

# RECLAMATION

*Managing Water in the West*

**Final Environmental Assessment**

## **Madera Irrigation District Lateral 24.2-17.0 Pipeline and Canal Automation Project**

**Madera County, California  
Mid-Pacific Region, 16-26-MP**



**U.S. Department of the Interior  
Bureau of Reclamation**

**May 2017**



## **Mission Statements**

The mission of the Department of the Interior is to protect and manage the Nation's natural resources and cultural heritage; provide scientific and other information about those resources; and honor 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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# Acronyms and abbreviations

AFY	acre-feet per year
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CVP	Central Valley Project
District	Madera Irrigation District
EA	Environmental assessment
ESA	Endangered Species Act (federal)
ITA	Indian Trust Assets
Lat/long	Latitude and longitude
MID	Madera Irrigation District
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
PM	Particulate matter
ROG	Reactive organic gases
SB	Senate Bill (California State)
SCADA	supervisory control and data acquisition
SIP	State Implementation Plan
SJVAPCD	San Joaquin Valley Air Pollution Control District
tpy	tons per year
USC	United States Code
USEPA	United States Environmental Protection Agency
WaterSMART	Sustain and Manage America's Resources for Tomorrow
WEEG	Water and Energy Efficiency Grant

# 1.0 Introduction

Reclamation provides WaterSMART: Water and Energy Efficiency Grant funding to entities with water or power delivery authority that propose projects seeking to conserve and use water more efficiently.

This Environmental Assessment (EA) examines the potential direct, indirect, and cumulative impacts to the affected environment associated with the Bureau of Reclamation (Reclamation) providing WaterSMART funding to the Madera Irrigation District (district) for part of its Lateral 24.2-17.0 Pipeline Improvement Project (pipeline project) and the Irrigation Water Conservation and Canal Automation Improvement Project (automation project). The district is located 18 miles north of the City of Fresno and bisected by Highway 99 and Highway 145. The pipeline project will occur west of the City of Madera, off of Avenue 15 (Figure 1). The automation project will occur at various other canal control structures throughout the district (Figure 2).

Construction of the pipeline will be completed by district staff. It will include installing a pipeline to replace the open lateral, appurtenant structures (manholes and inlet structures), turnouts, and a small recharge basin. The district will also install a SCADA system (supervisory control and data acquisition system) on the pipeline with solar-powered automated slip meter. The district estimates the pipeline project would conserve 1,759 acre-feet of water per year (AFY). Installation of the meters and gates at various locations around the district will conserve between 14,700 AFY and 30,000 AFY in above average rainfall years, and between 1,440 AFY and 2,880 AFY in below average years.

## 1.1 Need for the proposed action

Water losses in the district's system are attributed to imbalances in channel flows, unanticipated high flows from City of Madera stormwater, canal seepage, and canal breaches caused by rodents.

Replacing the remaining open channel at Lateral 24.0-17.0 with a pipeline would reduce seepage, evaporative losses, and effects from rodent activity. Installation of the SCADA system would allow the district to make real-time changes to operations and greatly reduce the number of trips needed by MID to manage flows. The water savings benefits would allow the district to more efficiently manage its water resources.

Replacing the canal gates at the various locations around the district and flume gate on Dry Creek will provide constant measurement of water flows and deliveries. This will allow the district to manage water flows in order to avoid imbalances and detect unanticipated high flows. The automated system will allow the district to implement a network management system that provides

Madera Irrigation District  
Lateral 24.2-17.0 Pipeline and Canal Automation Project

