet per second and will include a pre-cast concrete sump structure (4'x4'x6 feet deep), a metered manifold, and pump and motor. The pump station would fit within the reservoir footprint.

Equipment required to perform the construction include: excavators, graders, haulers, concrete trucks, water trucks, dump trucks, and pumper trucks. The equipment will be staged along an existing farm road within the project alignment.

Construction would last approximately 5 months and would occur between October 2015 and February 2015.

Construction activities would include:

- Installation of pipeline and control box: Approximately 6,100 feet of 36” PVC Pipeline would be installed. Pipeline installation includes two new control boxes that will be installed in-line with the pipe. Control boxes are approximately 8’ long by 4’ wide and 9’ deep. The pipeline would be installed with a minimum of 36” of cover over the pipe, creating a total trench depth of 72”. Trench width would be 60” which would be cut with an excavator. Trenching would generate approximately 7,000 cubic yards of spoil, which would be placed adjacent to the trench, and replaced and compacted over the pipe after installation. Any excess spoil would be graded over the existing field roads. The total disturbed area (including area to string pipe for installation, temporary spoils storage, and equipment staging/movement) is approximately 3.54 acres (~25’ wide following the alignment).
- Reservoir, pump station, and sump construction: The proposed reservoir would be excavated from an existing drain adjacent to the pipe alignment with one or two excavators and is expected to be approximately 8 feet by 50 feet with a depth of less than 5 feet. Excavated material will be used onsite to build the reservoir levees. A pre-cast concrete box would be placed by an excavator to serve as the pump sump and a second pre-cast box would be installed at the end of the pipeline.

## 2.3 Environmental Protection Measures

CCID would implement environmental protection measures to reduce potential environmental consequences associated with the Proposed Action (Table 1). Environmental consequences for resource areas assume the measures specified would be fully implemented.

**Table 1. Environmental Protection Measures**

<b>Resource</b>	<b>Measure</b>
Air Quality	Implement standard control measures for construction emissions of particulate matter less than 10 microns in diameter (PM10) according to the San Joaquin Valley Air Pollution Control District’s (SJVAPCD) Regulation VIII (SJVAPCD 2012). Typical measures include the use of water for fugitive dust control.
Biological Resources – Swainson’s Hawks	Construction is scheduled to occur outside the avian breeding season (February 15 to September 1).
Biological Resources – San Joaquin Kit Fox	A qualified biologist will conduct a preconstruction survey no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities. Surveys should identify kit fox habitat features on the project site and evaluate use by kit fox and, if possible, assess the potential impacts to the kit fox by the proposed activity. The status of all potential dens (per USFWS Standard

	<p>Recommendations for Protection of the Endangered San Joaquin Kit Fox, 2011) should be determined no more than 14 days prior to project initiation.</p> <p>If kit fox activity is observed at a den, the District shall contact USFWS and DFG for further guidance prior to any project activity.</p>
--	---

## **3.0 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 Not Analyzed in Detail**

Department of the Interior Regulations, Executive Orders, and Reclamation guidelines require a discussion of the following items when preparing environmental documentation:

#### **3.1.1 Cultural Resources**

CCID's consultant conducted historic property identification efforts and identified the Oil Station System to be a historic-era resource that did not meet the significance criteria to be eligible for inclusion in the National Register of Historic Places under consensus with the State Historic Preservation Officer (SHPO). With no historic properties within the area of potential effect, Reclamation determined that a finding of no historic properties affected, pursuant to 36 CFR §800.4(d)(1), was appropriate for this undertaking.

#### **3.1.2 Indian Trust Assets (ITAs)**

ITAs are legal interests in assets that are held in trust by the United States for federally recognized Indian tribes or individuals. There are no Indian Reservations, Rancherias or allotments in the project area. The Proposed Action does not have a potential to affect ITAs (See Appendix B).

#### **3.1.3 Indian Sacred Sites**

Sacred sites are defined in Executive Order 13007 (May 24, 1996) as "any specific, discrete, narrowly delineated location on Federal land that is identified by an Indian tribe, or Indian individual determined to be an appropriately authoritative representative of an Indian religion, as sacred by virtue of its established religious significance to, or ceremonial use by, an Indian religion; provided that the tribe or appropriately authoritative representative of an Indian religion has informed the agency of the existence of such a site." The Proposed Action will not be conducted on federal land and could not affect or prohibit access to and ceremonial use of Indian sacred sites.

