

RECLAMATION

Managing Water in the West

FINDING OF NO SIGNIFICANT IMPACT

Westlands Water District Coalinga Canal Turnout Project (Milepost 11.58)

FONSI-11-053

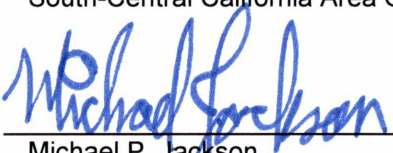
Recommended by:


for Chuck Slek
Supervisory Natural Resources Specialist
South-Central California Area Office
Date: 10-25-12

Concurred by:


Randy English
Chief, Resources Management Division
South-Central California Area Office
Date: 11/2/12

Approved by:


Michael P. Jackson
Area Manager
South-Central California Area Office
Date: 11/5/2012



Introduction

In accordance with section 102(2)(c) of the National Environmental Policy Act (NEPA) of 1969, as amended, the South-Central California Area Office of the Bureau of Reclamation (Reclamation), has determined that an environmental impact statement is not required for the Westlands Water District Coalinga Canal Turnout Project. This Finding of No Significant Impact (FONSI) is supported by Reclamation's Environmental Assessment (EA) Number 11-053, Westlands Water District Coalinga Canal Turnout Project (Milepost 11.58), and is hereby incorporated by reference.

A vertical line in the left margin indicates a change since the circulation of the Draft EA/FONSI. Reclamation provided the public with an opportunity to comment on the Draft EA/FONSI between June 18, 2012 and July 2, 2012. No comments were received.

Westlands Water District (WWD) covers almost 950 square miles of prime farmland in western Fresno and Kings Counties. Currently, WWD's district boundaries encompass 604,000 acres with an irrigable acreage of 567,800 acres. WWD has an existing license from Reclamation to operate the turnout at Coalinga Canal Milepost (MP) 11.58R to deliver water to its agricultural customer at this location, California Pistachios LLC, which operates a pistachio farm at this site.

Purpose and Need

The purpose of the Proposed Action is to replace components of the 35 year old diversion system at Coalinga Canal MP 11.58R which draws water from the canal for conveyance to California Pistachios LLC. WWD has determined that the existing system can no longer provide a stable water supply to its customer. Another purpose is to renew the existing 5-year license to divert water along the Coalinga Canal near MP 18.52 for an additional 5-years.

Proposed Action

Reclamation proposes to approve the removal and replacement of an existing water diversion structure on the Coalinga Canal at Milepost 11.58R which is operated pursuant to diversion license 08-LC-20-9641. Removal will consist of excavating an open trench to remove the existing 18 inch pipe on the WWD (diverter) side and within the existing operations and maintenance (O&M) road. The existing pressure tank will also be removed. However, the existing 150 horsepower turbine pump/motor/column and electrical connections will remain intact and will be connected to a new 18 inch polyvinyl chloride (PVC) pipe. The new pipe will then cross the access road (approximately 87 inches wide) underground to connect to two flange connections in Reclamation's Coalinga Canal right of way. During the replacement, several minor refurbishments will also be made, including the installation of a new concrete slab and a new 6 inch thick concrete wall with rebar (metal reinforcement bar) around the new pipe, concrete encasement of the new pipe under the O&M road, and a new 16 inch above-ground metering station with associated piping.

The open trench required for excavation will be backfilled and compacted once construction is complete. Any materials in excess of backfill needs will be hauled offsite or spread and compacted onsite.

In addition, the Proposed Action will renew the existing 5-year license (08-LC-20-9641) to divert water along the Coalinga Canal near Milepost 18.52 for an additional 5-years (January 1, 2013 through January 31, 2018).

Equipment that will be used for construction includes the following: Case 580 backhoe, concrete mixing truck, and rammer dirt compactor. Construction will require approximately six weeks to complete.

Reclamation's finding that implementation of the Proposed Action will result in no significant impact to the quality of the human environment is supported by the following findings:

Findings

Water Resources

Under the Proposed Action there will be no increase in design flow or changes to diversion. Replacement of the pipe, pressure tank and other improvements will enhance the reliability of the water service by WWD to its customer, California Pistachios LLC and any subsequent customers at MP 11.58R.

There will be no permanent impacts to water resources as all potential impacts are construction related and therefore temporary. All potential adverse impacts will be avoided through compliance with all applicable laws related to hazardous materials. As such, there will be no significant cumulative impacts associated with the Proposed Action.

Land Use

Under the Proposed Action, the existing land use will be temporarily disturbed during construction, as these activities will prevent the immediate area from being used. However, the site will be restored to pre-construction conditions and will continue to be used for agriculture-related uses.

The Proposed Action, through its replacement of the existing aged water conveyance system with an updated system, will contribute to stability of the existing agricultural uses; therefore, there will be no direct or significant cumulative impacts to land use.

Biological Resources

There will be no permanent impact to the habitat of any listed species however two listed species, the Blunt-nosed leopard lizard and San Joaquin kit fox could be impacted by construction activities.

If present, individual blunt-nosed leopard lizards within the temporary and permanent footprint of the site could be crushed by construction activities that collapse their burrows. These impacts could be greater due to fact that the project may well take place outside of the May 1st to August 1st timeframe. Activities that take place outside of this timeframe pose a greater risk because at least part of the population is underground and therefore more vulnerable to injury. In addition, any individual lizards that may be active during construction could be harassed, injured and/or killed by pedestrians, vehicles, and predators during overland movements. They could become

trapped in the trenches dug as part of the project. Lizards could be killed or injured on the roads leading to the proposed project by vehicles driving to the proposed project. The incorporated minimization measures will reduce the extent of these effects.

A total of 0.06 acres of potential kit fox habitat will be temporarily impacted. If the preconstruction survey finds that no kit foxes are currently using the action area, as the previous survey indicated, then only foraging habitat will be impacted, and there will still be risk of harassing or striking a kit fox during access to the site, or of trapping one in a trench. These effects will be reduced in extent or avoided by the minimization measures in the project description. If a den is found to be present, it will not be collapsed unless it is shown to be vacant. This will nonetheless result in harm to the species, however, by making certain the den was empty, injury or death will be prevented.

Formal consultation was initiated with the Service to resolve the potential for impacts to protected species. Reclamation received a non-jeopardy biological opinion from the Service on October 22, 2012, addressing impacts to the San Joaquin kit fox and blunt-nosed leopard lizard. As the Proposed Action would incorporate the conditions imposed by the Biological Opinion listed in Table 2-1, the potential for impacts to the species has been determined to not be significant. Cumulative effects from this action when combined with other actions in the area are also not expected to result in significant impacts to the species.

Cultural Resources

Cultural Resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The National Historic Preservation Act (NHPA) of 1966 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 (National Register). Those resources that are on or eligible for inclusion in the National Register are referred to as historic properties.

No historic properties were identified during the site survey, and documentation was submitted to the State Historic Preservation Officer (SHPO). The SHPO concurred in a letter dated October 20, 2011 (See Appendix C of the EA) that no historic properties would be affected by the Proposed Action.

Indian Trusts Assets

Indian trust assets (ITA) are legal interests in assets that are held in trust by the United States Government for federally recognized Indian tribes or individuals. On July 7, 2011 Reclamation's ITA Branch issued the determination that there are no ITA within the Proposed Action area and therefore the Proposed Action does not have a potential to affect ITA.

Indian Sacred Sites

Executive Order 13007 requires Federal land managing agencies to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and to avoid adversely affecting the physical integrity of such sacred sites. There will be no significant adverse impacts

to Indian Sacred Sites or changes to access to Indian Sacred Sites resulting from the Proposed Action.

Environmental Justice

The February 11, 1994, Executive Order 12898 requiring Federal agencies to ensure that their actions do not disproportionately impact minority and disadvantaged populations went into effect. There is not a residential population within the Proposed Action area. There will not be any disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations as there are no populations within the Proposed Action area.

Socioeconomic Resources

The Proposed Action could prevent economic loss caused by a disruption in water delivery should the existing system fail. As such, the Proposed Action could have a minor beneficial effect on socioeconomic resources.

Air Quality

Emission modeling was completed to determine air quality impacts (EA-11-053). All pollutants resulting from construction fall below the *de minimis* thresholds set by the San Joaquin Valley Air Pollution Control District. Post-construction emissions will be from the maintenance vehicles (i.e. trucks and non-heavy equipment) used by WWD personnel to monitor or operate the distribution system during the irrigation season, on an as-needed basis. Due to the reduced maintenance needs of the new equipment, post-construction emissions will be expected to be less than pre-construction levels. Therefore, the Proposed Action will not cause significant effects to air quality.

Global Climate

The construction phase of the Proposed Action will result in the direct emissions of Greenhouse gases (GHGs) through the use of petroleum fuels. These emissions will not continue past the Proposed Action completion date. The total Carbon Dioxide Equivalence (CO₂e) is 143.1 lbs (0.14 tons total), far below the 25,000 tons per year threshold for significant GHG emissions. As such, this will not result in a substantial change in GHG emissions, and there will be no significant effect.

RECLAMATION

Managing Water in the West

Final Environmental Assessment

Westlands Water District Coalinga Canal Turnout Project (Milepost 11.58) and License Renewal

EA-11-053



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

October 2012

Mission Statements

The mission of the Department of the Interior is to protect and provide access to our Nation's natural and cultural heritage and honor our trust responsibilities to Indian Tribes and our commitments to island communities.

The mission of the Bureau of Reclamation is to manage, develop, and protect water and related resources in an environmentally and economically sound manner in the interest of the American public.

Table of Contents

Section 1	Introduction.....	1
1.1	Background.....	1
1.2	Purpose and Need	5
1.3	Scope.....	5
1.4	Resources Eliminated from Further Analysis	5
1.5	Potential Issues.....	6
Section 2	Alternatives Including the Proposed Action.....	9
2.1	No Action Alternative.....	9
2.2	Proposed Action.....	9
Section 3	Affected Environment and Environmental Consequences	13
3.1	Water Resources	13
3.1.1	Affected Environment	13
3.1.2	Environmental Consequences	13
3.2	Land Use	13
3.2.1	Affected Environment	13
3.2.2	Environmental Consequences	14
3.3	Biological Resources	14
3.3.1	Affected Environment	14
3.3.2	Environmental Consequences	14
3.4	Cultural Resources	16
3.4.1	Affected Environment	16
3.4.2	Environmental Consequences	16
3.5	Air Quality	17
3.5.1	Affected Environment	17
3.5.2	Environmental Consequences	17
3.6	Global Climate.....	19
3.6.1	Affected Environment	19
3.6.2	Environmental Consequences	20
Section 4	Consultation and Coordination	17
4.1	Public Review Period.....	17
4.2	Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.).....	17
4.3	Endangered Species Act (16 U.S.C. § 1531 et seq.).....	17
4.4	National Historic Preservation Act (16 U.S.C. § 470 et seq.)	17
4.5	Indian Trust Assets	18
4.6	Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.)	18
4.7	Executive Order 11988 – Floodplain Management and Executive Order 11990 – Protection of Wetlands.....	18
4.8	Clean Air Act (42 U.S.C. § 7506 (C))	19
4.9	Clean Water Act (33 U.S.C. § 1251 et seq.).....	19
Section 5	List of Preparers and Reviewers	21
Section 6	References.....	21

List of Tables and Figures

Figure 1-1 Project Location Map	2
Figure 1-2 Canal Mileposts	3
Table 2-1 Environmental Protection Measures	10
Table 3-1 General Conformity de minimis Thresholds.....	18
Table 3-2 Estimated Operational Emissions	18
Table 3-3 Greenhouse Emissions	20

Appendices

Appendix A	San Joaquin Kit Fox Avoidance Measures
Appendix B	Biological Opinion
Appendix C	SHPO Concurrence

List of Acronyms and Abbreviations

APE	Area of Potential Effect
CAA	Clean Air Act
CARB	California Air Resources Board
CH ₄	Methane
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalents
CWA	Clean Water Act
DFG	Department of Fish and Game
EA	Environmental Assessment
EPA	Environmental Protection Agency
FWCA	Fish and Wildlife Coordination Act
GHG	greenhouse gases
ITA	Indian Trust Asset
MP	MilePost
NAAQS	National Ambient Air Quality Standards
National Register	National Register of Historic Places
NHPA	National Historic Preservation Act
NO ₂	Nitrous Oxide
NO _x	Nitrous Oxides
O ₃	Ozone
O&M	Operations and Maintenance
PM _{2.5}	Particulate matter less than 2.5 microns in diameter
PM ₁₀	Particulate matter between 2.5 and 10 microns in diameter
Reclamation	Bureau of Reclamation
ROG	Reactive Organic Gases
Service	US Fish and Wildlife Service
SIP	State Implementation Plan
SJVAB	San Joaquin Valley Air Basin
SJVAPCD	San Joaquin Valley Air Pollution Control District
SO ₂	Sulfur Dioxide
VOC	Volatile Organic Compounds
WWD	Westlands Water District

THIS PAGE INTENTIONALLY LEFT BLANK

Section 1 Introduction

The Bureau of Reclamation (Reclamation) provided the public with an opportunity to comment on the Draft Finding of No Significant Impact and Draft Environmental Assessment (EA) between June 18, 2012 and July 2, 2012. No comments were received. Changes from the draft EA that are not minor editorial changes are indicated by vertical lines in the left margin of this document.