Figure 1. Pipeline project alignment site map

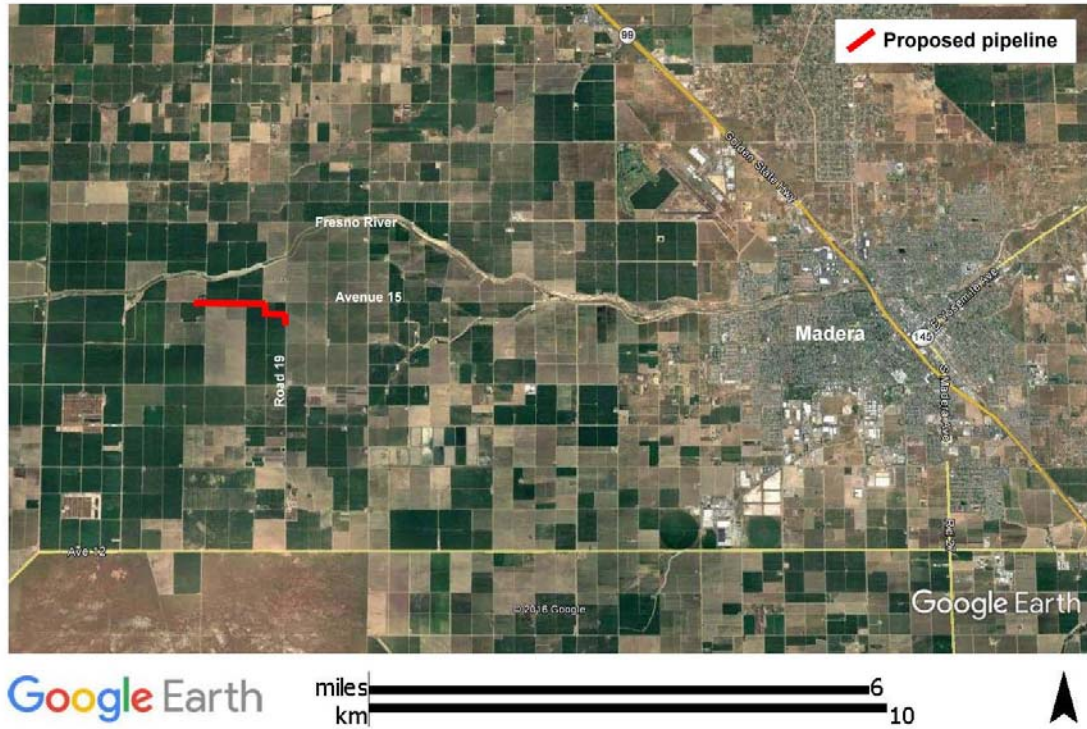
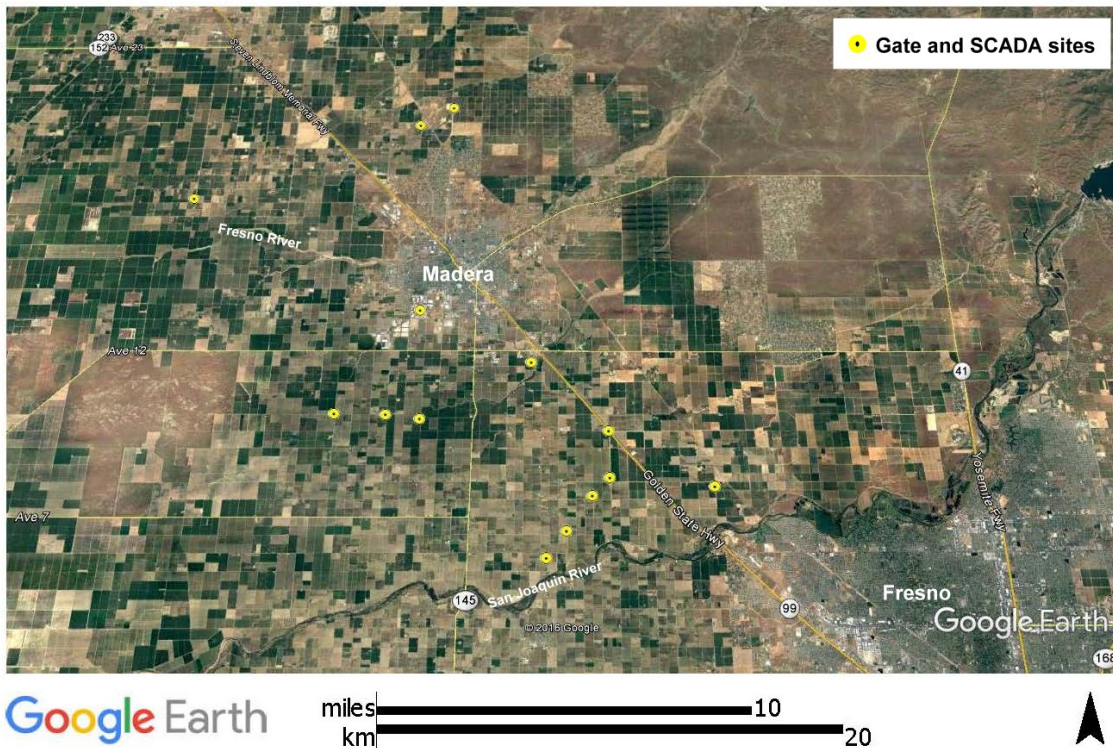