#### **3.1.4 Environmental Justice**

Executive Order 12898 requires each Federal agency to identify and address disproportionately high and adverse human health or environmental effects, including social and economic effects of its program, policies, and activities on minority populations and low-income populations. There are no negative impacts to any population, and therefore, the

Proposed Action would not have a significant or disproportionately negative impact on low-income or minority individuals or populations.

## **3.2 Water Resources**

### **3.2.1 Affected Environment**

#### ***Oil Station System***

The Oil Station System serves approximately 1,100 acres of farm land in western Stanislaus County. The existing system begins as a buried, unreinforced concrete pipeline, ultimately branching off into smaller reinforced concrete pipelines and ultimately discharging to the San Joaquin River through a series of open drains. The existing unreinforced concrete pipeline is cracked in several locations, which causes inundation of an adjacent walnut orchard during peak flows. Additionally, the system lacks sufficient capacity to support irrigation system upgrades within the service area.

Currently storm runoff and agricultural surface drainage (tailwater) is captured by the system and conveyed to the San Joaquin River along with any suspended silt and pesticides. These intermittent flows discharge directly into the existing Oil Station pipeline and create fluctuation in flow rate within the system. These fluctuations result in tailwater discharges to the San Joaquin River and contribute to water waste within the system.

### **3.2.2 Environmental Consequences**

#### ***No Action***

Under the No Action Alternative, Reclamation would not award a CALFED Grant to CCID and the proposed improvements would not be constructed. The existing system would inhibit local conversion to high efficiency irrigation systems and discharges of tailwater to the San Joaquin River from the system would continue.

#### ***Proposed Action***

The Proposed Action would replace the portions of the Oil Station System that restrict system capacity and are contributing to operational losses. The improved operational capacity would contribute to the ability of growers within the Oil Station System service area to convert to high efficiency irrigation systems. The construction of a small “buffering” reservoir would provide intermediate storage to account for intermittent fluctuations in flow cause by tailwater discharges. This would allow the tailwater to be incorporated into water deliveries rather than discharging those flows to the San Joaquin River. The Proposed Action would eliminate approximately 1,055 afy in operational losses and tailwater discharges, reusing that water for beneficial use and eliminating agricultural tailwater outflow to the San Joaquin River.

### 3.3 Biological Resources

#### 3.3.1 Affected Environment

A USFWS species list was generated on December 17, 2014 using the Sacramento Field Office's website: [http://www.fws.gov/sacramento/ES\\_Species/Lists/es\\_species\\_lists-form.cfm](http://www.fws.gov/sacramento/ES_Species/Lists/es_species_lists-form.cfm). The following Counties and USGS 7½ minute quadrangles were used for the list: Stanislaus and Newman. The project occurs entirely within the Newman quadrangle. The document number for the species list generated is 141217031305.

On November 28th, 2014 a biological pre-activity survey was conducted at the proposed project site for the Oil Station System Improvement Project. A full report from the survey can be found in Appendix B. The survey was conducted at the request of Summers Engineering and Central California Irrigation District for the purpose of evaluating the potential occurrence of special-status species at the project location. During the survey, no special-status species or suitable habitat was noted (Dean, 2014).

Table 2 below lists these species and critical habitat and summarizes the effects determination and occurrence in the Proposed Action Area.