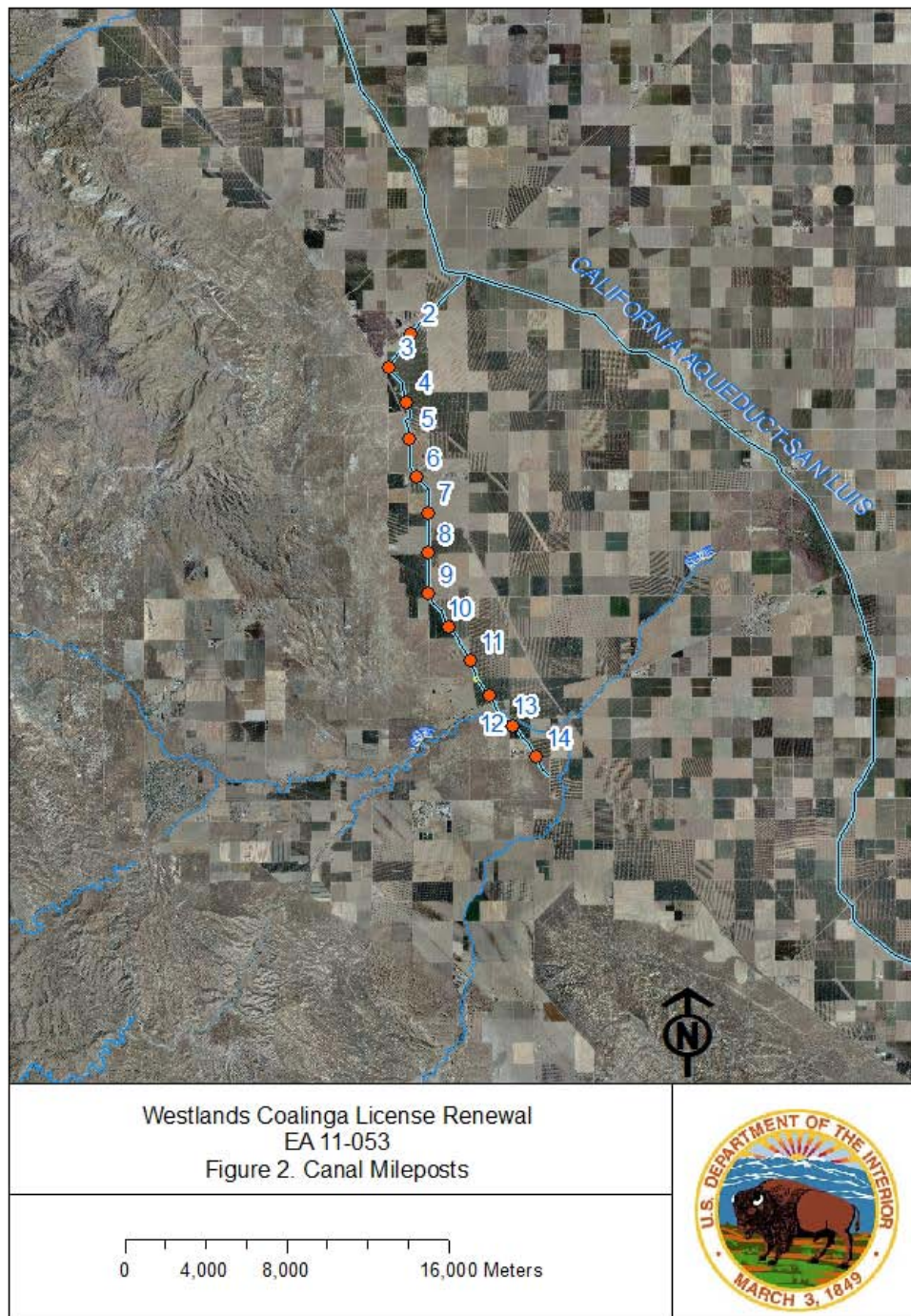
1.1 Background

Westlands Water District (WWD) covers almost 950 square miles of prime farmland in western Fresno and Kings Counties. Currently, WWD's district boundaries encompass 604,000 acres with an irrigable acreage of 567,800 acres. WWD has an existing license from Reclamation to operate the turnout at Coalinga Canal Milepost (MP) 11.58R to deliver water to its agricultural customer at this location, California Pistachios LLC, which operates a pistachio farm at this site (Figure 1).

In addition to the turnout for MP 11.58R, serving California Pistachios LLC, the license includes turnouts serving a variety of other customers along the length of the canal at the following locations (listed by canal MP- mileposts shown in Figure 2):

1. 2.94A
2. 2.94B
3. 2.95R
4. 4.94R
5. 5.38L
6. 7.04
7. 8.13L
8. 9.15L
9. 11.54L
10. 11.58R
11. 13.53R
12. 13.82R
13. 13.86L
14. 14.54R
15. 14.55-1
16. 14.55-2
17. 14.56R-A
18. 14.57R
19. 14.58R
20. 14.59R





(This page intentionally left blank)

1.2 Purpose and Need

The purpose of the Proposed Action is to replace the 35 year old diversion system at Coalinga Canal MP 11.58R, including the pump and piping which draws water from the canal for conveyance to California Pistachios LLC. WWD has determined that the existing system can no longer provide a stable water supply to its customer. An additional purpose of the Proposed Action is to renew the existing license which is scheduled to expire December 31, 2012 for a period of 5-years (January 1, 2013 through January 31, 2018).

1.3 Scope

The scope of analysis in this EA includes the effects on the environment as a result of the removal and replacement of the existing turnout and pipeline diversion which supplies surface water to the agricultural customers at MP 11.58R. The scope also include renewal of the existing license at the full range of turnouts operated along the length of the canal.

1.4 Resources Eliminated from Further Analysis

Reclamation analyzed the affected environment of the Proposed Action and No Action Alternative and has determined that there is no potential for direct, indirect, or cumulative effects to the following resources:

- **Indian Trust Assets:** Indian trust assets (ITA) are legal interests in assets that are held in trust by the United States Government for federally recognized Indian tribes or individuals. On July 7, 2011 Reclamation's ITA Branch issued the determination that there are no ITA within the Proposed Action area and therefore the Proposed Action does not have the potential to affect ITA.
- **Indian Sacred Sites:** Executive Order 13007 requires Federal land managing agencies to accommodate access to and ceremonial use of Indian sacred sites by Indian religious practitioners and to avoid adversely affecting the physical integrity of such sacred sites. There would be no adverse impacts to Indian Sacred Sites or changes to access to Indian Sacred Sites resulting from the Proposed Action.
- **Environmental Justice:** The February 11, 1994, Executive Order 12898 requiring Federal agencies to ensure that their actions do not disproportionately impact minority and disadvantaged populations went into effect. There is not a residential population within the Proposed Action area. There would not be any disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations as there are no populations within the Proposed Action area.
- **Socioeconomic Resources:** The Proposed Action could prevent economic loss caused by a disruption in water delivery should the existing system fail. As such, the Proposed Action could have a minor beneficial effect on socioeconomic resources.

As there would be no impact to the resources listed above as a result of the Proposed Action or the No Action alternative, they will not be considered further.

1.5 **Potential Issues**

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

- Water Resources
- Land Use
- Biological Resources
- Cultural Resources
- Air Quality
- Global Climate

Section 2 Alternatives Including the Proposed Action

This EA considers two possible actions: the No Action Alternative and the Proposed Action. The No Action Alternative reflects future conditions without the Proposed Action and serves as a basis of comparison for determining potential effects to the human environment.

2.1 No Action Alternative

Under the No Action Alternative, Reclamation would not approve removal and replacement of the turnout for the private landowner at MP 11.58R.

2.2 Proposed Action

Reclamation proposes to approve the removal and replacement of an existing water diversion structure on the Coalinga Canal at Milepost 11.58R which is operated pursuant to diversion license 08-LC-20-9641. Removal would consist of excavating an open trench to remove the existing 18 inch pipe on the WWD (diverter) side and within the existing operations and maintenance (O&M) road. The existing pressure tank would also be removed. However, the existing 150 horsepower turbine pump/motor/column and electrical connections would remain intact and would be connected to a new 18 inch polyvinyl chloride (PVC) pipe. The new pipe would then cross the O&M road (approximately 87 inches wide) underground to connect to two flange connections in Reclamation's Coalinga Canal right of way. During the replacement, several minor refurbishments would also be made including the installation of a new concrete slab and a new 6 inch thick concrete wall with rebar (metal reinforcement bar) around the new pipe, concrete encasement of the new pipe under the O&M road, and a new 16 inch above-ground metering station with associated piping.

The open trench required for excavation would be backfilled and compacted once construction is complete. Any materials in excess of backfill needs would be hauled offsite or spread and compacted onsite.

Equipment that would be used for construction includes the following: case 580 backhoe concrete mixing truck and rammer dirt compactor. Construction would require approximately six weeks to complete.

In addition, the Proposed Action would renew the existing 5-year license (08-LC-20-9641) to divert water along the Coalinga Canal at the following MPs for an additional 5-years (January 1, 2013 through January 31, 2018):

1. 2.94A
2. 2.94B
3. 2.95R

4. 4.94R
5. 5.38L
6. 7.04
7. 8.13L
8. 9.15L
9. 11.54L
10. 11.58R
11. 13.53R
12. 13.82R
13. 13.86L
14. 14.54R
15. 14.55-1
16. 14.55-2
17. 14.56R-A
18. 14.57R
19. 14.58R
20. 14.59R

Table 2-1 Environmental Protection Measures

Resource	Protection Measure
Water Quality	During construction hazardous materials such as fuel, oil and paint may be on site. WWD and its contractor would be required to comply with all Federal, state and local laws, during and after construction pertaining to the use, storage, transportation and disposal of any hazardous material.
Biological Resources	<ol style="list-style-type: none"> 1. Between 14 and 30 days prior to the start of construction, a qualified biologist approved by the Service and the Department of Fish and Game (DFG) will conduct a pre-construction survey for San Joaquin kit foxes as specified in Service (2011) and included in Appendix A. 2. All known and potential San Joaquin kit fox dens within the construction zone or kit fox dens outside the construction zone if otherwise authorized, shall be excavated pursuant to conditions described below prior to the onset of construction activities or otherwise protected as specified by Service. Hand excavation of known kit fox dens shall not occur until appropriate consultations are completed. Prior to excavation Reclamation shall notify Service and DFG of the intent to destroy the subject den or burrow(s) and the reasons why alternate courses of action are not possible. It is understood the Service may concur or recommend alternate methods to reduce impacts to the den or burrow(s). 3. As determined by a qualified biologist the destruction of a potential kit fox den may proceed without notification if no current or previous use of the den by kit foxes is known. However, if during excavation any potential den is determined to be a currently or previously used kit fox den (e.g., if kit fox sign is found inside), DFG and Service will be notified immediately of the change in status. 4. In the event that DFG and Service concurs that a known San Joaquin kit fox den would be unavoidably destroyed by planned project action, the following procedures shall be implemented: <ol style="list-style-type: none"> a. Prior to construction, the subject den shall be carefully excavated using hand tools. Excavation will be performed by either a qualified biologist or under the direct supervision of a biologist to ensure that no animals are trapped or injured. Any kit foxes in residence shall be allowed to escape unimpeded. b. The den shall be completely excavated and then refilled and compacted to prevent future use of the site by resident animals. c. Documentation of the den loss shall be conveyed in writing to the Service, Sacramento Field Office, and to DFG in Fresno. 5. A qualified biologist will be on-site or on-call during all activities that could result in the take of a blunt-nosed leopard lizard or San Joaquin kit fox. The qualifications of the biologist(s) will be presented to the Service for review and approval prior to any groundbreaking at the project site. The biologist will have oversight over implementation of all measures described in the <i>Terms and</i>