Figure 2. Automation project sites map





management of water flow control, demand management, customer order management, distribution efficiency and system-wide operational controls that will reduce demand for Central Valley Project (CVP) water. Using the solar panels to power the SCADA and motorized gates will also allow the district avoid the expense of installing a power line service drop at each location.

## **2.0 Actions considered**

### **2.1 No action**

If Reclamation takes no action, the district would not receive grant funding through the WEEG program to implement their project. Reclamation assumes that without WEEG program funding that the proposed action would not be implemented and the water savings would not be achieved.

### **2.2 Proposed action**

Reclamation's proposed action is to award the district with \$580,900 to complete the pipeline project and \$292,261 for the gate replacements and automation systems at select locations. This funding will cover 49% of the project costs. As a result of funding the project, the district will replace an open channel, Lateral 24.0-17.0, with a 36-inch pipeline, including appurtenant structures, a SCADA operating system, and solar-powered automated slip meter. The district will also replace the canal gates at the 13 locations around the district and the flume gate on Dry Creek. A SCADA operating system will be installed to operate the replaced gates and the new flume gate.

## **3.0 Affected environment and consequences**

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

- Biological resources
- Surface water resources
- Air quality
- Cultural resources

**Table 1. Location of proposed actions**

Site name	Type of activity	Closest cross streets	Coordinates (Lat/Long)
Cody Head	Gate replacement SCADA installation	Avenue 13 Road 25 ½	36°56'26.17"N -120°05'08.97"W
Hargrove Head	Gate replacement SCADA installation	Avenue 10 Road 24 ½	36°53'34.96"N -120°06'05.58"W
Cottonwood Creek Lateral	Gate replacement SCADA installation	Avenue 10 Road 23	36°53'36.32"N -120°07'42.30"W
Mordecai	Gate replacement SCADA installation	Avenue 10 Road 25	36°53'28.41"N -120°04'59.62"W
Hughes Head	Gate replacement SCADA installation	Avenue 12 Road 28 ½	36°54'59.60"N -120°01'27.16"W
Lateral 6.2-14.5 Head	Gate replacement SCADA installation	Avenue 9 Golden State Blvd	36°53'09.05"N -119°58'59.95"W
Lateral 6.2-15.9 Head	Gate replacement SCADA installation	Avenue 8 Road 30 ½	36°51'56.85"N -119°58'58.93"W
Lateral 6.2-16.9 Head	Gate replacement SCADA installation	Avenue 7 ½ Road 30	36°51'30.02"N -119°59'32.11"W
Lateral 6.2-18.4 Head	Gate replacement SCADA installation	Avenue 6 Road 29 ½	36°50'38.07"N -120°00'19.84"W
Lateral 6.2 Ext. Head	Gate replacement SCADA installation	Avenue 5 ½ Road 29 ½	36°49'59.13"N -120°00'56.69"W
Lateral 6.2-9.2-5.0 Head	Gate replacement SCADA installation	Avenue 8 Road 34	36°59'47.57"N -120°13'14.06"W
Ripperdan	Gate replacement SCADA installation	Avenue 11 Road 28	36°54'07.16"N -120°02'13.56"W
Dry Creek	Install new flume gate SCADA installation	Avenue 20 ½ Road 26	37°02'45.85"N -120°04'22.53"W
Lateral 24.0-17.0	Replace open lateral with pipeline SCADA installation	Avenue 15 Road 19	Start 36°57'49.22"N -120°12'08.51"W End 36°58'02.45"N -120°13'20.32"N

Impacts to the following resources were considered and found to be minor or absent. Brief explanations for their elimination from further consideration are provided below:

- Indian Trust Assets: The proposed action does not have the potential to affect Indian Trust Assets (see Appendix A).
- Indian Sacred Sites: Executive Order 13007 (May 24, 1996) requires that federal agencies accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners, and avoids adversely affecting the physical integrity of such sacred sites. The proposed action would not be located on federal lands and therefore would not affect access to or use of Indian sacred sites.
- Environmental Justice: The proposed action will occur in sparsely populated areas in the district. The closest residences, workplaces, and gathering places are several hundred feet away from each site. Impacts from the proposed action are localized and short-term in nature and will not impact roadways, structures, or adversely affect recreation. Therefore could not disproportionately impact low-income or minority individuals or populations within the action areas.