**Table 2** Special Status Species and Critical Habitat

Species	Status <sup>1</sup>	Effects <sup>2</sup>	Occurrence in the Proposed Action Area <sup>3</sup>
<b>Amphibians</b>			
California tiger salamander ( <i>Ambystoma californiense</i> )	T, X	NE	<b>Absent.</b> No available habitat in the project area.
California red-legged frog ( <i>Rana draytonii</i> )	T, X	NE	<b>Absent.</b> No available habitat in the project area.
Yosemite toad ( <i>Bufo canorus</i> )	C	NE	<b>Absent.</b> No available habitat in the project area.
<b>Birds</b>			
Western yellow-billed cuckoo ( <i>Coccyzus americanus occidentalis</i> )	T	NE	<b>Absent.</b> No available habitat in the project area.
California least tern ( <i>Sternula antillarum browni</i> )	E	NE	<b>Absent.</b> No available habitat in the project area.
Least Bell's vireo ( <i>Vireo bellii pusillus</i> )	E	NE	<b>Absent.</b> No available habitat in the project area.
<b>Fish</b>			
Green sturgeon ( <i>Acipenser medirostris</i> )	T	NE	<b>Absent.</b> No natural waterways within the species' range will be affected by the proposed action.
Delta smelt ( <i>Hypomesus transpacificus</i> )	T, X	NE	<b>Absent.</b> No natural waterways within the species' range will be affected by the proposed action.
Central Valley steelhead ( <i>Oncorhynchus mykiss</i> )	T, X	NE	<b>Absent.</b> No natural waterways within the species' range will be affected by the proposed action.
Central Valley spring-run Chinook	T	NE	<b>Absent.</b> No natural waterways

salmon ( <i>Oncorhynchus tshawytscha</i> )			within the species' range will be affected by the proposed action.
Sacramento River winter-run Chinook salmon ( <i>Oncorhynchus tshawytscha</i> )	E	NE	<b>Absent.</b> No natural waterways within the species' range will be affected by the proposed action.
<b>Invertebrates</b>			
Vernal pool fairy shrimp ( <i>Branchinecta lynchi</i> )	T, X	NE	<b>Absent.</b> No available habitat in the project area.
Valley elderberry longhorn beetle ( <i>Desmocerus californicus dimorphus</i> )	T	NE	<b>Absent.</b> No available habitat in the project area.
Vernal pool tadpole shrimp ( <i>Lepidurus packardii</i> )	E, X	NE	<b>Absent.</b> No available habitat in the project area.
Conservancy fairy shrimp ( <i>Branchinecta conservation</i> )	E, X	NE	<b>Absent.</b> No available habitat in the project area.
Longhorn fairy shrimp ( <i>Branchinecta longiantenna</i> )	E, X	NE	<b>Absent.</b> No available habitat in the project area.
<b>Reptiles</b>			
Blunt-nosed leopard lizard ( <i>Gambelia sila</i> )	E	NE	<b>Absent.</b> No available habitat in the project area.
Giant garter snake ( <i>Thamnophis gigas</i> )	T	NE	<b>Absent.</b> No available habitat in the project area.
Alameda whipsnake ( <i>Masticophis lateralis euryxanthus</i> )	T	NE	<b>Absent.</b> No available habitat in the project area.
<b>Mammals</b>			
Fresno kangaroo rat ( <i>Dipodomys nitratooides exilis</i> )	E	NE	<b>Absent.</b> No available habitat in the project area.
San Joaquin kit fox ( <i>Vulpes macrotis mutica</i> )	E	NE	<b>Absent.</b> No available habitat in the project area.
Riparian woodrat ( <i>Neotoma fuscipes riparia</i> )	E	NE	<b>Absent.</b> No available habitat in the project area.
Riparian brush rabbit ( <i>Sylvilagus bachmani riparius</i> )	E	NE	<b>Absent.</b> No available habitat in the project area.
<b>Plants</b>			
Large-flowered fiddleneck ( <i>Amsinckia graniflora</i> )	E	NE	<b>Absent.</b> No available habitat in the project area.
Chinese Camp brodiaea ( <i>Brodiaea pallida</i> )	T	NE	<b>Absent.</b> No available habitat in the project area.
Succulent owl's-clover ( <i>Castilleja campetris</i> ssp. <i>succulenta</i> )	T, X	NE	<b>Absent.</b> No available habitat in the project area.
Hoover's spurge ( <i>Chamaesyce hooveri</i> )	T, X	NE	<b>Absent.</b> No available habitat in the project area.
Santa Clara Valley dudleya ( <i>Dudleya setchellii</i> )	E	NE	<b>Absent.</b> No available habitat in the project area.
Colusa grass ( <i>Neostapfia colusana</i> )	T, X	NE	<b>Absent.</b> No available habitat in the project area.
San Joaquin Valley Orcutt grass ( <i>Orcuttia inaequalis</i> )	T, X	NE	<b>Absent.</b> No available habitat in the project area.
Hairy Orcutt grass ( <i>Orcuttia pilosa</i> )	E, X	NE	<b>Absent.</b> No available habitat in the project area.
Hartweg's golden sunburst ( <i>Psedobahia bahiifolia</i> )	E	NE	<b>Absent.</b> No available habitat in the project area.