	<p><i>Conditions of the biological opinion issued for this project and if any of the requirements associated with these measures are not being fulfilled he/she will have the authority to stop project activities through communication with the Project Manager,. If the biologist(s) exercises this authority, the Service and DFG will be notified by telephone and electronic mail within one (1) working day. The Service contact is Mr. Daniel Russell, Division Chief, Endangered Species Program, Sacramento Fish and Wildlife Office, Sacramento (telephone [916] 414-6600). The DFG contact is the State Dispatch at (916) 654-4262.</i></p> <ol style="list-style-type: none"> 6. Prior to initiation of any on-site preparation/construction activities, the Service-approved biologist will conduct an education and training session for all available individuals who will be involved in the site preparation or construction, including the project representative(s) responsible for reporting take to the Service and the DFG. Training sessions will be required for all new or additional personnel before they are allowed to access the project site. Attendance sheets identifying attendees and the contractor/company they represent will be provided to the Service with the post-construction compliance report. At a minimum, the training will include a description of the blunt-nosed leopard lizard, San Joaquin kit fox, and their habitat requirements. Additional information will include the general measures, as they relate to the project, that are being implemented to conserve the species; the penalties for non-compliance with these measures; travel within the marked project site will be restricted to established roadbeds and the boundaries (work area) within which the project must be accomplished. To ensure that employees and contractors understand their roles and responsibilities, training may have to be conducted in languages other than English. 7. The limits of the construction area will be flagged, if not already marked by other fencing, and all activity will be confined within the marked area. All access to and from the project area will be clearly marked in the field with appropriate flagging and signs. Prior to commencing construction activities, the contractor will determine construction vehicle parking sites and all access routes. All construction activity will be confined within the project site, which may include temporary access roads, haul roads, and staging areas specifically designated and marked for these purposes. At no time will equipment or personnel be allowed to adversely affect habitat areas outside the project site without authorization from the Service. 8. To the extent possible, nighttime construction must be minimized. 9. Permanent and temporary disturbances to habitats of the blunt-nosed leopard lizard and San Joaquin kit fox will be minimized to the maximum extent practicable. To minimize temporary disturbances, all project-related vehicle traffic will be restricted to established roads and other designated areas. These areas also would be included in pre-construction surveys and, to the maximum extent possible, would be established in locations disturbed by previous activities to prevent further adverse effects. 10. A 20-mile per hour speed limit will be required on unpaved roads within listed species habitats. 11. To prevent harassment, injury or mortality of blunt-nosed leopard lizards, San Joaquin kit foxes, or destruction of their burrows or dens no pets of any kind will be permitted on construction sites. 12. The onsite biological monitor will check for animals under all vehicles and equipment such as stored pipes before the start of work each morning. 13. To prevent inadvertent entrapment of blunt-nosed leopard lizards or San Joaquin kit foxes during the construction phase of the linear facilities, all excavated, steep-walled holes or trenches more than two feet deep shall be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps (with no greater than a 3:1 slope) constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals by a qualified biologist. If a blunt-nosed leopard lizard or San Joaquin kit fox is trapped, then it shall be allowed to escape on its own. In addition, all construction pipe, culverts, or similar structures with a diameter of 7.6 centimeters (3 inches) or greater that are stored at the construction site for one or more overnight periods will be thoroughly inspected for listed animals before the pipe is subsequently moved, buried, or capped. If during inspection one of these animals is discovered inside a pipe that section of pipe shall not be moved until the animal has escaped on its own. If at any time a trapped listed animal is discovered, the on-site biologist will immediately place escape ramps or other appropriate structures to allow the animal to escape from the opening, or will contact the Service and/or DFG by telephone for guidance. The Service will be notified of the incident by telephone and electronic mail within one (1) working day. 14. All equipment will be maintained in accordance with the manufacturer's directions so there will be no leaks of fluids such as gasoline, oils, or solvents. 15. To eliminate an attraction to predators, all food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers; these containers will be removed at least once every day from the entire project site.
--	---

	16. Use of rodenticides and herbicides in project areas should be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation, as well as additional project-related restrictions deemed necessary by the Service. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to kit fox.
Cultural Resources	In the event that cultural resources or human remains are identified during the implementation of this project there may be additional considerations pursuant to Section 106 of the NHPA. If inadvertent discoveries of cultural resources or human remains occur during project implementation, work shall temporarily stop and Reclamation cultural resources staff shall be contacted immediately.

Section 3 **Affected Environment and Environmental Consequences**

This section identifies the potentially affected environment and the environmental consequences involved with the Proposed Action and the No Action Alternative, in addition to environmental trends and conditions that currently exist.

3.1 **Water Resources**

3.1.1 **Affected Environment**

The Coalinga Canal carries water from the turnout structure on the San Luis Canal to the Coalinga area, in Fresno County. The system includes a 1.6-mile intake channel to the Pleasant Valley Pumping Plant and 11.6 miles of canal. Reaches 1 and 2 of the canal are operated by the WWD. The canal serves agricultural customers throughout all of its reaches.

3.1.2 **Environmental Consequences**

No Action

Under the No Action alternative, there would be no improvements to the water diversion structure. The diversion structure would continue to degrade over time and eventually water delivery service would be impaired.

Proposed Action

Under the Proposed Action there would be no increase in design flow or changes to diversion. Replacement of the pipe, pressure tank and other improvements would enhance the reliability of the water service by WWD to its customer, California Pistachios LLC and any subsequent customers at MP 11.58R.

During construction, hazardous materials such as fuel, oil and paint may be on site. WWD and its contractor would be required to comply with all Federal, state and local laws, during and after construction pertaining to the use, storage, transportation and disposal of any hazardous material.

Cumulative Impacts

Construction impacts would be temporary and brief in nature, and are not expected to affect long-term trends. Repair of the diversion structure would continue to provide water delivery service for the proponent and is a benefit to water users over the long term.

3.2 **Land Use**

3.2.1 **Affected Environment**

The land use surrounding the Coalinga Canal is mainly agricultural; however, in some places ruderal or fallow lands exist which were likely once used for agriculture. The lands immediately surrounding the Proposed Action are used both for agriculture and agriculture related activities, e.g. maintenance and staging areas. Lands directly north are fallow which support ruderal vegetation.

3.2.2 Environmental Consequences

No Action

Under the No Action Alternative, water service to agricultural lands could be impaired, making it difficult to continue farming without an alternative source of water.

Proposed Action

Under the Proposed Action, the existing land use would be temporarily disturbed during construction, as these activities would prevent the immediate area from being used. However, the site would be restored to pre-construction conditions and would continue to be used for agriculture-related uses. Water delivery would continue as per current conditions, so agricultural use could continue.

Cumulative Impacts

The Proposed Action, through its replacement of the existing aged water conveyance system with an updated system, would contribute to stability of the existing agricultural uses; therefore, there would be no direct or cumulative adverse impacts to land use.

3.3 Biological Resources

3.3.1 Affected Environment

The proposed construction footprint would occur on the Coalinga Canal operations and maintenance road, which is bordered by the canal, orchards, and arid grassland. There is little shrub cover in the adjacent grasslands. On July 28, 2011, a preconstruction survey was completed, which found no evidence of kit fox use and no potential burrows, although the habitat was found to be suitable for the species. No western burrowing owls were seen. Kangaroo rat burrows were found in the general action area which may provide refuge for blunt-nosed leopard lizards. Grasslands adjacent to the area are known to have blunt-nosed leopard lizards and San Joaquin kit foxes. By checking with the Endangered Species Recovery Program, it was verified that, because this site is west of the California Aqueduct, the kangaroo rats would be either Heermann's kangaroo rats or short-nosed kangaroo rats, neither of which are listed or proposed for listing under the Endangered Species Act. A write-up of this information was sent to both the U.S Fish and Wildlife Service and California Department of Fish and Game (DFG). DFG confirmed the possibility that blunt-nosed leopard lizards might use the area.

3.3.2 Environmental Consequences

No Action

Under the No Action Alternative, routine activities on the privately owned farmland would continue to impact blunt-nosed leopard lizards and kit foxes. These impacts include ground disturbance which prevents burrows and dens from being dug, and pesticide use. Similar impacts would occur on the Reclamation-owned right-of-way, although those impacts are covered by an existing biological opinion, which also addressed the impacts on the private farmland, which are cumulative to the direct impacts that were covered by the biological opinion.

Proposed Action

The area that would be affected by the Proposed Action is the 2,531 square feet (0.06 acre) project footprint which includes the equipment staging area, trench excavation, PVC pipe installation, trench backfilling, and equipment replacement. The area also includes a 200 foot area surrounding the project footprint. The 200 foot area accounts for construction related disturbance, e.g. sound, dust, vibration. The impacts are temporary because infrastructure is being replaced, with no changes to the baseline, other than the impacts due to the construction itself. No land use change would occur as a result of the Proposed Action; the current infrastructure is 35 years old and needs to be replaced.

If present, individual blunt-nosed leopard lizards within the temporary and permanent footprint of the site could be crushed by construction activities that collapse their burrows. These impacts could be greater due to the fact that the project may well take place outside of the May 1st to August 1st timeframe. Activities that take place outside of this timeframe pose a greater risk because at least part of the population is underground and therefore more vulnerable to injury. In addition, any individual lizards that may be active during construction could be harassed, injured and/or killed by pedestrians, vehicles, and predators during overland movements. They could become trapped in the trenches dug as part of the project. Lizards could be killed or injured on the roads leading to the proposed project by vehicles driving to the proposed project. The incorporated minimization measures would reduce the extent of these effects (See Table 2-1).

A total of 0.06 acres of potential kit fox habitat would be temporarily impacted. If the preconstruction survey finds that no kit foxes are currently using the action area, as the previous survey indicated, then only foraging habitat would be impacted, and there would still be risk of harassing or striking a kit fox during access to the site, or of trapping one in a trench. These effects would be reduced in extent or avoided by the minimization measures in the project description. If a den is found to be present, it would not be collapsed unless it is shown to be vacant. This would nonetheless result in harm to the species, however, by making certain the den was empty, injury or death would be prevented.

Formal consultation was initiated with the Service to resolve the potential for impacts to protected species. Reclamation received a non-jeopardy biological opinion from the Service on October 22, 2012, addressing impacts to the San Joaquin kit fox and blunt-nosed leopard lizard (See Appendix B). As the Proposed Action would incorporate the conditions imposed by the Biological Opinion listed in Table 2-1, the potential for impacts to the species has been determined to not be significant.

Cumulative Impacts

Cumulative impacts would include routine O&M of the Coalinga Canal, as described under the No Action. Also, activities on the private lands adjoining the canal right-of-way could affect both blunt-nosed leopard lizard and San Joaquin kit fox. These include rodent control, which may reduce burrow availability for the lizards and reduce the prey base of kit foxes, as well as result in secondary poisoning of kit foxes. Both species could be subject to harassment from the disturbance of routine farming activities. This is not expected to be a significant impact to the species.

3.4 Cultural Resources

Cultural resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The National Historic Preservation Act (NHPA) of 1966 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 (National Register). Those resources that are on or eligible for inclusion in the National Register are referred to as historic properties.

The Section 106 process is outlined in the Federal regulations at 36 Code of Federal Regulations (CFR) Part 800. These regulations describe the process that the Federal agency (Reclamation) takes to identify cultural resources and the level of effect that the proposed undertaking will have on historic properties. In summary, Reclamation must first determine if the action is the type of action that has the potential to affect historic properties. If the action is the type of action to affect historic properties, Reclamation must identify the area of potential effects (APE), determine if historic properties are present within that APE, determine the effect that the undertaking will have on historic properties, and consult with the State Historic Preservation Office, to seek concurrence on Reclamation's findings. In addition, Reclamation is required through the Section 106 process to consult with Indian Tribes concerning the identification of sites of religious or cultural significance, and consult with individuals or groups who are entitled to be consulting parties or have requested to be consulting parties.

3.4.1 Affected Environment

The APE for the Proposed Action is in a rural area of Fresno County west of Pleasant Valley Ranch. A field survey was conducted for the project area and no cultural resources were identified that could be affected.

3.4.2 Environmental Consequences

No Action

If no action were taken, the water delivery equipment would continue to degrade and could eventually be taken out of service. This would not have any effect on cultural resources.

Proposed Action

No historic properties were identified during the site survey, and documentation was submitted to the State Historic Preservation Officer (SHPO). The SHPO concurred in a letter dated October 20, 2011 (See Appendix C) that no historic properties would be affected by the Proposed Action.

Cumulative Impacts

Since no historic properties were identified in the project area, there is no potential for cumulative impacts from either the No Action alternative or the Proposed Action.

3.5 Air Quality

Section 176 (C) of the Clean Air Act [CAA] (42 U.S.C. 7506 (C)) requires any entity of the federal government that engages in, supports, or in any way provides financial support for, licenses or permits, or approves any activity to demonstrate that the action conforms to the applicable State Implementation Plan (SIP) required under Section 110 (a) of the Federal CAA (42 U.S.C. 7401 [a]) before the action is otherwise approved. In this context, conformity means that such federal actions must be consistent with SIP's purpose of eliminating or reducing the severity and number of violations of the National Ambient Air Quality Standards (NAAQS) and achieving expeditious attainment of those standards. Each federal agency must determine that any action that is proposed by the agency and that is subject to the regulations implementing the conformity requirements would, in fact conform to the applicable SIP before the action is taken.

