

FINDING OF NO SIGNIFICANT IMPACT

# Pixley Irrigation District – Canal Modernization Project

FONSI 12-23-MP

Recommended by:

Date: 9/25/13

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Date: 9/20/13



U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Regional Office Sacramento, California

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## Introduction

In accordance with Section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the Mid-Pacific Regional Office of the Bureau of Reclamation (Reclamation) has determined that awarding Pixley Irrigation District (PID) with Federal grant funding to assist with their Gravity Conveyance and Conservation Project (Proposed Action) is not a major Federal action that will significantly affect the quality of the human environment and an Environmental Impact Statement is not required. This Finding of No Significant Impact (FONSI, 12-23-MP) is supported by Reclamation's Environmental Assessment (EA), *Pixley Irrigation District Gravity Conveyance and Conservation Project*, which is hereby incorporated by reference and attached.

## **Proposed Action**

Reclamation proposes to award PID with a WaterSMART grant to help fund their Gravity Conveyance and Conservation Project (Project). The Project is a cooperative effort between PID and Lower Tule River Irrigation District (LTRID) that would allow for delivery of available surplus surface water supplies to agricultural lands within PID that is currently dependent on groundwater. In addition, the Project would assist PID with reducing seepage losses in their distribution system. The Project generally consists of upgrades to LTRID's existing Casa Blanca Canal, excavation of a new open-channel canal, and excavation for a new buried pipeline in Tulare County, California. Construction will take approximately 28 months to complete.

As part of the Proposed Action, PID will implement Environmental Protection Measures and Commitments as noted in Section 2.2.1 of the EA to avoid, minimize, and/or reduce potential environmental impacts associated with the Project.

# Findings

Reclamation's determination that implementation of the Proposed Action will not result in significant impacts to the quality of the human environment is supported by the findings summarized below and further described in the attached EA.

#### Indian Sacred Sites

The Proposed Action is not on federal lands, and will not affect and/or prohibit access to and ceremonial use of Indian sacred sites.

#### Indian Trust Assets (ITA)

The nearest ITA is the Tule River Reservation, approximately 16 miles east of the Project location. The Proposed Action does not have the potential to affect ITA.

#### **Environmental Justice**

There are no economically disadvantaged or minority populations that would be disproportionately affected by the Proposed Action.

#### **Biological Resources**

When taking into consideration the Environmental Protection Measures and Commitments from Section 2.2.1 of the EA, project-related activities will avoid or minimize impacts to species protected by the Migratory Bird Treaty Act.

When taking into consideration the Environmental Protection Measures and Commitments that will be implemented as part of the Proposed Action, potential effects to the San Joaquin kit fox (SJKF – *Vulpes macrotis mutica*) would be discountable and insignificant. Therefore, the Proposed Action is not likely to adversely affect the SJKF.

#### Water Resources

The Proposed Action would allow PID to better manage available flows on Deer Creek and water from the Friant-Kern Canal without leading to an increase in diversions. The Proposed Action could potentially provide available surface water to approximately 7,500 acres of agricultural lands within PID that are currently dependent on groundwater, thereby helping to alleviate the area's reliance on groundwater pumping.

#### Traffic and Transportation

Detour signs will be placed at key locations to direct traffic around closed county roads. There are many alternative routes every half mile in the area that are available to landowners and workers to detour around the closed road or to access the residential and commercial areas. PID will work with landowners and workers to provide them with access to the occasional residential and commercial areas at closed roads.

#### Land Use

The Proposed Action could provide surface water to approximately 7,500 acres of agricultural lands and be beneficial in the long-term. In addition, irrigation canals are considered a functional component of agriculture and would be compatible with the existing land use.

#### **Cultural Resources**

A comprehensive records search was performed and no known cultural resources were found within the area of potential effect (APE). A surface and subsurface investigation of the APE was conducted and did not find any prehistoric cultural resources. Investigations using a buried site sensitivity model for subsurface deposits did not identify any evidence to suggest that buried archaeological sites or other cultural material would likely be present in the APE. For the reasons discussed previously, Reclamation made a finding of no effect on historic properties as a result of the undertaking.

#### Air Quality

The Proposed Action would not emit pollutants that exceed federal, State, and local thresholds for the San Joaquin Valley Air Basin.

#### **Cumulative Impacts**

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 the EA.



**Environmental Assessment** 

# Pixley Irrigation District Gravity Conveyance and Conservation Project

WaterSMART: Water and Energy Efficiency Grant



U.S. Department of the Interior Bureau of Reclamation Mid-Pacific Regional Office Sacramento, CA

# **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.

# **Section 1** Introduction

This Environmental Assessment (EA) has been prepared by the Bureau of Reclamation (Reclamation) to examine the potential direct, indirect, and cumulative environmental impacts associated with providing federal grant funding to Pixley Irrigation District (PID) for their Gravity Conveyance and Conservation Project (Project).

The Project is a cooperative effort between PID and Lower Tule River Irrigation District (LTRID) that would allow for delivery of available surplus surface water supplies to agricultural lands within PID that is currently dependent on groundwater. The Project is located in Tulare County, California, roughly five miles southwest of the City of Porterville (see Figure 2-1).

# **1.1 Need for the Proposal**

Portions of the PID service area suffer from groundwater overdraft, particularly in drought years, due to the lack of surface water availability. The Proposed Action would allow available surplus surface water to be delivered to these areas and help offset groundwater pumping. In addition, PID needs to reduce seepage losses in their distribution system and to improve their overall water-use efficiency.

# Section 2 Proposed Action and Alternatives

# 2.1 No Action Alternative

Reclamation would not award PID with a grant and the district would continue to operate and maintain their distribution system under existing conditions.

# 2.2 No Action Alternative

Reclamation proposes to award PID with a grant to fund a portion of the Project. The Project would utilize LTRID's existing Casa Blanca Canal and build a diversion distribution system that would be able to deliver available surplus surface water supplies to lands within PID that are currently dependent on groundwater pumping. The Project can be described as three components: existing Casa Blanca Canal upgrades, new open channel canal, and new pipeline (refer to Appendix A for maps and site plans):

• Existing Casa Blanca Canal Upgrades: Twenty-five existing structures within an approximately 6-mile stretch of the Casa Blanca Canal would be reconstructed and/or reinforced, starting at the outlet from the Friant-Kern Canal going west to the Road 168 intersection (shown as green line on the figures in Appendix A). The extent of ground disturbance would be confined to the canal right-of-way and would mostly encompass an area of up to 30 feet (ft) in length, 3 ft deep, and the width of the canal prism.



Figure 2-1. Project Vicinity Map

- <u>New Open Channel Canal:</u> The new open channel canal would begin where the Casa Blanca Canal intersects Road 168 and continue south along the east side of the road for approximately 2 miles to the Avenue 116 alignment. At the Avenue 116 alignment, the canal would continue west along the north side of Avenue 116 for approximately 5.5 miles to Road 124, where it would terminate into the existing recharge basin area (shown as blue line on figures in Appendix A). The cross section for the new canal would be up to 75 ft wide, including the channel itself and an access road on each side. Road culverts would be constructed at the head works starting at the Casa Blanca Canal and at each of the eight county road crossings along the canal alignment and at each of the 15 existing dirt road crossings to allow farm equipment access to fields bisected by the new canal. Several drop structures, which control the flow and velocity of the channel, and turnouts for individual farmers would also be installed along the canal. Total ground disturbance for the new open channel canal is approximately 68 acres.
- <u>New Pipeline:</u> The new pipeline, measuring no more than 36-inches in diameter, would begin at the intersection of Road 168 and Avenue 116, where the open channel terminates along Road 168. From there, the pipeline would head south along Road 168 approximately 2 miles and connect to the existing Pixley North Canal, which is part of PID's distribution system (shown as yellow line on figures in Appendix A). The new pipeline would be constructed within a 25-foot-wide easement. In total, the new pipeline would temporarily disturb approximately 6 acres.

All ground-disturbing work involved with the Proposed Action would be performed in previously disturbed contexts, road shoulders, farm lands, regularly-maintained canal infrastructure, and/or concrete structures. Construction activities could take approximately 28 months to complete.

## 2.2.1 Environmental Protection Measures and Commitments

As part of the Proposed Action, the following environmental protection measures and commitments will be implemented by PID to avoid, minimize, and/or reduce potential environmental impacts associated with the Project:

• Tree removal involved with clearing and/or grading will not occur from February 1 to August 31 to avoid impacts to nesting Swainson's hawk (*Buteo swainsoni*) and other raptors protected by the Migratory Bird Treaty Act (MBTA). If tree removal, clearing, grading, or other construction activities must occur between February 1 and August 31, a qualified biologist will conduct pre-construction surveys for active raptor nests on and adjacent to the action area, where appropriate, within 30 days of ground disturbing activities. Surveys for Swainson's hawk nests would extend out to 1/4 mile from the action area. If an active nest is located within 1/4 mile of the action area, then PID will coordinate with the California Department of Fish and Wildlife (DFW) and U.S. Fish and Wildlife Service (USFWS) to identify a suitable construction-free buffer around the nest. The buffer(s) will be identified on the ground with flagging, fencing or by other easily visible means, and will be maintained until a biologist has determined that the young have fledged;

- Pre-construction surveys will be conducted by a qualified biologist for Western burrowing owls (*Athene cunicularia*) within 30 days of the on-set of construction. If pre-construction surveys are undertaken during the breeding season (February through August) and active nest burrows are located within or near construction zones, a construction-free buffer of 250 feet will be established around all active owl nests and shall remain in place for the duration of the breeding season. During the non-breeding season (September through January), resident owls occupying burrows in areas proposed for development may be relocated to alternative habitat. The relocation of resident owls must be conducted according to a relocation plan prepared by a qualified biologist and approved by the DFW and USFWS. The pre-construction surveys and any potential relocation of burrowing owl will be conducted in coordination with DFW and in accordance with their *2012 Staff Report on Burrowing Owl Mitigation*;
- In order to avoid impacts to cliff swallow (*Petrochelidon pyrrhonota*) nursery sites (structures within the Casa Blanca Canal), project-related activities will occur outside the avian nesting season (February 1 to August 31). If project-related activities occur during the nesting season, a qualified biologist will conduct pre-construction surveys for active nursery sites within 30 days of the on-set of these activities. Should any active nursery sites be discovered in or near proposed construction zones, the biologist will establish a suitable construction-free buffer around the nursery site throughout the nesting season;
- Methodology for San Joaquin kit fox (SJKF *Vulpes macrotis mutica*) preconstruction surveys and potential and atypical den monitoring:
  - Pre-construction surveys for kit fox will be completed no less than 14 days and no more than 30 days prior to the onset of any ground or vegetation-disturbing activity during the life of the project. U.S. Fish and Wildlife (USFWS)-approved biologists will survey the areas subject to surface disturbance for the present of kit fox dens. Surveys will follow the 2011 U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance;
  - Perform pre-construction surveys after land acquisition and crop harvest in that particular section have been completed. As properties become available to be cleared and grubbed, pre-construction surveys would be performed prior to any ground disturbance for that section. If work has not been started within 30 days upon completion of the pre-construction survey for any section(s), then another survey will be conducted prior to ground disturbance;
  - If any potential or atypical dens are found, the dens will be flagged during preconstruction surveys and avoided (50 ft buffer) during construction. If avoidance is not possible, the dens will be mapped and monitored for three consecutive days to determine if there is kit fox occupancy. Monitoring will consist of placing a tracking medium (sand) at the den entrance. If the species using the den cannot be identified through the tracking medium, then a remote camera will be placed facing the den entrance for three consecutive days to photograph and identify the species. The tracking medium and camera will be checked daily. All tracks will be noted and photographed, and the species creating the tracks will be identified.
- Construction activities will not occur during night time hours (30 minutes prior to sunset to 30 minutes after sunrise);

- Detour signage will be placed at key locations to direct traffic around closed county roads;
- An archaeological monitoring and inadvertent discovery plan will be prepared by PID and approved by Reclamation for ground-disturbing activities conducted in sediments deposited in the Middle and Late Holocene at one section of the new open channel canal (refer to Appendix B: Archaeological Monitoring Map). A qualified archaeological monitor (Secretary of the Interior Standards) will be present for these activities and implement the monitoring and inadvertent discovery plan; and
- Dust Control Measures:
  - All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, or covered with a tarp or other suitable cover or vegetative ground cover.
  - All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.
  - When materials are transported offsite, all material shall be covered or effectively wetted to limit visible dust emissions, and at least six inches of freeboard space from the top of the container shall be maintained.
  - Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, the piles will be effectively stabilized of fugitive dust emissions utilizing sufficient water stabilizer/suppressant.

# Section 3 Affected Environment and Environmental Consequences

Potential impacts to the following resources were considered and found to be minor. Brief explanations for the impacts are provided below:

- Indian Sacred Sites: The Proposed Action is not on federal lands, and will not affect and/or prohibit access to and ceremonial use of Indian sacred sites.
- Indian Trust Assets (ITA): The nearest ITA is the Tule River Reservation, approximately 16 miles east of the project location. The Proposed Action does not have the potential to affect ITA.
- Environmental Justice: There are no economically disadvantaged or minority populations that would be disproportionately affected by the Proposed Action.

# 3.1 No Action Alternative

Under the No Action Alternative, there would be no change to existing conditions and current trends of the affected environment.

# 3.2 Proposed Action

## 3.2.1 Special-Status Biological Resources

The action area is the footprint of the proposed earthmoving activities for the new open channel and buried pipeline, the Casa Blanca Canal, and a 250-foot buffer around those activities in which noise and dust could occur. The present land use around the action area consists of agricultural fields and orchards, limited residential and commercial areas, farm roads and shoulders, and existing ditches and canal infrastructure. The action area has been heavily cultivated and managed for decades, and herbicides are routinely used to control unwanted vegetation.

Swainson's hawks are known to nest within the vicinity of the action area, which also contains suitable foraging habitat. There is also potential for other raptors protected by the MBTA to nest in trees within the action area, mostly within the residential/commercial areas. Removal of trees with occupied nests and project-related noise from ground-disturbance and equipment engines could have direct and indirect impacts on Swainson's hawks and other raptors. Removal of trees could cause direct impacts to eggs or injury and mortality to chicks that have not fledged, and noise impacts could cause adults to abandon the nests too early and leave any eggs or chicks vulnerable. As noted in Section 2.2.1, construction-related activities will occur outside of the nesting season to the extent possible. If construction activities cannot avoid the nesting season, pre-construction surveys for raptors will be conducted for the presence of occupied nests. In coordination with the DFW and USFWS, an appropriate construction-free buffer zone will be observed around each nest until a biologist has determined that chicks have fledged. With

environmental protection measures and commitments in place (Section 2.2.1), potential impacts to Swainson's hawk and other raptors protected by the MBTA will be avoided or minimized.

Burrowing owls are also known to inhabit the action area. Construction activities, equipment, and noise could cause direct and indirect impacts to burrowing owls. Construction activities and equipment could crush occupied burrows and cause direct injury and mortality of any eggs or chicks. Noise from construction activities and equipment could cause adults to abandon any eggs or chicks. To avoid impacts to burrowing owl, pre-construction surveys will be conducted for occupied burrows. If construction activities must occur during the breeding season, any occupied burrows will be avoided with a 250-ft construction-free buffer zone until all young have fledged. If any resident owls remain to occupy the burrows, or if construction occurs outside of the breeding season and resident owls are occupying burrows within the action area, PID will prepare a relocation plan in coordination with, and approved by the DFW and USFWS. Passive relocation, whereby one-way doors are installed on active burrows, would be the preferred method of adult burrowing owl relocation.

Structures within the Casa Blanca Canal may house nursery sites for cliff swallows. Retrofitting and/or replacing those structures during the nesting season could cause direct injury or mortality to any eggs or chicks in the nursery sites. To avoid impacts to active cliff swallow nursery sites, any project-related work on the canal structures will occur outside of the nesting season. If project-related work must occur during the nesting season, pre-construction surveys for active nursery sites will be conducted. Any active nursery sites will be identified and a suitable construction-free buffer zone (~300 ft) will be established until the end of the nesting season.

According to a California Natural Diversity Database inquiry, there have been several historical SJKF sightings (between 1971 and 2002) within 10 miles of the action area. Construction activities will entail temporary and permanent earth disturbance, in addition to periodic maintenance of the facilities that could result in potential direct and indirect effects to SJKF. In addition to construction activities for the Casa Blanca Canal upgrades, open canal, and buried pipeline, temporary effects will include additional vehicular traffic, construction noise, and worker activities. Based on the distribution of SJKF occurrences in the vicinity, the action area may be used for dispersion and as a migratory corridor for individual SJKF from known populations. An individual SJKF may pass through and possibly forage within the action area from time to time during regular dispersal movements; however, the likelihood that any SJKF might move across intensive agricultural fields to forage or den in the action area is low. Land use within the action area consists primarily of cultivated farmlands and provides marginal to poor habitat for SJKF prey base and for denning.

Pre-construction surveys of the action area for signs of SJKF will be conducted prior to any ground-disturbing activities, and den monitoring (as described in Section 2.2.1) will be conducted if potential or atypical dens cannot be avoided. Considering the highly disturbed context of the action area, its isolation from extant SJKF populations, and its marginal suitability as foraging habitat, it is unlikely that SJKF is resides within the action area. In addition, construction activities will not occur during night time hours (30 minutes prior to sunset to 30 minutes after sunrise) when SJKF are more active. When taking into consideration the environmental protection measures and commitments that will be implemented as part of the

Proposed Action, and that SJKF are most active at night when there will be no construction activities, potential effects to SJKF would be discountable and insignificant.

#### 3.2.2 Water Resources

PID has historically used and diverted water from Deer Creek and could, if water was available, use the new facilities to provide surface water from Deer Creek to lands that rely on groundwater. In the past, PID has accepted water from the Friant-Kern Canal (FKC) into Deer Creek for delivery to various lands and recharge areas. These new facilities would allow PID to accept water directly into its system without suffering losses that occur in Deer Creek, and provide these waters to lands that historically only used groundwater. This would allow PID to substitute surface water for groundwater on these lands when excess flows are available. Use of these facilities would allow PID to better manage available flows on Deer Creek and the FKC, without leading to an increase in diversions (Pixley WMP, 2012).

Groundwater depths in the area have continued a downward trend and groundwater overdraft is a concern to many landowners. The Project could potentially provide available surface water to approximately 7,500 acres of agricultural lands within PID that are currently dependent on groundwater. Providing surface water to these lands could help alleviate the area's reliance on groundwater pumping. In addition, the open channel canal would terminate at an existing recharge basin, thereby providing PID the ability to recharge the underlying groundwater aquifer with available surface water.

## 3.2.3 Traffic and Transportation

Up to seven county roads would be temporarily closed while excavation at that particular road is being performed for the buried culverts. Only one road at any given time would be closed. The county roads do not experience a high volume of traffic under normal conditions and are mostly used by nearby landowners. Vehicular traffic may experience minor delays due to detours around and slowing down near Project construction zones. The county roads would be temporarily closed during excavation and reopened when they have been reconstructed. Detour signs will be placed at key locations to direct traffic around closed county roads. There are many alternative routes every half mile in the area that are available to landowners and workers to detour around the closed road or to access the residential and commercial areas. PID will work with landowners and workers to provide them with access to the occasional residential and commercial areas at closed roads. PID has already filed encroachment permits with Tulare County and emergency vehicle access will be maintained at paved crossings.

## 3.2.4 Land Use

The present land use around the Project area consists of agricultural fields and orchards, occasional residential and commercial areas associated with agricultural operations, farm roads and shoulders, and existing ditches and canal infrastructure. The cross section for the new open channel canal would range from 75 feet to 60 feet, including the channel and an access road on each side, totaling approximately 60 acres of permanent disturbance. The majority of the permanent disturbance would occur within agricultural fields and orchards, and farm roads and shoulders. Up to 60 acres (12 acres of permanent trees and 48 acres of row crops) would be taken out of production from small portions of fields owned by 13 different landowners. The loss of farming acreage is replaced by irrigation canals, which are considered a functional

component of agriculture. The new open channel and buried pipeline alignment would not encroach into the occasional residential or commercial areas.

#### 3.2.5 Cultural Resources

In an effort to identify historic properties, Reclamation reviewed a comprehensive records search completed at the Southern San Joaquin Valley Information Center, California Historical Resources Information System. No previously known cultural resources were identified in the area of potential effect (APE). In addition, a ground surface and subsurface investigations on behalf of PID was completed. No prehistoric cultural resources were found; however, an architectural site, the Casa Blanca Canal (CBC), was identified. The CBC is an earthen ditch constructed in the mid-1950s to convey water from the FKC to local farmers. It was determined that this canal does not meet any of the criteria for eligibility for listing on the National Register of Historic Places (36 CFR § 60.4). In addition, the CBC does not contribute to the eligibility of the FKC or to the larger CVP. The CBC does not represent the CVP themes of being pivotal in the history of the area or in Reclamation history. The PID was formed for flood control and supplemental irrigation water from the CVP. Irrigated agriculture was already in place before the canal's construction and this minor canal does not represent a significant part of Reclamation's history.

A buried site sensitivity model to further identify the potential for subsurface deposits was queried. This investigation included a review of relevant background information, development of a buried site sensitivity model, and review and analysis of data collected from 15 geotechnical bore cores. The investigations did not identify any evidence to suggest that buried archaeological sites or other cultural material would likely be present in the project APE; however, Reclamation has determined that there is a potential for buried deposits in the southwest portion of the project and some additional effort is warranted. A Reclamation-approved archaeological monitor will implement a monitoring and inadvertent discovery plan during ground-disturbing activities within a section of the open channel canal where sediments were deposited during the Middle and Late Holocene (refer to Appendix B: Archaeological Monitoring Map).

## 3.2.6 Air Quality

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 3-2 below shows the attainment status and *de minimis* threshold for general conformity for the criteria pollutants of most concern.

Table 3-2. SJVAB Attainment Status and De Minimis Thresholds for   Federal Conformity Determinations			
Pollutant	Attainment Status <sup>a</sup>	(tons/year)	
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: <u>http://www.arb.ca.gov/de</u> <sup>b</sup> 40 CFR 93.153 <sup>c</sup> SJVAPCE <sup>d</sup> The SJVAB is designated as Extr	<u>sig/adm/adm.htm</u> ) Threshold reme for O <sub>3</sub> NAAQS		

Construction emissions would vary from day to day and by activity, depending on the timing and intensity of construction, and wind speed and direction. Generally, air quality impacts from the Proposed Action would be localized in nature and decrease with distance. Ground disturbing activities would result in the temporary emissions of fugitive dust and vehicle combustion pollutants during the following activities:

- On-site earthwork (clearing, grading, excavation, compacting, and stockpiling)
- On-site construction equipment and haul truck engine emissions

Calculated emissions from the Proposed Action were estimated using the California Emissions Estimator Model for reactive organic gases  $(ROG)^1$ ,  $NO_x$ ,  $PM_{10}$ , and  $PM_{2.5}$ . Total project emissions are presented in Table 3-3 below.

Table 3-3. Estimated Project Emissions <sup>a</sup>			
Pollutant	Unmitigated (tons/year)	Mitigated (tons/year)	
ROG/VOC	0.66	-	
NO <sub>x</sub>	4.80	-	
PM <sub>10</sub>	1.11	0.67	
PM <sub>2.5</sub>	0.46	0.35	
Carbon dioxide equivalents	545.23	-	

<sup>a</sup> Source: CalEEMod Version 2011.1.1

As shown in Table 3-3 above, the Proposed Action has been estimated to emit less than the *de minimis* threshold for  $NO_x$  and ROG/VOC as  $O_3$  precursors and  $PM_{2.5}$ ; therefore, a federal general conformity analysis report is not required. In addition,  $PM_{10}$  emissions from the Proposed Action have been estimated to be well below the SJVAPCD threshold of 15 tons/year. As noted in Section 2.2.2, dust control measures would be implemented as part of the Proposed Action to suppress emissions of particulate matter. Furthermore, a Dust Control Plan approved

<sup>&</sup>lt;sup>1</sup> The term "volatile organic compounds" are synonymous with "reactive organic gases" for the purposes of this document since both terms refer to hydrocarbon compounds that contribute to ozone formation.

by the SJVAPCD would be prepared by PID to identify any additional measures to be implemented during construction activities to further minimize project-related emissions.

# 3.3 Cumulative Impacts

Greenhouse gas (GHG) 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 Project construction activities is 545.23 tons of carbon dioxide equivalents. There are no on-going operational emissions from the Project.

There are no other known past, present, or 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.

# Section 4 Consultation and Coordination

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

Section 7 of the ESA requires Federal agencies, in consultation with the Secretary of the Interior, 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.

In a memo dated March 8, 2013, Reclamation requested written concurrence from the USFWS on the determination that the Proposed Action is not likely to adversely affect kit fox. On May 2, 2013, Reclamation transmitted an addendum to the USFWS via e-mail with supplemental information to the concurrence request to include SJKF preconstruction survey and den monitoring methodology. In a memo dated June 12, 2013, the USFWS concurred with Reclamation's determination that the Proposed Action is not likely to adversely affect kit fox.

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

The National Historic Preservation Act (NHPA) is the primary Federal legislation that outlines the Federal Government's responsibility to cultural resources. Section 106 of the NHPA requires the Federal Government to take into consideration the effects of an undertaking on cultural resources listed on or eligible for inclusion in the National Register of Historic Places (NRHP).

The Native American Heritage Commission (NAHC) was contacted by mail on July 11, 2013 and was requested to provide applicable information from the Sacred lands File and a "Native American Contact List". The NAHC failed to identify any resources within their sacred lands file; however, they did provide a Native American Contact List. Reclamation submitted letters to three federally recognized tribes to invite their assistance in identifying the presence of, or concerns regarding, sites of religious and cultural significance pursuant to 36 CFR § 800.3(f)(2) and 36 CFR § 800.4(a)(4). In addition, Reclamation submitted letters to six non-federally recognized Native Americans to inquire if they have any knowledge of, or concerns with, historic properties in the area, and to identify issues relating to the undertaking's potential effects on any such historic properties pursuant to 36 CFR § 800.4(a)(3). The Tejon Indian Tribe indicated that the project was out of their area, and no other responses have been received.

Reclamation initiated consultation with the California State Historic Preservation Office (SHPO) on July 2, 2013, regarding the Project, and requested concurrence with a finding of no effect on historic properties. Reclamation addressed questions from the SHPO and resubmitted documentation on August 22, 2013. In a letter dated September 9, 20013, the California SHPO provided their concurrence with the finding that the Project would have no effect on historic properties.

# Appendix A – Map and Site Plans

i









# Appendix B – Archaeological Monitoring Map