Green's tuctoria ( <i>Tuctoria greenei</i> )	E, X	NE	<b>Absent.</b> No available habitat in the project area.
Red Hills vervain ( <i>Verbena californica</i> )	T	NE	<b>Absent.</b> No available habitat in the project area.

<sup>1</sup> Status = Status of federally protected species protected under federal Endangered Species Act.

E: Listed as Endangered under the federal Endangered Species Act.

PE: Proposed for listing as Endangered under the federal Endangered Species Act.

T: Listed as Threatened under the federal Endangered Species Act.

PT: Proposed for listing as Threatened under the federal Endangered Species Act.

X: Critical habitat designated under the federal Endangered Species Act.

PX: Critical habitat proposed for designation under the federal Endangered Species Act.

C: Candidate to become a proposed species.

<sup>2</sup> Effects = Endangered Species Act Effect determination

NE: No Effect anticipated from the Proposed Action to federally listed species

<sup>3</sup> Definitions of Occurrence Indicators

Present: Species observed in the area.

Absent: Species not recorded in study area and/or habitat requirements not met

### 3.4.2 Environmental Consequences

#### ***No Action Alternative***

Under the No Action Alternative, the Proposed Action would not be implemented and there would be no change in existing conditions.

#### ***Proposed Action***

None of the special-status plants and animals occurs within the boundaries of the Proposed Action (Dean, 2014), as described in Table 2 above. Additionally, the Proposed Action will occur within the footprint of the existing infrastructure, farm roads, and active agricultural fields. The Proposed Action would result in the same environmental consequences as the No Action Alternative, no change in existing conditions for special-status species.

## 3.5 Air Quality

### 3.5.1 Affected Environment

The Project area is located within the San Joaquin Valley Air Basin (SJVAB), which is regulated by the San Joaquin Valley Air Pollution Control District (SJVAPCD). The SJVAB has reached National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) for criteria pollutants of concern except for: ozone (O<sub>3</sub>), inhalable particulate matter between 2.5 and 10 microns in diameter (PM<sub>10</sub>), and particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>). As a result, the emissions of most concern are O<sub>3</sub> (which includes precursors such as volatile organic compounds [VOC] and nitrogen oxides [NO<sub>x</sub>]), PM<sub>10</sub>, and PM<sub>2.5</sub>. Table 3 below shows the attainment status and *de minimis* threshold for general conformity for the criteria pollutants of most concern.

**Table 3.** SJVAB Attainment Status and *De Minimis* Thresholds for Federal Conformity Determinations

<b>Pollutant</b>	<b>Attainment Status<sup>a</sup></b>	<b>(tons/year)</b>
VOC (as ozone precursor)	Nonattainment <sup>d</sup>	10 <sup>b</sup>
NO <sub>x</sub> (as an ozone precursor)	Nonattainment <sup>d</sup>	10 <sup>b</sup>
PM <sub>10</sub>	Nonattainment (CAAQS) Attainment (NAAQS)	15 <sup>c</sup>
PM <sub>2.5</sub>	Nonattainment	100 15 <sup>c</sup>
<sup>a</sup> Source: <a href="http://www.arb.ca.gov/desig/adm/adm.htm">http://www.arb.ca.gov/desig/adm/adm.htm</a> <sup>b</sup> 40 CFR 93.153 <sup>c</sup> SJVAPCD Recommended Threshold <sup>d</sup> The SJVAB is designated as Extreme for O <sub>3</sub> NAAQS		

### 3.5.2 Environmental Consequences

#### **No Action**

Under the No Action Alternative, there would be no impacts to air quality since no construction would take place.

#### **Proposed Action**

Construction emissions would vary from day to day and by activity, timing and intensity, and wind speed, direction, and duration. Generally, air quality impacts from the Proposed Action would be temporary and localized in nature.