On November 30, 1993, the Environmental Protection Agency (EPA) promulgated final general conformity regulations at 40 CFR 93 Subpart B for all federal activities except those covered under transportation conformity. The general conformity regulations apply to a proposed federal action in a non-attainment or maintenance area if the total of direct and indirect emissions of the relevant criteria pollutants and precursor pollutant caused by the Proposed Action equal or exceed certain *de minimis* amounts thus requiring the federal agency to make a determination of general conformity.

3.5.1 Affected Environment

The Proposed Action area lies within the San Joaquin Valley Air Basin (SJVAB) under the jurisdiction of the San Joaquin Valley Air Pollution Control District (SJVAPCD). The pollutants of greatest concern in the San Joaquin Valley are carbon monoxide (CO), ozone (O₃), O₃ precursors such as volatile organic compounds (VOC) or reactive organic gases (ROG), and inhalable particulate matter between 2.5 and 10 microns in diameter (PM₁₀) and particulate matter less than 2.5 microns in diameter (PM_{2.5}). The SJVAB has reached Federal and State attainment status for CO, nitrogen dioxide (NO₂), and sulfur dioxide (SO₂). Federal attainment status has been reached for PM₁₀ but is in non-attainment for O₃, PM_{2.5}, and VOC/ROG. There are no established standards for nitrogen oxides (NO_x); however, NO_x does contribute to NO₂ standards (SJVAPCD 2011).

3.5.2 Environmental Consequences

No Action

There would be no adverse impacts to air quality with the No Action Alternative.

Proposed Action

Air quality impacts from the Proposed Action would be limited to those resulting from construction emissions. Construction would begin following receipt of all necessary approvals and would take place over an approximate six week period.

Construction of the Proposed Action would generate pollutant emissions from project construction. The primary pollutant-generating activities associated with these phases include:

- exhaust emissions from construction vehicles and equipment;

- exhaust emissions from vehicles used to deliver supplies to the project site or to haul materials from the site;
- exhaust emissions from worker commute trips;
- fugitive dust from equipment operating on exposed earth and from the handling of construction materials.

Construction equipment for the Proposed Action would include a backhoe, concrete mixing truck and rammer dirt compactor.

Table 3-1 displays the *de minimis* daily thresholds or the amount of emissions determined to cause less than significant impacts to air quality.

Table 3-1 General Conformity *de minimis* Thresholds

Pollutant	Construction-Related
Criteria Air Pollutants and Precursors (Regional)	Average Daily Emissions (lb/day)
ROG (reactive organic gas)	54
NOX (oxides of nitrogen)	54
PM 10 (particulate matter 10 microns in diameter or smaller)	82 (exhaust)
PM 2.5 (particulate matter 2.5 microns in diameter or smaller)	54 (exhaust)
Local CO (carbon monoxide)	None

Source: SJVAPCD 2011

Table 3-2 displays the estimated operational hours for each type of construction equipment that would be utilized for the Proposed Action.

Table 3-2 Estimated Operational Emissions

Equipment	ROG lb/hr	NOX lb/hr	PM 10/2.5 lb/hr	CO lb/hr	Total Daily Hours	Estimated Total Hours
Case 580 backhoe (70 Horsepower)	0.0910	0.5664	0.0515	0.3623	8	210
Concrete mixing truck (350 Horsepower)	0.1782	1.8750	0.0660	0.5784	8	8
Rammer dirt compactor (6.5 Horsepower)	0.0066	0.0466	0.0017	0.0391	8	50
Total	0.2758	2.488	0.1192	0.9798		
Hourly emissions X 8 (daily operational hours)	2.2064	19.904	0.9536	7.8384		

All pollutants resulting from construction fall below the *de minimis* thresholds set by the SJVAPCD. Post-construction emissions would be from the maintenance vehicles (i.e. trucks and non-heavy equipment) used by WWD personnel to monitor or operate the distribution system during the irrigation season, on an as-needed basis. Due to the reduced maintenance needs of the new equipment, post-construction emissions would be expected to be less than pre-construction levels. Therefore, the Proposed Action would not cause adverse effects to air quality.

Cumulative Impacts

The Proposed Action would result in a temporary increase in emissions during the construction phase. While these emissions would be an adverse impact, they would be temporary and at a *de minimis* level and therefore are not considered an adverse cumulative impact. In addition, WWD would comply with the SJVAPCD's Regulation VIII in order to reduce any potential cumulative air quality impacts associated with operation of the Proposed Action.

3.6 Global Climate

Climate change refers to significant change in measures of climate (e.g., temperature, precipitation, or wind) lasting for decades or longer. Many environmental changes can contribute to climate change [changes in sun's intensity, changes in ocean circulation, deforestation, urbanization, burning fossil fuels, etc.] (EPA 2011a)

Gases that trap heat in the atmosphere are often called greenhouse gases (GHG). Some GHG, such as carbon dioxide (CO₂), occur naturally and are emitted to the atmosphere through natural processes and human activities. Other GHG (e.g., fluorinated gases) are created and emitted solely through human activities. The principal GHG that enter the atmosphere because of human activities are: CO₂, methane (CH₄), nitrous oxide, and fluorinated gasses (EPA 2011a).

During the past century humans have substantially added to the amount of GHG in the atmosphere by burning fossil fuels such as coal, natural gas, oil and gasoline to power our cars, factories, utilities and appliances. The added gases, primarily CO₂ and CH₄, are enhancing the natural greenhouse effect, and likely contributing to an increase in global average temperature and related climate changes. At present, there are uncertainties associated with the science of climate change (EPA 2011b).

Climate change has only recently been widely recognized as an imminent threat to the global climate, economy, and population. As a result, the national, state, and local climate change regulatory setting is complex and evolving.

In 2006, the State of California issued the California Global Warming Solutions Act of 2006, widely known as Assembly Bill 32, which requires California Air Resources Board (CARB) to develop and enforce regulations for the reporting and verification of statewide GHG emissions. CARB is further directed to set a GHG emission limit, based on 1990 levels, to be achieved by 2020.

In addition, the EPA has issued regulatory actions under the CAA as well as other statutory authorities to address climate change issues (EPA 2011c). In 2009, the EPA issued a rule (40 CFR Part 98) for mandatory reporting of GHG by large source emitters and suppliers that emit 25,000 metric tons or more of GHG [as CO₂ equivalents (CO_{2e}) per year] (EPA 2009). The rule is intended to collect accurate and timely emissions data to guide future policy decisions on climate change and has undergone and is still undergoing revisions (EPA 2011c).

3.6.1 Affected Environment

Global mean surface temperatures have increased nearly 1.8°F from 1890 to 2006 (Intergovernmental Panel on Climate Change 2007). Models indicate that average temperature changes are likely to be greater in the northern hemisphere. Northern latitudes (above 24°North) have exhibited temperature increases of nearly 2.1°F since 1900, with nearly a 1.8°F increase since 1970 alone (Intergovernmental Panel on Climate Change 2007). Without additional meteorological monitoring systems, it is difficult to determine the spatial and temporal variability and change of climatic conditions, but increasing concentrations of GHG are likely to accelerate the rate of climate change.

More than 20 million Californians rely on the State Water Project and CVP. Increases in air temperature may lead to changes in precipitation patterns, runoff timing and volume, sea level rise, and changes in the amount of irrigation water needed due to modified evapotranspiration rates. These changes may lead to impacts to California's water resources and project operations.

While there is general consensus in their trend, the magnitudes and onset-timing of impacts are uncertain and are scenario-dependent (Anderson et al. 2008).

3.6.2 Environmental Consequences

No Action

There would be no changes to baseline GHG emissions with the No Action Alternative.

Proposed Action

The construction phase of the Proposed Action would result in the direct emissions of GHG through the use of petroleum fuels (Table 3-3). The operational phase of the Proposed Action would result in indirect emissions through the use of electrical power.

Table 3-3 Greenhouse Emissions

Equipment	CO2 lbs/hr	CO2e Total lbs	CH4 lbs/hr	CH4 Total lbs	CO2e	Total Daily Hours	Estimated Total Hours
Case 580 backhoe (70 Horsepower)	0.3623	76.083	0.0082	1.722	36.2	8	210
Concrete mixing truck (350 Horsepower)	0.5784	4.6272	0.0154	1.1232	23.6	8	8
Rammer dirt compactor (6.5 Horsepower)	0.0391	1.955	0.0006	0.03	0.63	8	50
Total	.9798	82.6652	0.0242	2.8752	60.43		

These emissions would not continue past the Proposed Action completion date. The total CO₂e 143.1 lbs (0.14 tons total) is far below the 25,000 tons per year threshold for significant GHG emissions. As such, this would not result in a substantial change in GHG emissions, and there would be no adverse effect.

Cumulative Impacts

GHG generated by the Proposed Action is expected to be extremely small as GHG emissions are de minimis and temporary from construction. While any increase in GHG emissions would add to the global inventory of gases that would contribute to global climate change, the Proposed Action would result in potentially minimal to no increases in GHG emissions and a net increase in GHG emissions among the pool of GHG would not be detectable.

Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation provided the public with an opportunity to comment on the Draft Finding of No Significant Impact and Draft EA between June 18, 2012 and July 2, 2012. No comments were received.

4.2 Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.)

The Fish and Wildlife Coordination Act (FWCA) requires that Reclamation consult with fish and wildlife agencies (federal and state) on all water development projects that could affect biological resources. Federal agencies are required to consult whenever a body of water is proposed to be impounded, diverted, controlled or otherwise modified, either by the agency or under a permit or license issued to another entity. The Proposed Action would only replace existing infrastructure and so the FWCA would not apply.

4.3 Endangered Species Act (16 U.S.C. § 1531 et seq.)

Section 7 of the Endangered Species Act requires Federal agencies, in consultation with the Secretary of the Interior and/or Commerce, to ensure that their actions do not jeopardize the continued existence of endangered or threatened species, or result in the destruction or adverse modification of the critical habitat of these species.

Reclamation received a non-jeopardy biological opinion from the Service on October 22, 2012, addressing impacts to the San Joaquin kit fox and blunt-nosed leopard lizard (See Appendix B). No anadromous fishes occur in the area and so no consultation is needed with the National Marine Fisheries Service.

4.4 National Historic Preservation Act (16 U.S.C. § 470 et seq.)

The 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. Compliance with Section 106 follows a series of steps that are designed to identify interested parties, determine the Area of Potential Effect (APE), conduct cultural resource inventories, determine if historic properties are present within the APE, and assess effects on any identified historic properties.

No historic properties were identified during the site survey, and documentation was submitted to the SHPO. The SHPO concurred in a letter dated October 20, 2011 (See Appendix C) that no historic properties would be affected by the Proposed Action.

4.5 Indian Trust Assets

ITA are legal interests in property held in trust by the United States for federally-recognized Indian tribes or individual Indians. An Indian trust has three components: (1) the trustee, (2) the beneficiary, and (3) the trust asset. ITA can include land, minerals, federally-reserved hunting and fishing rights, federally-reserved water rights, and in-stream flows associated with trust land. Beneficiaries of the Indian trust relationship are federally-recognized Indian tribes with trust land; the United States is the trustee. By definition, ITA cannot be sold, leased, or otherwise encumbered without approval of the United States. The characterization and application of the United States trust relationship have been defined by case law that interprets Congressional acts, executive orders, and historic treaty provisions.

The Proposed Action would not affect ITA because there are none located in the Proposed Action area. The nearest ITA is the Santa Rosa Rancheria approximately 26 miles east-northeast of the Proposed Action location.

4.6 Migratory Bird Treaty Act (16 U.S.C. § 703 et seq.)

The Migratory Bird Treaty Act implements various treaties and conventions between the United States and Canada, Japan, Mexico and the former Soviet Union for the protection of migratory birds. Unless permitted by regulations, the Act provides that it is unlawful to pursue, hunt, take, capture or kill; attempt to take, capture or kill; possess, offer to or sell, barter, purchase, deliver or cause to be shipped, exported, imported, transported, carried or received any migratory bird, part, nest, egg or product, manufactured or not. Subject to limitations in the Act, the Secretary of the Interior may adopt regulations determining the extent to which, if at all, hunting, taking, capturing, killing, possessing, selling, purchasing, shipping, transporting or exporting of any migratory bird, part, nest or egg will be allowed, having regard for temperature zones, distribution, abundance, economic value, breeding habits and migratory flight patterns.

No western burrowing owls were found in the area during the July 11, 2011 surveys. A preconstruction survey for kit foxes would also detect any burrowing owls and allow construction personnel to avoid harm.