### 3.1 Biological resources

Common mammals and birds found in the laterals and agricultural fields in the area include coyote, California ground squirrel, mallard duck, great egret, red-tailed hawk, mourning dove, kestrel, loggerhead shrike, scrub-jay, crow, robin, yellow-rumped warbler, red-winged blackbird, great egret, meadowlark, Swainson's hawk, and Brewer's blackbird.

Swainson's hawk (*Buteo swainsonii*) is listed as threatened under the California Endangered Species Act (CDFW 2016). There is suitable foraging habitat with a large number prey species including lizards, voles, and squirrels in the action areas but there were no observed nest sites in October 2016 in the immediate vicinity of the proposed action.

A list of threatened and endangered species that may occur in the action areas or may be affected by the action was obtained from the U.S. Fish and Wildlife Service iPaC website in November 2016. Based on an October 2016 and December 2016 site visits by Reclamation staff, there is no suitable habitat in the action areas for:

- California red-legged frog and California tiger salamander: absence of suitable aquatic habitat at a majority of the work sites; presence of predatory species (bullfrog) in small, unvegetated, in-channel ponds.
- Yellow-billed cuckoo: absence of a contiguous riparian corridor.
- Conservancy fairy shrimp and vernal pool fairy shrimp: absence of vernal pools and seasonal wetlands.
- Delta smelt and steelhead: absence of riverine habitat.
- Fleshy owl's clover, Green's tuctoria, hairy Orcutt grass, San Joaquin Orcutt grass: absence of grassland and vernal pool habitats.
- Fresno kangaroo rat: absence of grassland and shrub/scrub habitat.
- San Joaquin kit fox: presence of suitable habitat but absence of signs of recent use.
- Blunt-nosed leopard lizard: absence of grassland and shrub/scrub habitat; seasonally flooded areas like the ditches, laterals, and fields in the action areas are generally not considered suitable habitat for the lizard.

Due to ongoing agricultural activities and MID maintenance actions, there is limited vegetative growth in proximity to the SCADA sites and proposed pipeline alignment. While ditches are kept clear of woody vegetation, they do contain patches of nutsedge and sedges. Patchy herbaceous vegetation occurs immediately outside of the ditches and includes species like doveweed, horseweed, yellow star-thistle, and bermudagrass. At Lateral 24.0-17.0, the soil characteristics are alkali and salt grass is present. At the Dry Creek site, riparian vegetation is present along the channel banks and includes cattails, tules, and willows. At the Cottonwood Creek Lateral site, riparian and emergent vegetation is present along the margins of the creek and includes giant reed grass and tules. Immediately

outside the creek and lateral channels are weedy species like tumbleweed. In nearby upland areas, there are blue-gum eucalyptus trees, California fan palms, and other woody ornamental species like Italian cypress. Adjacent permanent crops include grapes, walnuts, pomegranate, pistachio, fig, citrus, and peaches. One area of irrigated pastureland is located near the Lateral 6.2-9.2-5.0 Head.

### **3.1.1 No action**

#### ***3.1.1.1 Federally-listed species***

Under the no action alternative, the proposed work would not occur in the action areas. Thus there would be no effect on federally-listed species by selecting the no action alternative.

#### ***3.1.1.2 State-listed species***

There is foraging habitat present for Swainson's hawk at all of the action areas, however, no nests were observed within sight of the work locations during the October 2016 site visit. Under the no action alternative, there would be no work conducted at the proposed action areas and therefore there would be no effect on Swainson's hawk habitat.

#### ***3.1.1.3 Other wildlife and vegetation***

Under the no action alternative, no work would occur and there would be no effect on other wildlife and vegetation.

### **3.1.2 Proposed action**

#### ***3.1.2.1 Federally-listed species***

In western Madera County, San Joaquin kit fox tend to occupy undeveloped areas (Williams, 1990). Friable soils for denning, small mammal prey base for foraging, and an open space setting are present along Lateral 24.2-17.0. However, active agricultural activities and the lack of visibility created by orchard trees and other man-made features would likely detract kit fox dispersing through the area thereby making it low quality habitat in comparison to other moderate to high quality areas in the region. In Kern County, man-made disturbance and other anthropogenic influences on the landscape do not prevent kit fox from dispersing, foraging and denning along canals in urban settings. As such, Reclamation biologists looked for signs of dispersal and denning along Lateral 24.2-17.0 in fall 2016. There was no recent evidence of kit fox occupying or moving along the lateral. The California Natural Diversity Database indicates that there are no known occurrences of San Joaquin kit fox within 5 miles of the Lateral 24.0-17.0 pipeline project or SCADA and gate replacement sites.

The closest known occurrence of kit fox is 5.25 miles southwest of the pipeline project area between the work site and the town of Firebaugh on the Madera Ranch groundwater bank site. The Madera Ranch area contains alkali sink scrub habitat, a small rodent prey base, suitable denning soils, and better visibility, making it moderate to high quality habitat for the fox (Los Padres Forest Watch and Center for Biological Diversity, 2010). As such, kit fox use of the Lateral 24.2-17.0 area is likely infrequent or absent and it would be very unlikely that kit fox would be encountered in the project areas. Due to the small chance that kit fox would be encountered at Lateral 24.2.-17.0 and the other project work areas around the district, Reclamation has determined that the projects will have no potential to effect to San Joaquin kit fox.

### **3.1.2.2 State-listed species**

The proposed project would temporarily disturb a negligible portion of Swainson's hawk foraging habitat in rural Madera County. Once the action is complete, the any prey affected by the project are expected to re-establish and the foraging habitat will be available again for the hawk.

### **3.1.2.3 Other wildlife and vegetation**

The proposed project would have a short-term but negligible impact on the prey base for raptors, burrow site availability for small mammals, and basking areas for reptiles. Equipment movements and grading associated with the piping of the lateral may result in some direct mortality to small mammals and reptiles. Grading associated with the pipeline is likely to result in the direct mortality of a handful of bullfrogs and treefrogs and would result in the removal of shallow ponding habitat next to control structures along Lateral 24.0-17.0. Effects to vegetation in the immediate vicinity of the proposed actions would be neutral. MID would continue to control vegetation growth along their facilities once project work is complete.

## **3.2 Surface water resources**

MID's surface water sources consist of agricultural class 1 and class 2 from the CVP, Hensley Lake, and water from other pre-1914 water rights. The water available for use in the last five years has varied greatly from approximately 396,000 AF in 2011 down to approximately 9,700 AF in 2015. On average the water available for use is approximately 122,500 AFY.

District water losses are approximately 59,000 to 63,000 AFY in above average rainfall seasons and 6,000 AFY to 12,000 AFY in below average rainfall seasons. Losses can be attributed to imbalances in channel flows, unanticipated high flows from urban stormwater (requiring a deposit of excess water into the Madera Ranch Water Bank), canal seepage and evaporation, and unforeseen canal and pipe breaching from human activities and burrowing animals.

### 3.2.1 No action

Under the no action alternative, there would be no change to annual water use or losses in the district. Canal breaches and spills would continue to be reported to the district via visual inspections by staff during patrols and farmers notifying the district.

### 3.2.2 Proposed action

Implementing the proposed action would have a moderate, beneficial effect on surface water resources for MID. Real-time monitoring through the SCADA system will result in quicker response times for spills and canal breaches, minimizing water losses. Remote gate operation will allow the district to isolate canal segments in the case of a breach to confine water losses. By implementing the proposed action, MID would conserve 4.4 percent of the annual average water supply for the district as follows:

- The canal automation (gate replacement and SCADA installation) Dry Creek and the other 13 sites would prevent the loss of 3,610 AF (3% of MID's annual water supply), and the
- Lateral 24.0-17.0 pipeline and SCADA installation would prevent the loss of 1,759 AF (1.4% of MID's average annual water supply).

## 3.3 Air quality

Emissions from Madera Irrigation District activities are considered by Madera County as agricultural and thus no air district restrictions have been applied to ongoing MID maintenance and operations activities. Before 2004, all agricultural source emissions were exempt from emissions rules set by the San Joaquin Valley Air Pollution Control District (SJVAPCD). State Senate Bill 700 (SB 700, 2003), removed this exemption for *new* agricultural sources. MID was formed in 1920, and has been in continuing operation since. MID's maintenance and operations activities at existing facilities are grandfathered and not subject to permitting requirements under SB 700. As such, SJVAPCD rules 8011 (General Requirements) and 8021 (Construction, Demolition, Excavation, Extraction, and other Earthmoving Activities) for fugitive dust control do not apply.

MID equipment that would be used to install the pipeline, gates, and automation equipment, is mobilized on a daily basis to perform maintenance and operations activities. MID implements dust suppression measures as a good neighbor policy to minimize effects from dust on nearby crops and residents when it conducts maintenance and operations activities, as applicable. These same measures would be implemented as a part of the proposed project. Such measures include:

- Using street sweepers to minimize track-out and dusting
- Covering stock piles

- Using the MID water truck for dust control
- Imported materials to backfill the existing canal, if needed, will be covered

Reclamation's proposed action providing grant money, is not exempt from federal general conformity on the basis of MID being an agricultural source. A general conformity exemption is applicable only when emissions from a federal action are *de minimis*, and thus conform with the State Implementation Plan (SIP). Reclamation does not have a rule listing activities that are "presumed to conform," to the local SIP, so actions must be screened individually to determine if emissions are *de minimis*. Reclamation used the California Environmental Quality Act (CEQA) thresholds of significance established by the SJVAPCD as a proxy for *de minimis* general conformity thresholds in this analysis.

In developing the CEQA screening criteria, the SJVAPCD calculated emissions from small actions using construction and operational characteristics of typical projects based on land use, fugitive dust, employee trips, operational, and equipment emissions calculations. The SJVAPCD "pre-quantified emissions and determined a size below which it is reasonable to conclude that a project would not exceed applicable thresholds of significance for criteria pollutants," (SJVAPCD 2012b). Pre-quantified actions are grouped together in Small Project Analysis Level by Vehicle Trips and by Project Type.

The San Joaquin Air Basin is currently in extreme non-attainment for ozone (federal and state), non-attainment for particulate matter 2.5 microns or less (PM<sub>2.5</sub>)(federal and state), and non-attainment for PM<sub>10</sub> (state). The SJVAPCD has set their construction emissions thresholds of significance under the CEQA to:

- 10 tons per year for the ozone precursors of reactive organic gases (ROG) (also known as volatile organic compounds (VOCs))
- 10 tons per year for the ozone precursors of nitrous oxides (NO<sub>x</sub>)(federal general conformity threshold NO<sub>x</sub> is 10 tons per year)
- 15 tons per year for PM<sub>2.5</sub> (federal general conformity threshold for PM<sub>2.5</sub> is 100 tons per year), and
- 15 tons per year for PM<sub>10</sub> (federal general conformity threshold for PM<sub>10</sub> is 10 tons per year) (SJVAPCD 1994 and 2016).

### **3.3.1 No action**

No ground disturbance would occur under the no action alternative. The number of district staff vehicle trips taken for operations would remain the same. Therefore there would not be any equipment emissions or fugitive dust generated under the no action alternative. Emissions under the no action alternative are presumed to be zero for all criteria pollutants, and thus below CEQA significance and general conformity *de minimis* thresholds.

### 3.3.2 Proposed action

The MID makes maintenance trips to the locations proposed for gate replacement and automation on a regular basis. Over time the proposed action will reduce the necessary operational vehicle trips by the district. Thus construction emissions and not vehicle trips were used as the means to screen the proposed action. The closest Project Type fit for the action in the SJVAPCD small action screening guidance is construction of a General Light Industry facility. The threshold for significance for this type of development is 510,000 square feet or 11.7 acres. The proposed action would disturb less than a two acres of land and would have no ongoing operational emissions. Since area of disturbance for the proposed action area and operational activities are well below the level for small projects screened by the air district for CEQA significance in a given year, Reclamation presumes that the emissions from the proposed action would fall below federal general conformity *de minimis* thresholds as well. As such, a general conformity analysis is not required for the proposed action.

### 3.4 Cultural resources

Cultural resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. Title 54 U.S.C. 300101 et seq., formerly and commonly known as the National Historic Preservation Act (NHPA) is the primary legislation for Federal historic preservation. Section 106 of the NHPA (54 U.S.C. 306108) requires Federal agencies to take into consideration the effects of their undertakings on historic properties and to afford the Advisory Council on Historic Preservation an opportunity to comment. Historic properties are those cultural resources that are listed in or are eligible for inclusion in the National Register of Historic Places (National Register). The Section 106 regulations at 36 CFR 800 outline the process the Federal agency takes to identify historic properties within the area of potential effects (APE), and to assess the effects the proposed undertaking will have on those historic properties. The Section 106 process involves consultations with the State Historic Preservation Officer, Indian tribes, and other identified consulting and interested parties. The APE for the current undertaking consists of approximately 4.39 acres (Figure 1 and 2) and includes the proposed lateral piping, recharge basin, SCADA system installation, and staging areas on existing canal roads that will be included in the proposed action. In an effort to identify historic properties in the APE, Culturescape (Kile, 2017) conducted a records search of the California Historical Records System (CHRIS) and a pedestrian survey of the APE in November 2016. One historic property was identified in the APE through these efforts, the Dry Creek Diversion Weir (Site CA-MAD-2649H/P-20-002308).

Reclamation sent a letter to the Tule River Indian Tribe, North Valley Yokuts Tribe, and Southern Sierra Miwuck Nation on December 13, 2016, to invite their participation in the Section 106 process and request their assistance in the identification of sites of religious and cultural significance or historic properties



that may be affected by the proposed undertaking, pursuant to 36 CFR § 800.4(a)(4). To date, Reclamation has not received a response from these tribes.

Reclamation applied the criteria of adverse effect [36 CFR § 800.5(a)] for the proposed action and determined that it would result in no adverse effect to historic properties. Utilizing these identification efforts, Reclamation entered into consultation with the California State Historic Preservation Officer (SHPO) in March 2017, seeking their concurrence on a finding of “no adverse effect to historic properties pursuant to 36 CFR § 800.5(b).” Reclamation received concurrence from SHPO on May 10, 2017 and the Section 106 process is complete. A copy of the response letter detailing SHPO’s findings is included in Appendix B.

### **3.4.1 No action**

No ground disturbance would occur under the no action alternative. No impacts would occur to cultural resources.

### **3.4.2 Proposed action**

The proposed action has the potential to affect historic properties. The cultural resources inventory identified one historic property within the APE. Reclamation determined that no historic properties would be affected pursuant to 36 CFR § 800.5(b); therefore, there would be no impacts to cultural resources as a result of implementing the proposed action.

## **3.5 Cumulative effects**

According to the Council on Environmental Quality 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 effects can result from individually minor but collectively significant actions taking place over a period of time. No cumulative effects were identified.

## **4.0 Consultation and coordination**

### **4.1 Agencies and groups consulted**

Reclamation consulted with Madera Irrigation District in the preparation of this EA.

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

Section 7 of the Endangered Species Act 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. Reclamation determined that there would be no effect on federally-listed as endangered or threatened species; therefore, the U.S. Fish and Wildlife Service was not consulted.

## **4.3 California Endangered Species Act (Fish and Game Code § 2050-2085 and 14 CCR §783-786.8)**

Section 2080 of the California Fish and Game Code prohibits take of species listed under the California Endangered Species Act. This prohibition applies to local, state, and private entities. The California Department of Fish and Wildlife may issue a take permit for CESA-listed species under Fish and Game Code §2081 and 14 CCR 783, if there is determined to be take from a proposed action. Take is defined as to “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture or kill,” (Fish and Game Code §86). If a CESA take permit were required, Madera Irrigation District would be responsible for obtaining the permit as the local entity. Reclamation has determined that there would be negligible temporary effects to foraging areas for Swainson’s hawk from the proposed action which does not rise to the level of take defined by the State of California.

## **4.4 National Historic Preservation Act (54 U.S.C. § 300101 et seq.)**

Reclamation consulted with the California State Historic Preservation Officer and solicited input from area Native American Tribes.

## **5.0 References**

California Department of Fish and Wildlife (CDFW). (2016). *State & Federally Listed Endangered and Threatened Animals of California*. Retrieved November 25, 2016 from: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109405&inline>

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