Short-term air quality impacts would be associated with construction, and would generally arise from dust generation (fugitive dust) and operation of construction equipment. Fugitive dust results from land clearing, grading, excavation, concrete work, and vehicle traffic on paved and unpaved roads. Fugitive dust is a source of airborne particulates, including PM<sub>10</sub> and PM<sub>2.5</sub>.

Earth-moving equipment, trucks, and other mobile sources powered by diesel or gasoline are also sources of combustion emissions, including nitrogen dioxide, carbon monoxide, volatile organic compounds, sulfur dioxide, and small amounts of air toxics. Types of equipment to be used includes; excavators, backhoes, loaders, and water trucks. Table 4 below provides a summary of the estimated emissions during construction. Calculated emissions from the Proposed Action were estimated using the 2013 Road Construction Emissions Model (version 7.1.4), which incorporates emission factors for reactive organic gases (ROG), NO<sub>x</sub>, CO, SO<sub>2</sub>, and both fugitive and exhaust PM<sub>10</sub>, and PM<sub>2.5</sub>.

Comparison of the estimated Proposed Action emissions (Table 4)(without mitigation) and the thresholds for Federal and local conformity determinations (Table 3) indicates that project emissions are estimated to be below these thresholds; therefore a conformity analysis with the applicable State Implementation Plan is not required.

**Table 4** Estimated Project Emissions<sup>a</sup>

<b>Pollutant</b>	<b>Tons/Construction Period</b>
ROG/VOC	0.1
NO <sub>x</sub>	1.6
PM <sub>10</sub>	0.3
PM <sub>2.5</sub>	0.1
Carbon dioxide equivalents	170.9

<sup>a</sup> Source: 2013 Road Construction Emissions Model v. 7.1.4

### **3.7 Cumulative Impacts**

According to CEQ regulations for implementing the procedural provisions of NEPA, a cumulative impact is defined as the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Greenhouse gas impacts are considered to be cumulative impacts since any increase in GHG emissions would add to the existing inventory of gases that could contribute to climate change. The estimated GHG emission due to temporary Proposed Action construction activities is 10 metric tons of carbon dioxide equivalents, using CalEEMOD. There are no on-going operational emissions from the Project.

There are no other known past, present, and reasonably foreseeable future actions that would cumulatively result in significant impacts to the human environment when taking into consideration the actions analyzed within this EA.

## **4.0 Consultation and Coordination**

### **4.1 Public Review Period**

Reclamation intends to provide the public with an opportunity to comment on the Draft EA for 15 days.

### **4.2 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 have no effect on listed species or designated critical habitat.

### **4.3 National Historic Preservation Act (16 U.S.C. § 470 et seq.)**

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

Reclamation will initiate consultation with SHPO under Title 54 USC § 306108, commonly known as Section 106 of the NHPA, and its implementing regulations found at 36 CFR Part 800 seeking concurrence with the APE delineation the identification efforts, as well as notification of the no historic properties affected determination.

Upon initiating consultation with SHPO, pursuant to the regulations at 36 CFR §800.5(c), SHPO has 30 days from receipt to review an agency finding. [The SHPO has yet to respond to Reclamation's finding of effect.] If after 30 days the SHPO has not responded, the regulations state that "...the agency official shall then carry out the undertaking in accordance with paragraph (d)(1) of this section" [§800.5(c)(1)]. If SHPO fails to comment within the period of time provided to them pursuant to the Section 106 regulations, Reclamation may move on to the next step of the Section 106 process. In this case, barring outside factors, the next step would be the conclusion of the 106 process.

## 5.0 References

Dean, J. 2014. Oil Station Improvement Project, Biological pre-activity survey report. November 2014.

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

U.S. Fish and Wildlife Service. 2014. Species List.

U.S. Fish and Wildlife Service. 2011. Standard Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance.