4.7 Executive Order 11988 – Floodplain Management and Executive Order 11990 – Protection of Wetlands

Executive Order 11988 requires Federal agencies to prepare floodplain assessments for actions located within or affecting flood plains, and similarly, Executive Order 11990 places similar requirements for actions in wetlands. The Proposed Action would not affect either concern.

4.8 Clean Air Act (42 U.S.C. § 7506 (C))

Section 176 of the CAA requires that any entity of the Federal government that engages in, supports, or in any way provided financial support for, licenses or permits, or approves any activity to demonstrate that the action conforms to the applicable SIP required under Section 110 (a) of the CAA (42 U.S.C. § 7401 (a)) before the action is otherwise approved. In this context, conformity means that such federal actions must be consistent with a SIP's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of those standards. Each federal agency must determine that any action that is proposed by the agency and that is subject to the regulations implementing the conformity requirements will, in fact conform to the applicable SIP before the action is taken. The Proposed Action would not affect the California SIP.

4.9 Clean Water Act (33 U.S.C. § 1251 et seq.)

Section 401

Section 401 of the Clean Water Act (CWA) (33 U.S.C. § 1311) prohibits the discharge of any pollutants into navigable waters, except as allowed by permit issued under sections 402 and 404 of the CWA (33 U.S.C. § 1342 and 1344). If new structures (e.g., treatment plants) are proposed, that would discharge effluent into navigable waters, relevant permits under the CWA would be required for the project applicant(s). Section 401 requires any applicant for an individual U. S. Army Corps of Engineers dredge and fill discharge permit to first obtain certification from the state that the activity associated with dredging or filling will comply with applicable state effluent and water quality standards. This certification must be approved or waived prior to the issuance of a permit for dredging and filling. The Proposed Action would not discharge any pollutants into navigable waters.

Section 404

Section 404 of the CWA authorizes the U. S. Army Corps of Engineers to issue permits to regulate the discharge of “dredged or fill materials into waters of the United States” (33 U.S.C. § 1344). The Proposed Action would not discharge any materials into waters of the United States.

THIS PAGE INTENTIONALLY LEFT BLANK

Section 5 List of Preparers and Reviewers

Chuck Siek, Supervisory Natural Resources Specialist, SCCAO
 Ben Lawrence, Natural Resource Specialist, SCCAO
 Rain Healer, Natural Resource Specialist, SCCAO - Reviewer
 Shauna McDonald, Wildlife Biologist, SCCAO
 William Soule, Archaeologist, MP-153
 Patricia Rivera, ITA, MP-400

Section 6 References

Anderson, J, F Chung, M Anderson, L Brekke, D Easton, M Ejetal, R Peterson, and R Snyder. 2008. Progress on Incorporating Climate Change into Management of California's Water Resources. *Climatic Change* 87(Suppl 1):S91–S108 DOI 10.1007/s10584-007-9353-1

Environmental Protection Agency (EPA). 2009. Mandatory Reporting of Greenhouse Gases, Final Rule (40 CFR Parts 86, 87, 89 et al.) *Federal Register*. 74(209): 56260-56519.

California Air Resources Board. 2011. California Air Basins. Website:
<http://www.arb.ca.gov/knowzone/basin/basin.htm> Accessed: June 11, 2012.

Environmental Protection Agency (EPA). 2011a: Website – Climate Change, Basic Information.
<http://www.epa.gov/climatechange/basicinfo.html>

Environmental Protection Agency (EPA). 2011b: Website – Climate Change, Science.
<http://www.epa.gov/climatechange/science/index.html>

Environmental Protection Agency (EPA). 2011c. Climate Change – Science. Website:
<http://www.epa.gov/climatechange/science/index.html>.

Intergovernmental Panel on Climate Change. 2007. Climate Change 2007: Synthesis Report. Website: http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4_syr.pdf. Accessed April 2011.

San Joaquin Valley Air Pollution Control District (SJVAPCD). 2011. Ambient Air Quality Standards and Valley Attainment Status. Website:
<http://www.valleyair.org/aqinfo/attainment.htm> Accessed: October 2011.

U.S. Census Bureau. 2011. State and County QuickFacts webpage: Fresno County, CA. Website: <http://quickfacts.census.gov/qfd/states/06/06019.html>. Accessed: October 2011.

U.S. Fish and Wildlife Service (USFWS). 2011. Species List

ENVIRONMENTAL ASSESSMENT (11-053)

Westlands Water District Coalinga Canal Turnout Project (Milepost 11.58)

Appendix A

San Joaquin Kit Fox Avoidance Measures

October 2012

**U.S. FISH AND WILDLIFE SERVICE
STANDARDIZED RECOMMENDATIONS
FOR PROTECTION OF THE ENDANGERED SAN JOAQUIN KIT FOX
PRIOR TO OR DURING GROUND DISTURBANCE**

Prepared by the Sacramento Fish and Wildlife Office
January 2011

INTRODUCTION

The following document includes many of the San Joaquin kit fox (*Vulpes macrotis mutica*) protection measures typically recommended by the U. S. Fish and Wildlife Service (Service), prior to and during ground disturbance activities. **However, incorporating relevant sections of these guidelines into the proposed project is not the only action required under the Endangered Species Act of 1973, as amended (Act) and does not preclude the need for section 7 consultation or a section 10 incidental take permit for the proposed project.** Project applicants should contact the Service in Sacramento to determine the full range of requirements that apply to your project; the address and telephone number are given at the end of this document. Implementation of the measures presented in this document may be necessary to avoid violating the provisions of the Act, including the prohibition against "take" (defined as killing, harming, or harassing a listed species, including actions that damage or destroy its habitat). These protection measures may also be required under the terms of a biological opinion pursuant to section 7 of the Act resulting in incidental take authorization (authorization), or an incidental take permit (permit) pursuant to section 10 of the Act. The specific measures implemented to protect kit fox for any given project shall be determined by the Service based upon the applicant's consultation with the Service.

The purpose of this document is to make information on kit fox protection strategies readily available and to help standardize the methods and definitions currently employed to achieve kit fox protection. The measures outlined in this document are subject to modification or revision at the discretion of the Service.

IS A PERMIT NECESSARY?

Certain acts need a permit from the Service which includes destruction of any known (occupied or unoccupied) or natal/pupping kit fox dens. Determination of the presence or absence of kit foxes and /or their dens should be made during the environmental review process.

All surveys and monitoring described in this document must be conducted by a qualified biologist and these activities do not require a permit. A qualified biologist (biologist) means any person who has completed at least four years of university training in wildlife biology or a related science and/or has demonstrated field experience in the identification and life history of the San Joaquin kit fox. In addition, the biologist(s) must be able to identify coyote, red fox,

gray fox, and kit fox tracks, and to have seen a kit fox in the wild, at a zoo, or as a museum mount. Resumes of biologists should be submitted to the Service for review and approval prior to any survey or monitoring work occurring.

SMALL PROJECTS

Small projects are considered to be those projects with small foot prints, of approximately one acre or less, such as an individual in-fill oil well, communication tower, or bridge repairs. These projects must stand alone and not be part of, or in any way connected to larger projects (i.e., bridge repair or improvement to serve a future urban development). The Service recommends that on these small projects, the biologist survey the proposed project boundary and a 200-foot area outside of the project footprint to identify habitat features and utilize this information as guidance to situate the project to minimize or avoid impacts. If habitat features cannot be completely avoided, then surveys should be conducted and the Service should be contacted for technical assistance to determine the extent of possible take.

Preconstruction/preactivity surveys shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the San Joaquin kit fox. Kit foxes change dens four or five times during the summer months, and change natal dens one or two times per month (Morrell 1972). 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 dens should be determined and mapped (see Survey Protocol). Written results of preconstruction/preactivity surveys must be received by the Service within five days after survey completion and prior to the start of ground disturbance and/or construction activities.

If a natal/pupping den is discovered within the project area or within 200-feet of the project boundary, the Service shall be immediately notified and under no circumstances should the den be disturbed or destroyed without prior authorization. If the preconstruction/preactivity survey reveals an active natal pupping or new information, the project applicant should contact the Service immediately to obtain the necessary take authorization/permit.

If the take authorization/permit has already been issued, then the biologist may proceed with den destruction within the project boundary, except natal/pupping den which may not be destroyed while occupied. A take authorization/permit is required to destroy these dens even after they are vacated. Protective exclusion zones can be placed around all known and potential dens which occur outside the project footprint (conversely, the project boundary can be demarcated, see den destruction section).

OTHER PROJECTS

It is likely that all other projects occurring within kit fox habitat will require a take authorization/permit from the Service. This determination would be made by the Service during the early evaluation process (see Survey Protocol). These other projects would include, but are not limited to: Linear projects; projects with large footprints such as urban development; and projects which in themselves may be small but have far reaching impacts (i.e., water storage or conveyance facilities that promote urban growth or agriculture, etc.).

The take authorization/permit issued by the Service may incorporate some or all of the protection measures presented in this document. The take authorization/permit may include measures specific to the needs of the project and those requirements supersede any requirements found in this document.

EXCLUSION ZONES

In order to avoid impacts, construction activities must avoid their dens. The configuration of exclusion zones around the kit fox dens should have a radius measured outward from the entrance or cluster of entrances due to the length of dens underground. The following distances are **minimums**, and if they cannot be followed the Service must be contacted. Adult and pup kit foxes are known to sometimes rest and play near the den entrance in the afternoon, but most above-ground activities begin near sunset and continue sporadically throughout the night. Den definitions are attached as Exhibit A.

Potential den**	50 feet
Atypical den**	50 feet
Known den*	100 feet
Natal/pupping den (occupied <u>and</u> unoccupied)	Service must be contacted

***Known den:** To ensure protection, the exclusion zone should be demarcated by fencing that encircles each den at the appropriate distance and does not prevent access to the den by kit foxes. Acceptable fencing includes untreated wood particle-board, silt fencing, orange construction fencing or other fencing as approved by the Service as long as it has openings for kit fox ingress/egress and keeps humans and equipment out. Exclusion zone fencing should be maintained until all construction related or operational disturbances have been terminated. At that time, all fencing shall be removed to avoid attracting subsequent attention to the dens.

****Potential and Atypical dens:** Placement of 4-5 flagged stakes 50 feet from the den entrance(s) will suffice to identify the den location; fencing will not be required, but the exclusion zone must be observed.

Only essential vehicle operation on existing roads and foot traffic should be permitted. Otherwise, all construction, vehicle operation, material storage, or any other type of surface-disturbing activity should be prohibited or greatly restricted within the exclusion zones.

DESTRUCTION OF DENS

Limited destruction of kit fox dens may be allowed, if avoidance is not a reasonable alternative, provided the following procedures are observed. The value to kit foxes of potential, known, and natal/pupping dens differ and therefore, each den type needs a different level of protection.

Destruction of any known or natal/pupping kit fox den requires take authorization/permit from the Service.

Destruction of the den should be accomplished by careful excavation until it is certain that no kit foxes are inside. The den should be fully excavated, filled with dirt and compacted to ensure that kit foxes cannot reenter or use the den during the construction period. If at any point during excavation, a kit fox is discovered inside the den, the excavation activity shall cease immediately and monitoring of the den as described above should be resumed. Destruction of the den may be completed when in the judgment of the biologist, the animal has escaped, without further disturbance, from the partially destroyed den.

Natal/pupping dens: Natal or pupping dens which are occupied will not be destroyed until the pups and adults have vacated and then only after consultation with the Service. Therefore, project activities at some den sites may have to be postponed.

Known Dens: Known dens occurring within the footprint of the activity must be monitored for three days with tracking medium or an infra-red beam camera to determine the current use. If no kit fox activity is observed during this period, the den should be destroyed immediately to preclude subsequent use.

If kit fox activity is observed at the den during this period, the den should be monitored for at least five consecutive days from the time of the observation to allow any resident animal to move to another den during its normal activity. Use of the den can be discouraged during this period by partially plugging its entrances(s) with soil in such a manner that any resident animal can escape easily. Only when the den is determined to be unoccupied may the den be excavated under the direction of the biologist. If the animal is still present after five or more consecutive days of plugging and monitoring, the den may have to be excavated when, in the judgment of a biologist, it is temporarily vacant, for example during the animal's normal foraging activities.

The Service encourages hand excavation, but realizes that soil conditions may necessitate the use of excavating equipment. However, extreme caution must be exercised.

Potential Dens: If a take authorization/permit has been obtained from the Service, den destruction may proceed without monitoring, unless other restrictions were issued with the take authorization/permit. If no take authorization/permit has been issued, then potential dens should be monitored as if they were known dens. If any den was considered to be a potential den, but is later determined during monitoring or destruction to be currently, or previously used by kit fox (e.g., if kit fox sign is found inside), then all construction activities shall cease and the Service shall be notified immediately.

CONSTRUCTION AND ON-GOING OPERATIONAL REQUIREMENTS

Habitat subject to permanent and temporary construction disturbances and other types of ongoing project-related disturbance activities should be minimized by adhering to the following activities. Project designs should limit or cluster permanent project features to the smallest area possible while still permitting achievement of project goals. To minimize temporary disturbances, all project-related vehicle traffic should be restricted to established roads, construction areas, and other designated areas. These areas should also be included in preconstruction surveys and, to the extent possible, should be established in locations disturbed by previous activities to prevent further impacts.

1. Project-related vehicles should observe a daytime speed limit of 20-mph throughout the site in all project areas, except on county roads and State and Federal highways; this is particularly important at night when kit foxes are most active. Night-time construction should be minimized to the extent possible. However if it does occur, then the speed limit should be reduced to 10-mph. Off-road traffic outside of designated project areas should be prohibited.
2. To prevent inadvertent entrapment of kit foxes or other animals during the construction phase of a project, all excavated, steep-walled holes or trenches more than 2-feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen-fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals. If at any time a trapped or injured kit fox is discovered, the Service and the California Department of Fish and Game (CDFG) shall be contacted as noted under measure 13 referenced below.
3. Kit foxes are attracted to den-like structures such as pipes and may enter stored pipes and become trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4-inches or greater that are stored at a construction site for one or more overnight periods should be thoroughly inspected for kit foxes before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a kit fox is discovered inside a pipe, that section of pipe should not be moved until the Service has been consulted. If necessary, and under the direct supervision of the biologist, the pipe

may be moved only once to remove it from the path of construction activity, until the fox has escaped.

4. All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from a construction or project site.
5. No firearms shall be allowed on the project site.
6. No pets, such as dogs or cats, should be permitted on the project site to prevent harassment, mortality of kit foxes, or destruction of dens.
7. Use of rodenticides and herbicides in project areas should be restricted. This is necessary to prevent primary or secondary poisoning of kit foxes and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and Federal legislation, as well as additional project-related restrictions deemed necessary by the Service. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to kit fox.
8. A representative shall be appointed by the project proponent who will be the contact source for any employee or contractor who might inadvertently kill or injure a kit fox or who finds a dead, injured or entrapped kit fox. The representative will be identified during the employee education program and their name and telephone number shall be provided to the Service.
9. An employee education program should be conducted for any project that has anticipated impacts to kit fox or other endangered species. The program should consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and military and/or agency personnel involved in the project. The program should include the following: A description of the San Joaquin kit fox and its habitat needs; a report of the occurrence of kit fox in the project area; an explanation of the status of the species and its protection under the Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information should be prepared for distribution to the previously referenced people and anyone else who may enter the project site.
10. Upon completion of the project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc. should be re-contoured if necessary, and revegetated to promote restoration of the area to pre-project conditions. An area subject to "temporary" disturbance means any area that is

disturbed during the project, but after project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas should be determined on a site-specific basis in consultation with the Service, California Department of Fish and Game (CDFG), and revegetation experts.

11. In the case of trapped animals, escape ramps or structures should be installed immediately to allow the animal(s) to escape, or the Service should be contacted for guidance.
12. Any contractor, employee, or military or agency personnel who are responsible for inadvertently killing or injuring a San Joaquin kit fox shall immediately report the incident to their representative. This representative shall contact the CDFG immediately in the case of a dead, injured or entrapped kit fox. The CDFG contact for immediate assistance is State Dispatch at (916)445-0045. They will contact the local warden or Mr. Paul Hoffman, the wildlife biologist, at (530)934-9309. The Service should be contacted at the numbers below.
13. The Sacramento Fish and Wildlife Office and CDFG shall be notified in writing within three working days of the accidental death or injury to a San Joaquin kit fox during project related activities. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal and any other pertinent information. The Service contact is the Chief of the Division of Endangered Species, at the addresses and telephone numbers below. The CDFG contact is Mr. Paul Hoffman at 1701 Nimbus Road, Suite A, Rancho Cordova, California 95670, (530) 934-9309.
14. New sightings of kit fox shall be reported to the California Natural Diversity Database (CNDDDB). A copy of the reporting form and a topographic map clearly marked with the location of where the kit fox was observed should also be provided to the Service at the address below.

Any project-related information required by the Service or questions concerning the above conditions or their implementation may be directed in writing to the U.S. Fish and Wildlife Service at:

Endangered Species Division
2800 Cottage Way, Suite W2605
Sacramento, California 95825-1846
(916) 414-6620 or (916) 414-6600

EXHIBIT “A” - DEFINITIONS

"Take" - Section 9 of the Endangered Species Act of 1973, as amended (Act) prohibits the "take" of any federally listed endangered species by any person (an individual, corporation, partnership, trust, association, etc.) subject to the jurisdiction of the United States. As defined in the Act, take means " . . . to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct". Thus, not only is a listed animal protected from activities such as hunting, but also from actions that damage or destroy its habitat.

"Dens" - San Joaquin kit fox dens may be located in areas of low, moderate, or steep topography. Den characteristics are listed below, however, the specific characteristics of individual dens may vary and occupied dens may lack some or all of these features. Therefore, caution must be exercised in determining the status of any den. Typical dens may include the following: (1) one or more entrances that are approximately 5 to 8 inches in diameter; (2) dirt berms adjacent to the entrances; (3) kit fox tracks, scat, or prey remains in the vicinity of the den; (4) matted vegetation adjacent to the den entrances; and (5) manmade features such as culverts, pipes, and canal banks.

"Known den" - Any existing natural den or manmade structure that is used or has been used at any time in the past by a San Joaquin kit fox. Evidence of use may include historical records, past or current radiotelemetry or spotlighting data, kit fox sign such as tracks, scat, and/or prey remains, or other reasonable proof that a given den is being or has been used by a kit fox. The Service discourages use of the terms "active" and "inactive" when referring to any kit fox den because a great percentage of occupied dens show no evidence of use, and because kit foxes change dens often, with the result that the status of a given den may change frequently and abruptly.

"Potential Den" - Any subterranean hole within the species' range that has entrances of appropriate dimensions for which available evidence is insufficient to conclude that it is being used or has been used by a kit fox. Potential dens shall include the following: (1) any suitable subterranean hole; or (2) any den or burrow of another species (e.g., coyote, badger, red fox, or ground squirrel) that otherwise has appropriate characteristics for kit fox use.

"Natal or Pupping Den" - Any den used by kit foxes to whelp and/or rear their pups. Natal/pupping dens may be larger with more numerous entrances than dens occupied exclusively by adults. These dens typically have more kit fox tracks, scat, and prey remains in the vicinity of the den, and may have a broader apron of matted dirt and/or vegetation at one or more entrances. A natal den, defined as a den in which kit fox pups are actually whelped but not necessarily reared, is a more restrictive version of the pupping den. In practice, however, it is difficult to distinguish between the two, therefore, for purposes of this definition either term applies.

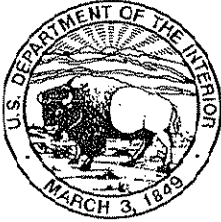
"Atypical Den" - Any manmade structure which has been or is being occupied by a San Joaquin kit fox. Atypical dens may include pipes, culverts, and diggings beneath concrete slabs and buildings.

ENVIRONMENTAL ASSESSMENT (11-053)

Westlands Water District Coalinga Canal Turnout Project (Milepost 11.58)

**Appendix B
Biological Opinion**

October 2012



United States Department of the Interior

FISH AND WILDLIFE SERVICE



Sacramento Fish and Wildlife Office
2800 Cottage Way, Room W-2605
Sacramento, California 95825-1846



In Reply Refer To:
08ESMF00-2012-F-0141

OCT 22 2012

To: David E. Hyatt, Supervisory Biologist, Bureau of Reclamation, Fresno, California

From:  Susan K. Moore, Field Supervisor, Sacramento Fish and Wildlife Office,
Sacramento, California 

Subject: Formal Consultation for Westlands Water District Coalinga Canal Turnout
Replacement, Fresno County, California

This is the U.S. Fish and Wildlife Service's (Service) response to the Bureau of Reclamation's (Reclamation) request for initiation of formal consultation on the proposed Westlands Water District (Westlands) Coalinga Canal Turnout Replacement (project), in Fresno County, California. Reclamation is considering the renewal of an existing permit (08-LC-20-9641) to continue to divert water following improvements at the turnout.

This letter represents the Service's biological opinion on the effects of the proposed action on the blunt-nosed leopard lizard (*Gambelia sila*) and San Joaquin kit fox (*Vulpes macrotis mutica*) both federally-listed as endangered under the Endangered Species Act of 1973, as amended (Act). The proposed project includes the improvement of a 35 year old diversion system along the Bureau of Reclamation's Coalinga Canal to provide water delivery to California Pistachios LLC. Reclamation determined that no Critical Habitat for any listed species would be affected as none occurs in the proposed project area, and that the proposed action may affect, and is likely to adversely affect the San Joaquin kit fox and blunt-nosed leopard lizard. The Service has reviewed the proposed project and concurs with Reclamation's determinations that the project is likely to adversely affect the blunt-nosed leopard lizard and San Joaquin kit fox.

The findings and recommendations of this biological opinion (BO) are based on: (1) The December 21, 2011 request for consultation; (2) the document titled *Westlands Water District Coalinga Canal Turnout Replacement Biological Assessment* (biological assessment) prepared by Reclamation and received with your request for consultation; (3) January 09, 2012 telephone correspondence between the Service and Reclamation; (4) March 14, 2012 telephone call and follow up email correspondence for expanding proposed avoidance measures; (5) April 10, 2012 email correspondence detailing the project's action area; and (5) other information available to the Service. Your request for consultation was received in our office on January 04, 2012.

Consultation History

December 21, 2011. Reclamation submitted to the Service the biological assessment and a request for formal consultation on the Westlands Water District Coalinga Canal Turnout Replacement project.

January 04, 2012. The Service received Reclamation's request for initiation of formal consultation.

January 24, 2012. The Service requested a project map delineating trench locations for the proposed project.

February 03, 2012. Reclamation submitted to the Service a project map showing trench and pump locations.

February 08, 2012. Service requested additional information on the size of the project's action area.

March 14, 2012. Via telephone, the Service and Reclamation developed additional conservation measures for listed species near the project area; a follow up email was drafted to document these changes.

April 10, 2012. Westlands submitted additional materials re-quantifying the action area acreage.

September 21, 2012. Reclamation confirms that no night work is proposed.

BIOLOGICAL OPINION

Description of the Proposed Action

Reclamation proposes to renew a water diversion permit to allow Westlands to remove and replace an existing water diversion structure on the Coalinga Canal at Milepost 11.58R. The project is located in Township 20 south, Range 16 east, northwest quarter of Section 22, Mount Diablo Base and Meridian (UTM coordinates 10S 749580 4007485), 7 miles east of Coalinga. The surrounding land use consists of almond orchard to the west, the intersection of Gale Avenue and the Coalinga Canal operations and maintenance (O&M) road to the north, the Coalinga Canal and Coalinga Canal right of way (ROW) to the east, and the O&M road to the south.

The proposed project consists of excavating an open trench (2 feet by 90 feet) to remove the existing 18 inch pipe within the existing O&M road (approximately 87 feet wide) and within the roadway's eastern boundary. The existing pressure tank would also be removed. However, the existing 150 horsepower turbine pump/motor/column and electrical connections would remain intact and would be connected to a new 18 inch polyvinyl chloride (PVC) pipe. A second trench

(3 feet by 90 feet) would then be excavated crossing the O&M road connecting to two flange connections in Reclamation's Coalinga Canal ROW. The second trench would be utilized for placement of the new 18 inch PVC pipe. The two open trenches required for excavation would be backfilled and compacted once construction is complete. Any materials in excess of backfill needs would be hauled offsite or spread and compacted onsite. All of the proposed work will occur within a 1,631 square foot area. Equipment that would be used for construction includes the following: backhoe, excavator, concrete mixing truck, contractor personnel trucks. Equipment will be staged and stored on site in a 900 square foot area.

During the replacement, several minor refurbishments would also be made, which include installing a new concrete slab and a new six inch thick poured concrete wall with rebar (metal reinforcement bar) around the new pipe, concrete encasement of the new pipe under the O&M road, and new 16 inch above-ground metering stations and associated piping would be installed. Construction would require an estimated 6 weeks to complete; all work would be conducted during daylight.