## **Appendix A**

# **Indian Trust Assets Compliance Memo**



Cordova, Daniel &lt;dcordova@usbr.gov&gt;

---

**Re: ITA Request**

1 message

---

**RIVERA, PATRICIA** <privera@usbr.gov>  
To: Daniel Cordova <dcordova@usbr.gov>

Fri, Oct 24, 2014 at 8:46 AM

Daniel,

I reviewed the proposed action to provide of federal funding to the Central California Irrigation District's Oil Station Improvement project. The improvements would address a combined pipeline and unlined ditch system that has inadequate capacity to meet delivery needs and inhibits the conversion to high-efficiency irrigation systems within its service area. The proposed project will upgrade and modernize the Oil Station system to meet current flow demands and provide a reliable conveyance system capable of meeting scheduling and the criteria for high-efficiency irrigation systems. Construction will include creation of a mid-system reservoir and pump-back system that will capture tailwater and operational spills and eliminate discharges to the San Joaquin River. The existing concrete pipeline will be abandoned in place and a 36" PVC pipeline will replace it and terminate in the new reservoir. The new pipeline will be trenched within existing farm roads. The completed project will encourage growers within the service area to convert to high efficiency irrigation systems, thereby reducing the volume of tailwater generated. The proposed project is expected to improve water quality in the San Joaquin River and conserve 1,055 acre-feet-year through a combination of tailwater recapture and operational spill elimination.

The proposed action does not have a potential to impact Indian Trust Assets. The nearest Indian Trust Asset is Chicken Ranch Rancheria, approximately 49 miles northeast of the project location.

Patricia Rivera  
Native American Affairs Program Manager  
US Bureau of Reclamation  
Mid-Pacific Region  
2800 Sacramento, California 95825  
(916) 978-5194

## **Appendix B**

# **Oil Station System Improvement Project Biological Pre-Activity Survey Report**

NOVEMBER 28, 2014

SUMMERS ENGINEERING  
887 NORTH IRWIN STREET  
HANFORD, CA 93232  
ATTENTION: CHRIS LINNEMAN

#### OIL STATION SYSTEM IMPROVEMENT PROJECT

On November 28th, 2014, a biological pre-activity survey was conducted at the proposed project site for the Oil Station System Improvement Project. The survey was conducted at the request of Summers Engineering and Central California Irrigation District (CCID) for the purpose of evaluating the potential occurrence of special-status species at the project location.

#### PROJECT DESCRIPTION

The Oil Station System was constructed in the 1920's with portions piped in the 1950's. It includes a mix of undersized delivery components that strain the system's ability to make deliveries. The system serves approximately 1,100 acres. Due to a number of system deficiencies, about 70% of the service area is irrigated with conventional surface irrigation methods. Some of the key deficiencies of the system include:

- Undersized and cracked headworks pipeline that floods a neighboring walnut orchard at peak flow.
- A steep segment of undersized earthen ditch that accumulates aquatic weeds, leaks onto an adjacent maintenance road and contributes to the silt load of the system.
- An undersized pipeline distribution system with a manually operated and antiquated control box.

Combined, these features fail to provide the dependable service necessary to encourage the growers to convert from current surface irrigation methods to high-efficiency systems like buried drip. As a result, along with the steep slope and highly erodible soil conditions of the region, a large amount of tailwater is generated, discharging silt, pesticides, and other constituents of concern into the San Joaquin River where it contributes to water quality exceedances and habitat degradation.

The Proposed Project will provide improvements to the Oil Station system to address these deficiencies and provide the reliability necessary for growers to make improvements to their irrigation systems. The Proposed Project is consistent with the goals of the District and the Westside San Joaquin Watershed Coalition, and is a high priority for both agencies.

The Proposed Project would replace an existing cast in place pipeline with a 36" PVC Pipeline, and construct a small buffering reservoir with a pump station to provide water delivery service to the Oil Station Service Area. The proposed project is expected to conserve 1,055 af per year through a combination of tailwater recapture and operational spill elimination. It is also expected to improve water quality in the San Joaquin River. The pipeline will be installed along the same alignment of the existing system.

Equipment required to perform the construction include: excavators, graders, haulers, concrete trucks, water trucks, dump trucks, and pumper trucks. The equipment will be staged along an existing farm road within the project alignment.

Construction would last approximately 5 months and would occur between October 2015 and February 2015.

Construction activities would include:

- Installation of pipeline and control box: Approximately 6,100 feet of 36" PVC Pipeline would be installed. Pipeline installation includes two new control boxes that will be installed in-line with the pipe. Control boxes are approximately 8' long by 4' wide and 9' deep. The pipeline would be installed with a minimum of 36" of cover over the pipe, creating a total trench depth of 72". Trench width would be 60" which would be cut with an excavator. Trenching would generate approximately 7,000 cubic yards of spoil, which would be placed adjacent to the trench, and replaced and compacted over the pipe after installation. Any excess spoil would be graded over the existing field roads. The total disturbed area (including area to string pipe for installation, temporary spoils storage, and equipment staging/movement) is approximately 3.54 acres (~25' wide following the alignment).

#### PROJECT SITE LOCATION

The Oil Station service area is located within Central California Irrigation District's (CCID) boundaries in Stanislaus County, California, approximately 8 miles southeast of the City of Patterson, and is located within the CALFED Solution Area.

#### SURVEY METHODS

A reconnaissance level survey was conducted by driving the pipeline route of the proposed project, at speeds less than 15 mph, so that the entire area could be visibly inspected. Binoculars were used when needed to identify avian species passing by or utilizing the project site and to search the surrounding canopy for nesting birds and special-status species. When necessary observations were made on foot in order to better access and inspect areas of interest.

#### USFWS SPECIES LIST RESULTS

Results from the USFWS Species List will be documented in the CCID Oil Station System Improvement Project Environmental Assessment in the Biological Resources section 3.3. No special-status species listed in that document were observed during the reconnaissance survey. However, to safeguard against potential occurrences of Swainson's hawk and San Joaquin kit fox, mitigation measures will be implemented.

## SENSITIVE RESOURCES AND CONSIDERATIONS FOR COMPLETION OF PROJECT

### Swainson's Hawk

If a summer construction schedule is followed, Swainson's hawk protocol surveys must be conducted and the following Swainson's hawk management conditions will need to be followed:

1. No intensive new disturbances or other project related activities which may cause nest abandonment or forced fledging, should be initiated within 1/2 mile (buffer zone) of an active nest between March 1 and September 15 or until August 15 if a Management Authorization or Biological Opinion is obtained for the project. If construction or other project related activities which may cause nest abandonment or forced fledging are necessary within the buffer zone, monitoring of the nest site by a qualified biologist should be required. Routine disturbances such as agricultural activities, commuter traffic, and routine facility maintenance activities within 1/4 mile of an active nest should not be prohibited.

However, the project proponent is looking to begin construction during the fall in order to avoid the Swainson's hawk nesting season (March 1 to September 15).

### San Joaquin Kit Fox

The project site consists of well maintained roads and right of way surrounded by land predominately used for agriculture. Crops are primarily walnut and almond orchard but some seasonal row crop is mixed in as well. Nothing that could be described as optimal San Joaquin kit fox habitat was detected at or adjacent to the project site. Additionally, no burrows or dens were detected during the survey.

However, due to the possibility that individuals could exist in the area and that those same individuals could use the project site as a potential movement corridor, pre-activity surveys completed no more than 30 days prior to the beginning of ground disturbance and/or construction activities and the standard recommendations as set forth by the U.S. Fish and Wildlife Service are recommended.

#### FINAL COMMENTS

The findings of this survey are intended for the completion of environmental documentation for project approval. Additional biological pre-activity surveys will be required prior to project start in order to comply with recommended mitigations. If you have any questions or require clarification on any of the findings in this report please don't hesitate to contact me.

Thank you,

Jason Dean  
Wildlife Biologist  
559.694.1562

## REFERENCES

California Energy Commission and Department of Fish and Wildlife. 2010. Swainson's Hawk Survey Protocols, Impact Avoidance, and Minimization Measures for Renewable Energy Project in the Antelope Valley of Los Angeles and Kern Counties, California.

California Department of Fish and Wildlife. 1994. Staff Report Regarding Mitigation for Impact to Swainson's Hawks (*Buteo swainsoni*) in the Central Valley of California.

California Department of Fish and Wildlife. 2015. California Natural Diversity Data Base (CNDDB), Rarefind 5.

Swainson's Hawk Technical Advisory Committee. 2000. Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley.

University of California Agriculture & Natural Resources, UC IPM Online. 2005. Cliff Swallows.

U.S. Fish and Wildlife Service. 1999. San Joaquin Kit Fox Survey Protocol for the Northern Range.

U.S. Fish and Wildlife Service. 2011. Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance.

U.S. Fish and Wildlife Service. Replacement and Restoration Guidelines for Giant Garter Snake.