Proposed Avoidance and Minimization Measures

Reclamation, in coordination with Westlands, proposes to implement the following guidelines to minimize or avoid impacts to listed species that are known and/or have the potential to occur within the vicinity of the project area:

Construction Guidelines

1. A Service-approved biologist will be on-call during all activities that could result in the take of a blunt-nosed leopard lizard or San Joaquin kit fox. The qualifications of the biologist(s) will be presented to the Service for review and approval prior to any groundbreaking on the project site.
2. Prior to initiation of any on-site preparation/construction activities, the Service-approved biologist will conduct an education and training session for all individuals who will be involved in the site preparation or construction, including the project representative(s) responsible for reporting take to the Service. Training sessions will be required for all new or additional personnel before they are allowed to access the project site. At a minimum the training will include a description of the San Joaquin kit fox and blunt-nosed leopard lizard, and their habitat requirements. Additional information will include the general measures, as they relate to the project, that are being implemented to conserve the species; and the penalties for non-compliance with these measures. To ensure that employees and contractors understand their roles and responsibilities, training may have to be conducted in languages other than English.
3. Travel within the marked project site will be restricted to established roadbeds and the boundaries (project area) within which the project must be accomplished. The limits of the construction area will be flagged, if not already marked by other fencing,

and all activity will be confined within the marked area. All access to and from the project area will be clearly marked in the field with appropriate flagging and signs. At no time will equipment or personnel be allowed to adversely affect habitat areas outside the project site without prior authorization from the Service.

4. A 10-mile per hour speed limit will be required on unpaved roads leading to the project site.
5. The onsite Service-approved biologist will check for animals under all vehicles and equipment such as stored pipes before the start of work each morning.
6. To prevent inadvertent entrapment of blunt-nosed leopard lizards or San Joaquin kit foxes during the construction phase of the linear trenches, all excavated, steep-walled holes or trenches more than two feet deep shall be covered at the close of each working day by plywood or similar materials or provided with one or more escape ramps (with no greater than a 3:1 slope) constructed of earth fill or wooden planks. Before such holes or trenches are filled, they shall be thoroughly inspected for trapped animals by a Service-approved biologist. If a blunt-nosed leopard lizard or San Joaquin kit fox is trapped, then it shall be allowed to move on its own. In addition, all construction pipe, culverts, or similar structures with a diameter of 7.6 centimeters (3 inches) or greater that are stored at the construction site for one or more overnight periods will be thoroughly inspected before the pipe is subsequently moved, buried, or capped. If during inspection one of these animals is discovered inside a pipe that section of pipe shall not be moved until the animal has moved on its own. If at any time a trapped listed animal is discovered, the Service-approved biologist will immediately place escape ramps or other appropriate structures to allow the animal to leave from the opening, or will contact the Service by telephone for guidance.
7. All food-related trash items such as wrappers, cans, bottles, and food scraps will be disposed of in closed containers; these containers will be removed at least once every day from the entire project site.
8. All equipment will be maintained in accordance with the manufacturer's directions so there will be no leaks of fluids such as gasoline, oils, or solvents.

Proposed Conservation Measures for Listed Species

A Service-approved biologist shall oversee implementation of all the measures described in this biological opinion and he/she shall have the authority to stop project activities, through communication with the Reclamation representative, if these measures are not being fulfilled. Any stop work requests due to take of listed species shall be communicated to the Service within one day.

- San Joaquin kit fox:
 1. The Service-approved biologist(s) will implement the *U.S. Fish and Wildlife Service Standardized Recommendations for Protection of the Endangered San Joaquin Kit Fox Prior to or During Ground Disturbance* (Service 2011).
- Blunt-nosed leopard lizard
 1. To prevent inadvertent entrapment of the blunt-nosed leopard lizard during construction, any open trenches and holes will be surveyed in the morning and late afternoon hours in order to locate any individuals that may have fallen in. Escape ramps or other methods enabling blunt-nosed leopard lizards to escape from trenches will be utilized.
 2. If blunt-nosed leopard lizards are identified within the project footprint (during construction activities), Reclamation will notify the Service and stop construction activity until the blunt-nosed leopard lizard leaves on its own accord.

Action Area

The action area is defined in 50 CFR § 402.02, as “all areas to be affected directly or indirectly by the Federal action and not merely the immediate area involved in the action.” The action area for this project is the 2,531 square feet (0.06 acre) project footprint which includes the equipment staging area, trench excavation, PVC pipe installation, trench backfilling, and equipment replacement. The action area also includes a 200 foot area surrounding the project footprint. The 200 foot area will account for construction related disturbance, e.g. sound, dust, vibration.

Analytical Framework for the Jeopardy/No Jeopardy Determination

In accordance with policy and regulation, the following analysis relies on four components to support the jeopardy/no jeopardy determination for the blunt-nosed leopard lizard and San Joaquin kit fox: (1) the *Status of the Species*, which evaluates the species’ range-wide condition, the factors responsible for that condition, and their survival and recovery needs; (2) the *Environmental Baseline*, which evaluates the condition of all of the species in the action area, the factors responsible for that condition, and the role of the action area in the species’ survival and recovery; (3) the *Effects of the Action*, which determines the direct and indirect impacts of the proposed Federal action and the effects of any interrelated or interdependent activities on the species; and (4) *Cumulative Effects*, which evaluates the effects of future, non-Federal activities in the action area on the species.

In accordance with policy and regulation, the jeopardy/no jeopardy determination is made by evaluating the effects of the proposed Federal action in the context of the species’ current status,

taking into account any cumulative effects, to determine if implementation of the proposed action is likely to cause an appreciable reduction in the likelihood of both the survival and recovery of the San Joaquin kit fox or blunt-nosed leopard lizard.

The following analysis places an emphasis on consideration of the range-wide survival and recovery needs of the species and the role of the action area in meeting those needs as the context for evaluating the significance of the effects of the proposed Federal action, combined with cumulative effects, for purposes of making the jeopardy/no jeopardy determination. In short, a non-jeopardy determination is warranted if the proposed action is consistent with maintaining the role of habitat and the species' populations in the action area for the survival and recovery of these two species.

Status of the Species

San Joaquin kit fox

Refer to the *San Joaquin Kit Fox (Vulpes macrotis mutica) 5-Year Review: Summary and Evaluation* (Service 2010) for the current status of the species.

Blunt-nosed leopard lizard

Refer to the *Blunt-nosed Leopard Lizard (Gambelia sila) 5-Year Review: Summary and Evaluation* (Service 2010) for the current status of the species.

Environmental Baseline

San Joaquin kit fox

The action area is located in the Pleasant Valley Satellite Population area for the San Joaquin kit fox (Service 1998). Reported occurrences in the CNDDDB (2011) of the San Joaquin kit fox are known from an estimated 1 mile southeast, 1.8 miles south, and 2.3 miles east of the action area. The action area is located at the edge of agricultural land (primarily orchards) and open range land, and consists primarily of dirt farm road and land adjacent to the Coalinga Canal. Soils in the action area are loamy (i.e., loose-textured).

San Joaquin kit fox denning habitat exists primarily on the roadway borders and embankments in the action area, though the entire action area could serve as dispersal habitat. Kit foxes prefer loose-textured soils (Grinnell et al. 1937, Hall 1946, Egoscue 1962, Morrell 1972 *in* Service, 1988) and are known to modify and use human made structures (culverts, banks on roadbeds) as dens (B.L. Cyper pers. comm. *in* Service, 1998). Roadways and embankments in the action area include Gale Avenue, the Coalinga Canal O&M roadway, and the Coalinga Canal embankment. A study conducted by Warrick et al. (2007) demonstrated that kit foxes frequently used the ROW

of the California Aqueduct. Likewise, irrigation canals (such as the Coalinga Canal) could serve as corridors for kit fox (Warrick et al. 2007).

San Joaquin kit fox foraging habitat is also present in the action area, represented by numerous small mammal burrows. About one third of the San Joaquin kit fox diet in the southern portion of its range comprises nocturnal small mammals (Scrivner et al. 1987).

Although the action area is in an area that has been converted to agriculture and developed with roads, the Service believes that San Joaquin kit fox is reasonably certain to occur in the action area because it is within the range of the species, is adjacent to open grasslands with nearby occurrences, and provides suitable denning, foraging, and movement habitat for the species.

Blunt-nosed leopard lizard

The action area is located within the Pleasant Valley Essential Habitat Area for the blunt-nosed leopard lizard (Service 1998), an area identified as a high priority recovery area in the recovery strategy for blunt-nosed leopard lizard. Reported occurrences in the CNDDDB (2011) of the blunt-nosed leopard lizard are known from an estimated 1.3 miles southwest of the action area, 3.5 miles northeast, and 1.8 miles southwest. The action area is located at the edge of agricultural land (primarily orchards) and open range land, and consists primarily of dirt farm road and land adjacent to the Coalinga Canal. Soils in the action area are loamy (i.e., loose-textured).

Habitat suitable for the blunt-nosed leopard lizard is present within the action area. Blunt-nosed leopard lizards are known to inhabit open, sparsely vegetated areas of low relief on the San Joaquin Valley floor and in the surrounding foothills (Smith 1946, Montanucci 1965). Numerous small mammal burrows are present in the action area, which could provide suitable burrow habitat for blunt-nosed leopard lizard.

Although the action area is in an area that has been converted to agriculture and developed with roads, the Service believes that blunt-nosed leopard lizard is reasonably likely to occur within the action area because it is within the range of the species, is adjacent to open grasslands with nearby occurrences, and provides suitable burrow habitat and open foraging habitat for the species.

Effects of the Proposed Action

Effects to San Joaquin kit foxes

The Service believes there is a reasonable likelihood that San Joaquin kit fox will be denning in the action area. Therefore, the species will be forced to leave their dens and the action area by the project proponent through implementation of our avoidance and minimization measures. These measures include den destruction to preclude subsequent use by this species, which will harass them by creating the likelihood of injury through disruption of normal behavioral patterns such as sheltering. The proposed avoidance measures will prevent any other adverse effects.

Effects to Blunt-nosed leopard lizards

The Service thinks there is a reasonable likelihood than blunt-nosed leopard lizard will be present in the action area at the time of construction. The project will use a backhoe, excavator, and other equipment to dig trenches to remove existing pipes and a pressure tank, install new pipe, and make minor refurbishments to infrastructure. Lizards are unlikely to escape from the action area during construction and will be excavated, crushed, or entombed, resulting in injury or death.

Cumulative Effects

Cumulative effects include the effects of future State, Tribal, local or private actions that are reasonably certain to occur in the action area considered in this biological opinion. Future Federal actions that are unrelated to the proposed action are not considered in this section because they require separate consultation pursuant to Section 7 of the Act.

The Service is not aware of any non-Federal actions currently planned in the Coalinga Canal Turnout Replacement action area.

Conclusion

Conservation measures implemented before and during project work will serve to minimize project effects on the San Joaquin kit fox and blunt-nosed leopard lizard and the level of take associated with the San Joaquin kit fox and blunt-nosed leopard lizard. Project construction is likely to result in the harassment of San Joaquin kit fox and the harm of blunt-nosed leopard lizard; however, because of the very limited size of the construction footprint (0.06 acres), the magnitude of these effects is anticipated to be very small. After reviewing the current status of the San Joaquin kit fox and blunt-nosed leopard lizard, the environmental baseline for the action area for each species, the effects of the proposed project on both species, and the cumulative effects, it is the Service's biological opinion that the project, as proposed, is not likely to jeopardize the continued existence of the San Joaquin kit fox and blunt-nosed leopard lizard.

INCIDENTAL TAKE STATEMENT

Section 9 of the Endangered Species Act and Federal regulations pursuant to section 4(d) of the Act, prohibit the take of endangered and threatened species, respectively, without special exemption. Take is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture or collect, or to attempt to engage in any such conduct. The Service further defines harm to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. The Service defines harassment as an intentional or negligent act or omission that creates the likelihood of injury to listed species by annoying it to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding, or sheltering.

Incidental take is defined as take that is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity. Under the terms of section 7(b)(4) and section 7(o)(2), taking that is incidental to and not intended as part of the agency action is not considered to be prohibited taking under the Act provided that such taking is in compliance with the terms and conditions of this Incidental Take Statement.

The measures described below are nondiscretionary, and must be undertaken by Reclamation so that they become binding conditions of any grant or permit issued to the applicant, as appropriate, for the exemption in section 7(o)(2) to apply. Reclamation has a continuing duty to regulate the activity covered by this incidental take statement. If Reclamation (1) fails to assume and implement the terms and conditions, or (2) fails to require Westlands to adhere to the terms and conditions of the incidental take statement through enforceable terms that are added to the permit or grant document, the protective coverage of section 7(o)(2) may lapse. In order to monitor the impact of incidental take, Reclamation must report the progress of the action and its impact on the species to the Service as specified in the incidental take statement. [50 CFR §402.14(i)(3)].

Amount or Extent of Take

San Joaquin kit fox

Based on our analysis of the project, the likelihood of foxes being in and around the action area, and the small size of the action area, we believe it is likely a fox or foxes will set up one den in the action area during or before implementation of the project. However, because we have no way of knowing whether it will be one or more foxes using the den (e.g., 1 pair), we are quantifying the anticipated take in terms of habitat disturbed, i.e. one den will be destroyed, thereby harassing the foxes using it.

Blunt-nosed leopard lizard

Burrows are present in the action area; however the number of burrows occupied by blunt-nosed leopard lizard is unknown, and data for estimating the number present on the action area is not available. Additionally, the project's ground disturbance is in a narrow linear configuration, which would likely only bisect a small portion of any one lizard's home, foraging, or dispersal range. Since we cannot quantify the number of individual lizards that we anticipate will be subject to this incidental take, we are therefore quantifying the anticipated incidental take in terms of acres of disturbed habitat. Since take is expected to result from these impacts to habitat, the quantification of acreage becomes a direct surrogate for the species that will be taken.

Effect of the Take

In the accompanying biological opinion, the Service has determined that this level of anticipated take is not likely to jeopardize the continued existence of the San Joaquin kit fox and blunt-nosed leopard lizard.

Reasonable and Prudent Measures

The following reasonable and prudent measures are necessary and appropriate to minimize the effects of the proposed action on the San Joaquin kit fox and blunt-nosed leopard lizard.

1. All of the avoidance and minimization measures for San Joaquin kit fox and blunt-nosed leopard lizard proposed in the biological assessment, the *Description of the Proposed Action*, and as supplemented and modified below, must be fully implemented.

Terms and Conditions

In order to be exempt from the prohibitions of section 9 of the Act, Reclamation must comply with the following terms and conditions which implement the reasonable and prudent measures described above and outline required reporting/monitoring requirements. These Terms and Conditions are nondiscretionary.

The following Terms and Conditions implement Reasonable and Prudent Measure one:

1. Reclamation shall condition their permit (08-LC-20-9641) to ensure Westlands implements and adheres to all the avoidance and minimization measures.
2. Reclamation shall monitor and document to the Service on a weekly basis, the amount of habitat disturbed during project-related construction and/or operation to ensure that the amount of habitat affected does not exceed the amount of take anticipated by this biological opinion.

Reporting Requirements

In order to monitor whether the amount or extent of incidental take anticipated from implementation of the project is approached or exceeded, Reclamation shall adhere to the following reporting requirements. Should this anticipated amount or extent of incidental take be exceeded, Reclamation must immediately reinstate formal consultation as per 50 CFR 402.16.

1. For those components of the action that may result in direct encounters between listed species and project workers and their equipment whereby incidental take in the form of harassment, harm, injury, or death occurs, Reclamation shall immediately contact

the Service's Sacramento Fish and Wildlife Office (SFWO) at (916) 414-6600 to report the encounter. If an encounter occurs after normal working hours, Reclamation shall contact the SFWO at the earliest possible opportunity the next working day. When injured or killed individuals of the listed species are found, Reclamation shall follow the steps outlined in the Disposition of Individuals section below.

2. Reclamation shall submit to the Service a monitoring report on a weekly basis that includes documentation recorded in accordance with the terms, conditions, and reporting requirement 1 of this BO.

Disposition of Individuals Taken

In the case of injured and/or dead San Joaquin kit foxes and blunt-nosed leopard lizards, the Service shall be notified of events within one day and the animals shall only be handled by an Service-approved, permitted biologist. Injured San Joaquin kit foxes shall be cared for by a licensed veterinarian or other qualified person. In the case of a dead animal, the individual animal shall be preserved, as appropriate, and held in a secure location until instructions are received from the Service regarding the disposition of the specimen or until the Service takes custody of the specimen. Reclamation must report to the Service within one calendar day any information about take or suspected take of federally-listed species not exempted in this opinion. Notification must include the date, time, and location of the incident or of the finding of a dead or injured animal. The Service contacts are Mr. Daniel Russell, Deputy Assistant Field Supervisor, Endangered Species Program, Sacramento, at (916) 414-6600 and Mr. Daniel Crum, the Resident Agent-in-Charge of the Service's Law Enforcement Division at (916) 414-6660.

Any contractor or employee who, during construction, inadvertently kills or injures a listed wildlife species must immediately report the incident to his representative at his contracting/employment firm and contact the Service within one calendar day.

CONSERVATION RECOMMENDATIONS

Conservation recommendations are suggestions of the Service regarding discretionary measures to minimize or avoid further adverse effects of a proposed action on listed, proposed, or candidate species or on designated critical habitat, or regarding the development of new information. They may also serve as suggestions on how action agencies can assist species conservation in furtherance of their responsibilities under section 7(a)(1) of the Act, or recommend studies improving an understanding of a species' biology or ecology. Wherever possible, conservation recommendations should be tied to tasks identified in recovery plans. The Service is providing you with the following conservation recommendations:

1. It is recommended that Reclamation report any observed Federally-listed species to the California Natural Diversity Database.

In order for the Service to be kept informed of actions minimizing or avoiding adverse effects or benefitting listed species or their habitats, the Service requests notification of the implementation of any conservation recommendations.

REINITIATION—CLOSING STATEMENT

This concludes the Service's review of the Coalinga Canal Turnout Replacement project, as outlined in your December 21, 2011 letter. As provided in 50 CFR § 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been maintained (or is authorized by law) and if: (1) the amount or extent of incidental take is exceeded, (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or an extent not considered in this biological opinion, (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in this biological opinion, or (4) a new species is listed or critical habitat designated that may be affected by the action.

Please contact Hunter Kunkel, Fish and Wildlife Biologist, or Thomas Leeman, Chief, San Joaquin Valley Division, at the letterhead address or at (916) 414-6600 if you have any questions regarding this letter on the biological opinion.

cc:

Ms. Annee Ferranti, California Department of Fish and Game, Fresno, California

Literature Cited

- (CNDDB) California Natural Diversity Database. 2011. Full report for selected elements: *Gambelia sila* and *Vulpes macrotis mutica*. Sacramento, California.
- Egoscue, H.J. 1962. Ecology and life history of the kit fox in Tooele County, Utah. Ecology 43:481-497.
- Grinnell, J., J.S. Dixon, and J.M. Linsdale. 1937. Fur-bearing mammals of California. Vol. 2. Univ. California Press, Berkeley.
- Hall, E.R. 1946. Mammals of Nevada. Univ. California Press, Berkeley, 710 pp.
- Montanucci, R.R. 1965. Observations on the San Joaquin leopard lizard, *Crotaphytus wislizenii silus* Stejneger. Herpetologica 21:270-283.
- Morrell, S.H. 1971. Life history of the San Joaquin kit fox. California Dept. Fish and Game, Sacramento, Spec. Wildl. Invest., Unpubl. Rep., 25 pp.
- Natural Resources Conservation Service. 2011. Web Soil Survey [web application]. Available on the internet at < <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>>. Accessed November 17, 2011.
- (Service) U.S. Fish and Wildlife Service 1998. *Recovery Plan for Upland Species of the San Joaquin Valley, California*. Portland, Oregon. 319 pp. Available on the internet at <http://ecos.fws.gov/docs/recovery_plans/1998/980930a.pdf>. Accessed November 17, 2011.
- _____. 1999. San Joaquin Kit Fox Survey Protocol For The Northern Range. Sacramento, California. 12 pp. Available on the internet at <http://www.fws.gov/sacramento/ES/Survey-Protocols-Guidelines/Documents/kitfox_no_protocol.pdf>. Accessed November 22, 2011.
- _____. 2010a. *Blunt-nosed leopard lizard (Gambelia sila) 5-Year Review: Summary and Evaluation*. Sacramento, California. 79 pp. Available on the internet at <http://ecos.fws.gov/docs/five_year_review/doc3209.pdf>. Accessed November 21, 2011.
- _____. 2010b. San Joaquin kit fox (*Vulpes macrotis mutica*) 5-Year Review: Summary and Evaluation. Sacramento, California. 122 pp. Available on the internet at <http://ecos.fws.gov/docs/five_year_review/doc3222.pdf>. Accessed November 21, 2011.
- _____. 2011. *Standardized Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance*, Sacramento, California. Available on the

internet at <http://www.fws.gov/sacramento/es/documents/kitfox_standard_rec.htm>. Accessed November 17, 2011.

- Schriener, J.H., T.P. O'Farrell, T.T. Kato, and M.K. Johnson. 1987. Diet of the San Joaquin kit fox, *Vulpes macrotis mutica*, on Naval Petroleum Reserve #1, Kern County, California, 1980-1984. Rep. No. EGG 10282-2168, EG&G Energy Measurements, Goleta, CA, 26 pp.
- Smith, H.M. 1946. Handbook of Lizards. Lizards of the United States and Canada. Comstock Publishing Co., Ithaca, NY, 557 pp.
- Warrick, G.D., T. T. Kato, B.R. Rose. 1998. Microhabitat Use and Home Range Characteristics of Blunt-nosed Leopard Lizards. Journal of Herpetology 32:183-191.
- Warrick G.D., H.O. Clark, P.A. Kelly, D.F. Williams, B.L. Cypher. 2007. Use of Agricultural Lands by San Joaquin Kit Fox. Western North American Naturalist 67:270-277.

ENVIRONMENTAL ASSESSMENT (11-053)

Westlands Water District Coalinga Canal Turnout Project (Milepost 11.58)

**Appendix C
SHPO Concurrence**

October 2012

**OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION**

1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov



October 20, 2011

Reply in Reference To: **BUR110824A**

Shane Hunt - Acting Regional Environmental Officer
United States Department of the Interior
Bureau of Reclamation, Mid-Pacific Regional Office
2800 Cottage Way
Sacramento, CA 95825-1898

Re: Section 106 Compliance for the *Turnout Replacement Project on the Coalinga Canal, Fresno County, California* (Tracking #11-SCAO-205)

Dear Mr. Hunt:

Thank you for consulting pursuant to 36 CFR Part 800 (as amended 8-05-04) regulations implementing Section 106 of the National Historic Preservation Act (NHPA). The Bureau of Reclamation (BUR) is seeking my comments on the above noted Undertaking concerning (1) delineation of the *Area of Potential Effect* (APE), (2) resource identification efforts, and (3) a finding of "*No Historic Properties Affected*" pursuant to 36 CFR Part 800.4(d)(1).

The BUR has proposed to amend and renew a license for the Westlands Water District (WWD) so they can remove and replace an existing water diversion structure, or turnout, on the Coalinga Canal. The canal is owned by the BUR and maintained and operated under license by the WWD. Project work involves excavating a trench between the west bank of the canal and a nearby maintenance road for extracting an 18-in diameter irrigation pipe, installing a new 18-in diameter PVC pipe, and removing one existing pressure tank. Other activities are comparatively minor and consist of pouring one concrete slab, constructing a concrete casement around the pipe where it crosses under the aforementioned maintenance road, installing a concrete wall around the pipeline alignment, and placing a new 16-in diameter metering station on the surface of the ground at the new turnout facility. The Undertaking APE is located in a rural portion of Fresno County west of Pleasant Valley Ranch and encompasses an estimated 0.28-of an acre in which the aforementioned project activities are situated. Resource identification work consisted of a search of pertinent agency files; an as yet to be reciprocated consultation with Big Sandy Rancheria of Mono Indians, Santa Rosa Rancheria, and Table Mountain Rancheria; and, field-survey. Archival research indicated the Coalinga Canal (originally named the Pleasant Valley Canal) was constructed in 1973 as part of the San Luis Unit of the Central Valley Project. Field survey identified no cultural features in the APE that meet criteria for historic properties.

After reviewing your submitted letter and report titled *MP-153 Cultural Resources Post Field Summary Record* prepared by B. Soule (2011), I have the following comments:

1. Pursuant to 36 CFR Parts 800.4(a)(1) and 800.16(d), I find the APE for the Undertaking properly determined and documented.
2. Pursuant to 36 CFR Part 800.4(b)(1), I find the *Level of Effort* discussed above appropriate for identifying historic properties in the APE with the one following additional remark:
 - a. Please be advised the BUR should base its Native American (NA) consultation efforts on information provided by the Native American Heritage Commission (NAHC).

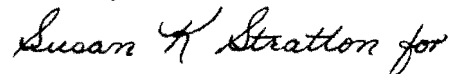
File #	
Control No	11080213
Folder I.D.	
Date Input & Initials	10/26/2011 Kp

SCANNED

3. Based on the above comments, I **concur** with the finding of "*No Historic Properties Affected*" pursuant to 36 CFR Part 800.4(d)(1), as resource identification efforts indicated there are no historic properties in the APE.
4. Please be advised that under certain circumstances, such as an unanticipated discovery or a change in project description, the BUR may have additional future responsibilities for the Undertaking under 36 CFR Part 800.

Thank you for considering historic properties as part of your project planning. Please contact Jeff Brooke of my staff at (916) 445-7003 or jbrooke@parks.ca.gov if you have any questions or concerns regarding this project review.

Sincerely,

A handwritten signature in cursive script that reads "Susan H. Stratton for".

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer