

RECLAMATION

Managing Water in the West

Draft Environmental Assessment

County of Fresno's Millerton Road Widening Project

EA-09-009



Mission Statements

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

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

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Section 1 Introduction

1.1 Background

The County of Fresno (County) has proposed to widen a 4.7-mile stretch of Millerton Road (referred to as the Millerton Road Widening Project or Project) located between North Fork Road to slightly east of Table Mountain Road (Figures 1 and 2). The County's Project would reconstruct this area from a 2-lane rural roadway to a 4-lane arterial roadway with four 12-foot-wide travel lanes, two 6-foot-wide paved shoulders that would function as directional bike lanes, and 4-foot-wide treated dirt shoulders. A 16-foot-wide median would separate the eastbound and westbound traffic. Implementation of the Project would require expansion of the County's existing right-of-way from approximately 60 feet wide to approximately 106 feet wide (53 feet on either side of the roadway centerline, except where additional width is necessary for cut and fill slopes). The minimum design speed for the roadway is 45 miles per hour (mph) and conforms to a higher design speed (55 mph) wherever practical.

The County analyzed the environmental effects of their proposed Project in an Initial Study (IS) in accordance with the California Environmental Quality Act (CEQA) (County 2013a). The County determined that all potentially significant effects due to the Project would be reduced to less than significant levels with the implementation of mitigation measures (Appendix A). Accordingly, the County adopted a Mitigated Negative Declaration (MND) and mitigation monitoring and reporting program (MMRP) for the Project on December 10, 2013 (County 2013b).

The County submitted an application to the U.S. Army Corps of Engineers (Corps) for their Project. As the federal lead agency for the Project, the Corps completed consultations pursuant to the Endangered Species Act (ESA) and the National Historic Preservation Act (NHPA) that covered the entire Project area (Appendix B and C, respectively). The Corps issued Nationwide Permit (NWP) 14 for the Project on December 5, 2014 (Appendix D).

The County currently holds an easement with the Bureau of Reclamation (Reclamation) for a two-span precast/pre-stressed I-girder bridge along Millerton Road that crosses over the Friant-Kern Canal (FKC). The County has requested additional right-of-way easement(s) from Reclamation in order to accommodate portions of the Project, which includes a second bridge crossing over the FKC (Figure 2). The Corps' consultations for the overall Project include Reclamation's Proposed Action area (Figure 2) analyzed in this Environmental Assessment. Reclamation completed Section 106 consultation with the State Historic Preservation Officer (SHPO) specific to Reclamation's Section 106 area of potential effects (APE) within the larger Project area (Appendix E).

1.2 Need for the Proposed Action

The County needs access to Reclamation's right-of-way, or lands, in order to proceed with their Project which would improve safety for motorists, alleviate congestion and delays, accommodate existing and projected future traffic volumes, and improve traffic operations within this segment of Millerton Road.

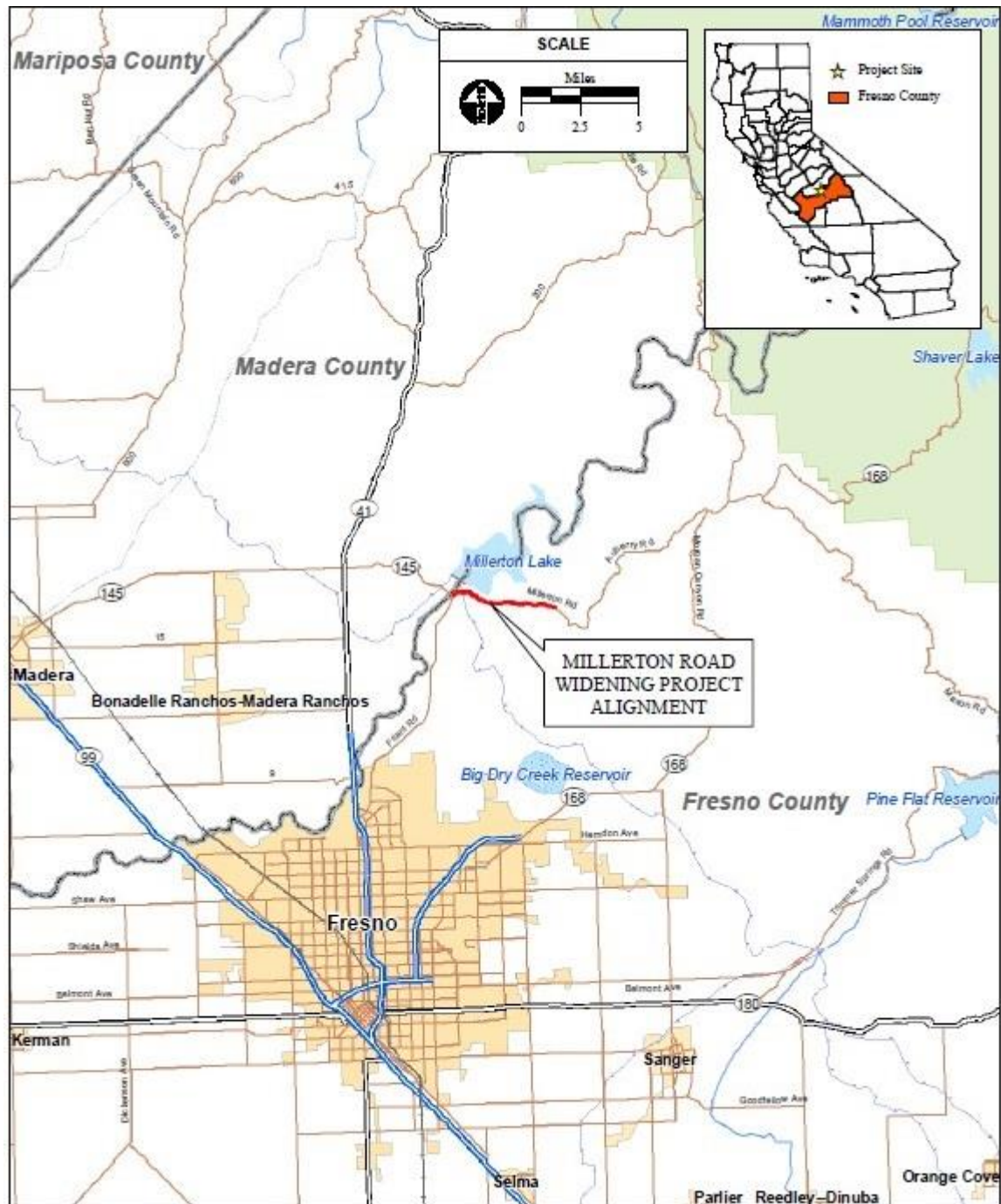


Figure 1 Millerton Road Widening Project Location, regional view



SOURCE: AECOM, 2010; Espinosa Surveying, 2009; NAIP aerial photograph, 6/18/2014; AES, 7/30/2015

Millerton Road Widening Project Environmental Assessment / 207518 ■

Figure 2 Construction footprint for the Millerton Road Widening Proposed Action

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Section 2 Alternatives Including the Proposed Action

This Environmental Assessment 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 grant additional right-of-way to the County and the Project would not be constructed. Millerton Road and the existing FKC bridge would continue to operate in their current state.

2.2 Proposed Action

Reclamation proposes to issue the following easement(s) to the County for their Project totaling approximately 9.46 acres. Project designs for these areas are located in Appendix F.

- Approximately 3.19 acres along the northern and southern edges of Millerton Road near the entrance to the California Department of Forestry and Fire Protection (CAL FIRE) Station resulting in a modification to the driveway approach matching the proposed Millerton Road alignment.
- Approximately 0.97 acres along the northern and southern edges of Millerton Road near the intersection of the Friant Dam Access Road and Millerton Road. The Project would result in a slight re-alignment of the Friant Dam Access road connection to Millerton Road, just northeast of the current connection, providing equivalent access to Friant Dam and other facilities.
- Approximately 0.27 acres near milepost 0.48 on the FKC for installation of a new 2-lane pre-stressed I-girder bridge. The proposed 160-foot long 38 feet 10 inches wide bridge would be located approximately 13 feet upstream of the existing bridge. The design for the bridge would be similar to that of the existing bridge: consisting of two 12-foot travel lanes, one 4-foot shoulder, one 8-foot shoulder/bicycle lane, and two 1-foot, 5-inch wide guardrails including traffic barriers. The new bridge would serve westbound traffic over the FKC, while the existing FKC bridge would be utilized for eastbound lanes. The County currently has a right-of-way easement over the FKC for operation and maintenance of the existing bridge. Construction in this location would occur during the FKC's scheduled shut-off period (mid-November through the end of January). The existing bridge would be modified to meet existing standards for bike lanes with the addition of a tubular guardrail mounted on the existing concrete barrier railing.
- Approximately 0.20 acres of driveway approach would be replaced with equivalent access near the western entrance of the Millerton Lake State Recreation Area along the northern edge of Millerton Road.

- Approximately 5 acres for the expansion of Millerton Road on both sides and replacement of the driveway approach with equivalent access would occur near the main entrance of Millerton Lake State Recreation Area and continuing east along the southern edge of Millerton Road.

To the extent feasible, bridge construction would occur when the FKC is shut down (canal is dry) for maintenance (generally from mid-November to the end of January every three years or so). If construction were to occur outside this window, the County and/or its designee would need to install temporary culverts and cofferdams in order to divert water around the construction area (Cornerstone 2009). Construction over the canal would be coordinated with Reclamation and the Friant Water Authority (FWA).

2.2.1 Permitting for the Proposed Action

The permits and approvals that are necessary to implement the Project are as follows:

- Corps Section 404 NWP for permanent fill within wetlands and other waters of the U.S. issued December 5, 2014 (Appendix D).
- U.S. Fish and Wildlife Service (Service) Section 7 Biological Opinion and Incidental Take Statement for California Tiger Salamander, Vernal Pool Fairy Shrimp, and Vernal Pool Tadpole Shrimp. Issued to the Corps on October 22, 2013 (Appendix B).
- SHPO Section 106 Finding of No Adverse Effect with Standard Conditions of Finding of Adverse Effect and Memorandum of Agreement. Issued to the Corps on November 16, 2015 (Appendix C).
- Fresno County adoption of the IS/MND under the requirements of CEQA, adoption of a MMRP, and issuance of Encroachment Permits to contractors for construction activities within County right-of-way. MND and MMRP adopted on December 10, 2013.
- California Department of Fish and Wildlife (CDFW) 1602 Agreement for Streambed Alteration and Section 2081(b) permit for Threatened and Endangered Species. Pending submittal by the County.
- Regional Water Quality Control Board (RWQCB) National Pollutant Discharge Elimination System (NPDES) Permit for Discharges of Storm Water Runoff Associated with Construction Activity and 401 Water Quality Certification for discharge into waters of the U.S. Pending submittal by the County.
- San Joaquin Valley Air Pollution Control District Indirect Source Review (Rule 9510). Pending submittal by the County.

2.2.2 Environmental Commitments

The County shall implement environmental protection measures included in the permits and environmental compliance documents listed above to avoid and/or reduce environmental impacts associated with the Project. Environmental impacts for resource areas assume the measures specified would be fully implemented.

Section 3 Affected Environment and Environmental Consequences

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

3.1 Resources Eliminated from Further Analysis

Reclamation analyzed the affected environment and determined that the Proposed Action did not have the potential to cause direct, indirect, or cumulative adverse effects to the resources listed in Table 1.

Table 1 Resources Eliminated from Further Analysis

Resource	Reason Eliminated
Environmental Justice	The Proposed Action would not cause dislocation, changes in employment, or increase flood, drought, or disease nor would it disproportionately impact economically disadvantaged or minority populations.
Indian Sacred Sites	The Project would not limit access to ceremonial use of Indian Sacred Sites on federal lands by Indian religious practitioners or significantly adversely affect the physical integrity of such sacred sites.
Land Use and Agricultural Resources	The development and implementation of the Proposed Action would not induce growth beyond previously approved levels within the Fresno County General Plan. Construction of the Project is consistent with all relevant goals and policies of adopted land use plans for the project area. Therefore, implementation of the Proposed Action would have no effect on current or future land use plans. The Proposed Action would not convert Prime, Important, or Unique farmland within the Action Area.
Traffic and Circulation	Construction worker and material delivery trips during the construction phase of the Project would not exceed 70 trips per day, or less than 1.0 percent of the existing traffic. The addition of worker and material delivery trips during construction would be temporary and would not substantially increase the existing traffic load and capacity or cause an exceedance of the existing level of service on Millerton Road. The Project is designed to improve existing transportation through this area and to reduce traffic congestion; therefore, there would be beneficial effects to traffic and circulation due to the Project.

3.2 Air Quality

Section 176 (C) of the Clean Air Act (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 required under Section 110 (a) of the Federal Clean Air Act (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 State Implementation Plan'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 State Implementation Plan 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 a proposed action equal or exceed certain emissions thresholds, thus requiring the Federal agency to make a conformity determination.

3.2.1 Affected Environment

The Proposed Action area lies within the San Joaquin Valley Air Basin (Air Basin), the second largest air basin in the State. Air basins share a common “air shed”, the boundaries of which are defined by surrounding topography. Although mixing between adjacent air basins inevitably occurs, air quality conditions are relatively uniform within a given air basin. The San Joaquin Valley experiences episodes of poor atmospheric mixing caused by inversion layers formed when temperature increases with elevation above ground, or when a mass of warm, dry air settles over a mass of cooler air near the ground.

Despite years of improvements, the Air Basin does not meet some State and Federal health-based air quality standards. To protect health, the San Joaquin Valley Air Pollution Control District (Air District) is required by Federal law to adopt stringent control measures to reduce emissions.

The land surrounding the Proposed Action is primarily open space with scattered residential, recreational, and commercial uses. There are several residences located in the immediate vicinity of the roadway, approximately 30 feet south of the easternmost segment of the Proposed Action Area.

3.2.2 Environmental Consequences

No Action

Under the No Action alternative, Millerton Road would not be widened and the roadway would remain in the current condition. No adverse effects to air quality would occur.

Proposed Action

Minimal short-term air quality impacts would occur associated with construction of the Project, generally arising from dust generation (fugitive dust) and operation of construction equipment. Construction emissions from grading, paving, bridge construction, and worker trips during construction were estimated using the 2007 Urban Emissions (URBEMIS) air quality model (Table 2). The URBEMIS output files for the Project are included as Appendix G.

Table 2 Emissions from construction related activities

	ROG	NO _x	PM _{2.5}	PM ₁₀	CO ₂
	tpy	tpy	tpy	tpy	tpy
Construction Emissions	1.50	11.47	0.81	1.67	1,318.52
<i>De Minimus Levels</i>	10	10	100	100	N/A
Exceed Thresholds	No	Yes ¹	No	No	N/A
Construction Emissions after Mitigation	1.5	9.87	0.16	0.5	1,318.52
Exceed Thresholds after Mitigation	No	No	No	No	N/A
Notes: tpy = tons per year. N/A = Not Applicable ¹ Construction emissions were calculated in 2012 and represent a conservative estimate as emission factors have reduced over time. ² Implementation of Mitigation Measure AQ-2 within the County's MMRP (Appendix A) would reduce impact to less than the <i>de minimus</i> levels. Source: URBEMIS 2007 (Appendix G).					

As shown in Table 2, temporary and short-term emissions related to construction of the Project would not produce criteria air pollutants in excess of Air District thresholds except for Nitrogen dioxides (NO_x). The County has included Mitigation Measures AQ-2 through AQ-4 in their MMRP (Appendix A) in order to reduce emissions below the Air District's threshold. Therefore, the Project, including Reclamation's Proposed Action, would not contribute to a violation of NAAQS or contribute to an exceedance of ambient air quality standards. Additionally, Mitigation Measure AQ-1 within the County's MMRP (Appendix A) would further reduce impacts associated with particulate matter emissions due to construction activities.

The estimated criteria pollutant emissions from the Proposed Action are well below the San Joaquin Valley Air District (Air District) requirements or thresholds of significance (Table 2). Consequently, the proposed Action would not result in a significant adverse impact upon air quality and a conformity analysis pursuant to the Clean Air Act is not required.

Cumulative Impacts

The Proposed Action in combination with other similar projects, in the region, has the potential to affect regional air quality. The County has included measures to reduce potential air quality impacts including cumulative impacts. With incorporation of Mitigation Measures AQ-1 through AQ-4 within the County's MMRP (Appendix A), the Proposed Action would not contribute to adverse cumulative impacts associated with air quality.

3.3 Biological Resources

3.3.1 Affected Environment

Biological surveys were performed by Analytical Environmental Services (AES) for the Project during 2008 on March 3-5, 11-13, and 18-20; April 28; May 5-6; July 9; and August 13-14 and in 2009 on January 7-8 and 21-22; February 3-4 and 17-18; March 3-4, 17-18, 25-26, and 31; April 1; May 12-13 and 27; and June 9 (AES 2013, p. 25). The survey area encompasses land located approximately 250 feet north and south of the centerline of Millerton Road from the intersection of Millerton Road and North Friant Road eastward for approximately 4.7 linear miles. While the total width of the area surveyed is 250 feet, Reclamation's Proposed Action Area is limited to the areas shown on Figure 2.

On February 25, 2013, AES requested an official species list from the Service via the Sacramento Field Office's website, http://www.fws.gov/sacramento/es/spp_list.htm. The list is for the Friant and Academy U.S. Geological Survey (USGS) 7½-minute topographic quadrangles (quads). The California Department of Fish and Wildlife California Natural Diversity Database (CNDDDB) was also queried for records of protected species within five miles of the proposed project location (CNDDDB 2013) using the Friant, Academy, Millerton Lake North, and Millerton Lake East quads. The information collected above used to determine the likelihood of protected species occurrence within the Action Area.

Biological Communities

Terrestrial vegetative communities that occur within the Action Area include: nonnative annual grassland, and ruderal/disturbed areas (AES 2013, p. 26). Dominant aquatic habitat types that occur within the Action Area include: FKC, channel, ephemeral drainage, roadside ditch, and seasonal wetland (AES 2013, p. 26).

Federal Special-Status Species

A summary of regionally occurring federally listed special-status species based on the Service's file data and CNDDDB queries is provided in Table 3. Designated Critical Habitat within the survey area for the Project, including Reclamation's Action Area, consists of 2.08 acres for vernal pool fairy shrimp and 6.15 acres for California tiger salamander.

Table 3 Federal Special Status Species with the Potential to Occur in the Action Area

Species	Status	Effects	Occurrence in the Study Area
INVERTEBRATES			
<i>Branchinecta conservatio</i> conservancy fairy shrimp	E	NE	No. The study area is outside of the geographical range for this species.
<i>Branchinecta lynchi</i> vernal pool fairy shrimp	E	MAA	Yes. See section 3.3.2
<i>Desmocerus californicus dimorphus</i> valley elderberry longhorn beetle	T	NE	No. The study area is outside of the species' range.
<i>Lepidurus packardii</i> vernal pool tadpole shrimp	E	MAA	Yes. See section 3.3.2
FISH			
<i>Hypomesus transpacificus</i> Delta smelt	E	NE	No. The study area does not contain habitat for this species.
<i>Oncorhynchus mykiss</i> Central Valley Steelhead	E	NE	No. The study area does not contain habitat for this species.
AMPHIBIANS			
<i>Ambystoma californiense</i> California tiger salamander Central population	T	MAA	Yes. See section 3.3.2
<i>Rana draytonii</i> California red-legged frog	T	NE	No. The study area does not contain habitat for this species.
REPTILES			

Species	Status	Effects	Occurrence in the Study Area
<i>Gambelia sila</i> Blunt-nosed leopard lizard	E	NE	No. The study area does not contain habitat for this species
<i>Thamnophis gigas</i> giant garter snake	T	NE	No. The study area does not contain habitat for this species
MAMMALS			
<i>Dipodomys nitratooides exilis</i> Fresno kangaroo rat	E	NE	No. The study area does not contain habitat for this species
<i>Vulpes macrotis mutica</i> San Joaquin kit fox	E	NLAA	Yes. See section 3.3.2
PLANTS			
<i>Castilleja campestris</i> ssp. <i>succulenta</i> succulent owl's clover	T	NE	No. While the study area provides potential habitat for this species, none were observed during focused botanical surveys.
<i>Caulanthus californicus</i> California jewel-flower	E	NE	No. The study area occurs outside of the geographical range for this species.
<i>Orcuttia inaequalis</i> San Joaquin Valley Orcutt grass	T	NE	No. While the study area provides potential habitat for this species, none were observed during focused botanical surveys.
<i>Orcuttia pilosa</i> hairy Orcutt grass	E	NE	No. The study area occurs outside of the geographical range for this species.
<i>Pseudobahia bahiifolia</i> Hartweg's golden sunburst	E	NE	No. While the study area provides potential habitat for this species, none were observed during focused botanical surveys.
<i>Pseudobahia peirsonii</i> San Joaquin adobe sunburst	T	NE	No. While the study area provides potential habitat for this species, none were observed during focused botanical surveys.
<i>Tuctoria greenei</i> Greene's tuctoria	E	NE	No. While the study area provides potential habitat for this species, none were observed during focused botanical surveys.
<p>1 Status = Listing of Federally special status species T: Listed as Threatened E: Listed as Endangered X: Critical Habitat designated for this species</p> <p>2 Effects = Effect determination MAA: May adversely effect NE: No Effect from the Proposed Action to federally listed species NLAA: Not likely to adversely affect</p> <p>3 Definition Of Occurrence Indicators Absent: Species not recorded in study area and/or habitat requirements not met Possible: Species not observed in the last 10 years in area Present: Species recorded in or near action area and habitat present</p>			

State Listed Species

The Millerton Road Widening Project Initial Study was prepared by the County in accordance with CEQA, which included a detailed analysis of the potential for effects to all State listed species with the potential to occur within the Project area. Mitigation measures for potential effects to State listed species are detailed in the County's MMRP (Appendix A).

Migratory Birds and Birds of Prey

Migratory birds and other birds of prey, protected under the Migratory Bird Treaty Act (MBTA) (50 Code of Federal Regulations [CFR] 10), have the potential to nest in the trees and shrubs

within the ruderal/disturbed habitat and beneath the bridge that crosses over the FKC within the Proposed Action Area. Birds were observed nesting within the survey area during the 2008 biological surveys conducted in the spring.

3.3.2 Environmental Consequences

No Action

Under the No Action alternative, Millerton Road would not be widened and the Proposed Action Area would remain unchanged. Adverse effects to biological resources would not occur.

Proposed Action

As described in Table 3, the majority of federally protected special-status species do not occur in the Proposed Action area and would therefore be unaffected. The Proposed Action would affect California tiger salamander, vernal pool fairy shrimp and tadpole shrimp, and San Joaquin kit fox as described below. In addition, the Proposed Action would affect 2.08 acres and 6.15 acres of Critical Habitat for vernal pool fairy shrimp and California tiger salamander, respectively.

California Tiger Salamander Construction of the Project would adversely impact known and potential upland and breeding habitat for California tiger salamander within the seasonal wetland and nonnative annual grassland that occur throughout the Action Area. In addition, a portion of the Proposed Action area lies within the Southern San Joaquin Region Unit 2, of designated Critical Habitat for the central California tiger salamander. The Southern San Joaquin Region Unit 2 contains approximately 10,193 acres of land that includes ephemeral aquatic habitats suitable for breeding and upland areas for dispersal, shelter, and foraging. The Project would result in the permanent loss of California tiger salamander Critical Habitat through vegetation clearing and grading activities. Additionally, the Project will temporarily create barriers to dispersal within areas of the Critical Habitat. However, the Project would not preclude or appreciably diminish the role of that habitat in the survival and recovery of the species due to the limited size of the impacted area (0.06% of the designated Critical Habitat for Unit 2). In addition, the County would purchase preservation and creation credits to offset removal of this habitat that would enhance overall habitat for the California tiger salamander. With implementation of the terms and conditions within the Incidental Take Statement (Appendix B) and the measures identified for this species in the County's MMRP (Appendix A), adverse impacts to California tiger salamander and its Critical Habitat would be mitigated.

Vernal Pool Branchiopods Federally listed vernal pool fairy shrimp and vernal pool tadpole shrimp have the potential to occur within the Action Area. The Proposed Action would directly affect approximately 0.039 acres of potential habitat consisting of a seasonal wetland. In addition, a portion of the Proposed Action area lies within designated Critical Habitat Unit 24 for vernal pool fairy shrimp. Critical Habitat Unit 24 comprises a total of 28,950 acres. The Proposed Action would modify approximately 2.08 acres of uplands within Critical Habitat Unit 24.

With implementation of measures identified for this species in (BR-2 within the County's MMRP), including the purchase of preservation credits, adverse effects to vernal pool fairy shrimp Critical Habitat due to the Proposed Action would be mitigated.

The Service issued an Incidental Take Statement that provided terms and conditions for permitted take of the species (Appendix B). The Service has determined that with implementation of the terms and conditions within the Biological Opinion, the Project would not likely jeopardize the continued existence of vernal pool fairy shrimp or vernal pool tadpole shrimp (Service, 2013, p. 17). All terms and conditions within the Incidental Take Statement shall be adhered to. With implementation of the measures identified for this species in Mitigation Measure BR-2 within the County's MMRP (Appendix A), including the purchase of conservation credits required for impacts to California tiger salamander and the purchase of preservation credits, adverse effects to federally listed vernal pool fairy shrimp and vernal pool tadpole shrimp would be mitigated.

San Joaquin Kit Fox The Action Area does not provide denning habitat for San Joaquin kit fox. San Joaquin kit fox has a low potential to forage in the Action Area as only one CNDDDB occurrence documented over 17 years ago has been recorded within a five-mile radius. Several barriers, including the San Joaquin River, Millerton Lake, the FKC, Auberry Road, and Friant Road, inhibit the continuity of surrounding vegetative communities, and therefore reduce the likelihood that San Joaquin kit fox would forage within the Action Area. The County has committed to precautionary mitigation measures to minimize the potential for individuals to be harmed during construction activities. With the incorporation of the precautionary Mitigation Measure BR-6 within the County's MMRP (Appendix A), the Proposed Action is not likely to adversely affect the San Joaquin kit fox. The Service concurred with the determination that the Project is not likely to adversely affect the San Joaquin kit fox (Appendix B). Therefore, no adverse effects to San Joaquin kit fox would occur.

Migratory Birds Potential nesting habitat is present within the Proposed Action area for migratory bird species and other birds of prey. If active nests are present, construction activities associated with the Proposed Action could result in impacts to these species. With the incorporation of the mitigation measures identified for nesting birds in Mitigation Measure BR-4 and BR-5 within the County's MMRP (Appendix A), including preconstruction surveys, the potential for disruption of active nests would be minimized.

Cumulative Impacts

Cumulative projects in the vicinity of the Action Area, including growth resulting from build-out of the Millerton New Town Plan, are anticipated to permanently remove plant and wildlife resources, which could impact special-status species and their habitat, nesting and foraging habitat for resident and migratory birds, and/or local policies or ordinances protecting biological resources. With the implementation of environmental commitments outlined in the County's MMRP (Appendix A), the Proposed Action would minimize its contribution to a cumulative direct or indirect loss of sensitive or special-status wildlife species and their habitat, loss of migratory birds, or conflict with local plans or policies protecting biological resources.

3.4 Cultural Resources

"Cultural Resources" is a broad term that typically applies to archaeological resources, the built environment, and Traditional Cultural Properties. Such resources include prehistoric and historic-era archaeological sites that provide evidence of past human lifeways; structures, such as

buildings, bridges, dams, and canals related to more recent human activity; and specific locations strongly associated with the traditions or cultural identity of living communities. Cultural resources that are included in, or eligible for inclusion in, the National Register of Historic Places (National Register) are known as historic properties [36 CFR § 800.16(l)(1)]. Title 54 U.S.C. § 306108, commonly known as Section 106 of the National Historic Preservation Act (NHPA), requires that Federal agencies take into account the effects of their undertakings on historic properties. Undertakings are defined as projects, activities, or programs funded in whole or in part under the direct or indirect jurisdiction of a Federal agency [36 CFR § 800.16(y)]. Reclamation's Proposed Action constitutes an undertaking requiring compliance with Section 106 of the NHPA.

The Section 106 process, as outlined at 36 CFR Part 800, describes how Federal agencies meet their statutory responsibilities for NHPA Section 106 compliance. The process involves efforts to identify historic properties in the undertaking's area of potential effects (APE). The APE is defined as the geographic area or areas within which an undertaking may directly or indirectly cause alterations in the character or use of historic properties, if any such properties exist therein [36 CFR § 800.16(d)]. The Section 106 process requires consultation with Indian tribes concerning the identification of sites of religious or cultural significance that may be present in the APE. Other groups or individuals who are entitled, or have requested, to be consulting parties may also participate in the Section 106 process. Consultation with the State Historic Preservation Officer (SHPO) and/or the Advisory Council on Historic Preservation, Indian tribes, and other groups or individuals, who are entitled or have requested to be consulting parties, is also as part of the Section 106 process. Reclamation uses the findings made through Section 106 compliance to inform the cultural resources impact analysis under the National Environmental Policy Act.

3.4.1 Affected Environment

The affected environment comprises the Section 106 APE for Reclamation's Proposed Action. Reclamation's APE is subsumed within the APE for the overall Millerton Road Widening Project (Figure 2), which encompasses all staging areas and construction activities. This larger Project APE, inclusive of Reclamation's Action Area, was subject to Section 106 compliance completed by the Corps. The activities associated with that Section 106 compliance included a record search through the Southern San Joaquin Valley Information Center (SSJVIC) of the California Historical Resources Information System, Native American consultation efforts, intensive pedestrian surveys of the entire APE, and subsurface testing to assess the potential for buried archaeological resources. The results of those efforts are documented in a cultural resources report prepared by AES on behalf of the County (AES 2001).

The FKC and a previously excavated prehistoric archaeological site were the only two historic properties identified in the overall Project APE. The Corps determined that the Project would have no adverse effects on either of these properties, consulted with the SHPO on a Section 106 finding of no adverse effect pursuant to 36 CFR § 800.5(b), and received SHPO concurrence on that finding (Appendix C). The FKC is the only historic property identified within Reclamation's APE. Using the same Section 106 documentation used by the Corps, Reclamation also consulted with the SHPO, seeking concurrence that the new bridge proposed to cross the FKC would result in no adverse effect on the FKC. The SHPO likewise concurred with Reclamation's finding (Appendix E).

3.4.2 Environmental Consequences

No Action

Under the No Action alternative, Millerton Road would not be widened and there would be no change to the Proposed Action area. Therefore, no impact to cultural resources would occur under the No Action alternative.

Proposed Action

In 1997, the Federal Highway Administration obtained a SHPO consensus determination for the National Register eligibility of the FKC. Although Reclamation has not yet received a consensus determination for the FKC based on its own formal evaluation, the agency has treated, and continues to treat, the FKC as eligible for inclusion in the National Register under Criterion A, for its association with the agricultural and economic development of California's Central Valley.

Reclamation determined that the Proposed Action will not alter any characteristics of the FKC that qualify it for National Register inclusion. Both the Corps and Reclamation consulted with and received SHPO concurrence on a finding of no adverse effect on the FKC, pursuant to 36 CFR § 800.5(b). No other known historic properties will be affected by proposed Project activities and no adverse impacts to cultural resources will result from Reclamation's Proposed Action.

In the event that previously unknown cultural resources are encountered during Project construction on Reclamation land, such post-review discoveries will be handled in accordance with 36 CFR § 800.13 and other applicable federal laws and regulations. Mitigation Measures CR-2 and CR-3 within the County's MMRP (Appendix A) also would ensure that unknown cultural resources and/or human remains throughout the Project are protected in accordance with federal and state laws should they be inadvertently discovered during construction.

Cumulative Impacts

Significant cumulative impacts to cultural resources typically occur when important sites, features, or artifacts are lost, damaged, or destroyed without appropriate mitigation such as recordation or data recovery. As these resources are destroyed or displaced, important information is lost and connections to past events, people, and cultures are diminished. As Fresno County continues to grow (residential and commercial), impacts to cultural resources are likely to occur. The County contains extensive cultural resources, including Native American archaeological sites and historical sites associated with early Euro-American settlement, ranching, and agriculture. Native American archaeological sites in the county include village sites, burial grounds, procurement sites, and lithic scatters. Historic sites in the region are quite diverse and include buildings, a 19th century military outpost, ranches, and homes, among others.

Several Cultural resources, including historic properties eligible for inclusion in the National Register, are located in and adjacent to the Project's APE. Moreover, the records search and archival research indicate that the region is sensitive for both prehistoric and historical resources. Future projects in the area that have a federal nexus would be subject to compliance with Section 106 of the NHPA, ensuring that impacts to cultural resources are considered and mitigated, as

required. Future projects under non-federal jurisdiction would be required to conform to the appropriate cultural resources regulatory framework(s), including local preservation ordinances, reducing the cumulative impacts to cultural resources.

3.5 Global Climate Change

3.5.1 Affected Environment

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 2014a).

Gases that trap heat in the atmosphere are often called greenhouse gases (GHGs). Some GHGs, such as carbon dioxide (CO₂), occur naturally and are emitted to the atmosphere through natural processes and human activities. Other GHGs (e.g., fluorinated gases) are created and emitted solely through human activities. The principal GHGs that enter the atmosphere because of human activities are: CO₂, methane (CH₄), nitrous oxide (NO_x), and fluorinated gases (EPA 2014a).

During the past century humans have substantially added to the amount of GHGs 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 2014b).

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 Clean Air Act as well as other statutory authorities to address climate change issues (EPA 2014c). 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 GHGs (as CO₂ equivalents per year[CO₂e]) (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 2014c).

3.5.2 Environmental Consequences

No Action

Under the No Action alternative, emissions associated with implementation of the Proposed Action would not occur. No adverse effects associated with climate change would occur.

Proposed Action

The entire Project would directly generate GHGs during the construction phase, but would not generate GHGs during the operation phase, as traffic would not increase along Millerton Road. Construction emissions of CO₂ for the overall Project are estimated to be 1,318.52 metric tons (Table 2). The URBEMIS model does not estimate emissions for other GHGs. However, based on the emissions factors within the new California Emissions Estimator Model (Version 2013.2) it can be assumed that CO₂e emissions for other GHGs (CH₄ and NO₂) would account for less than an additional 1.0 percent of the estimated CO₂ emissions. Therefore, total CO₂e emissions for the Project would be well below the EPA's 25,000 metric tons per year threshold for annually reporting GHG emissions (URBEMIS 2007). Mitigation Measures GHG-1 and GHG-2 will be implemented by the County (Appendix A), further reducing emissions of GHGs during construction. Because GHG emissions would be short-term and temporary, and the County has committed to the implementation of mitigation measures to minimize emissions, the Project and Reclamation's Proposed Action would not cause adverse effects associated with global climate change.

Cumulative Impacts

GHG emissions generated during construction of the Proposed Action would be temporary and would not exceed the 25,000 metric tons reporting threshold established by the EPA (Table 2). 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. A net increase in GHG emissions among the pool of GHGs would not be detectable. Therefore, the Proposed Action would not contribute to adverse cumulative impacts associated with global climate change.

3.6 Indian Trust Assets

3.6.1 Affected Environment

Indian Trust Assets (ITA) are legal interests in assets that are held in trust by the U.S. for federally recognized Indian tribes or individuals. The trust relationship usually stems from a treaty, executive order, or act of Congress. The Secretary of the Interior is the trustee for the U.S. on behalf of Federally recognized Indian tribes. "Assets" are anything owned that holds monetary value. "Legal interests" means there is a property interest for which there is a legal remedy, such as compensation or injunction, if there is improper interference. ITA cannot be sold, leased or otherwise alienated without the U.S.' approval. "Assets" can be real property, physical assets, or intangible property rights, such as a lease, or right to use something, which may include lands, minerals, and natural resources in addition to hunting, fishing, and water rights. Indian reservations, Rancherias, and public domain allotments are examples of lands that are often considered trust assets. In some cases, ITA may be located off trust land. Reclamation shares the Indian Trust responsibility with all other agencies of the Executive Branch to protect

and maintain ITA reserved by or granted to Indian tribes, or Indian individuals by treaty, statute, or executive order. The nearest ITA to the Proposed Action Area is the Table Mountain Rancheria, located immediately north of Millerton Road east of the Action Area. A portion of the proposed right-of-way expansion is located within the Table Mountain Rancheria tribal trust land. Table Mountain Rancheria tribal trust land is the only ITA located near the project vicinity.

Reclamation assesses the effect of its programs on tribal trust resources and federally recognized tribal governments. To carry out this policy, Reclamation incorporated procedures into its NEPA compliance procedures to require evaluation of the potential effects of its proposed actions. Reclamation will comply with procedures contained in Department Manual Part 512, Chapter 2 guidelines, which protect ITA.

3.6.2 Environmental Consequences

No Action

Under the No Action alternative, there would be no impacts to ITA since no change to existing conditions would occur.

Proposed Action

A portion of the proposed right-of-way is located within Table Mountain Rancheria trust land. The Table Mountain Rancheria has been extensively involved throughout the design of the Project, including consultation with the Corps and Reclamation. Table Mountain Rancheria has not raised any concerns regarding the Proposed Action or the granting of easements by Reclamation. Further, the proposed roadway improvements would benefit the Tribe as it is the main roadway to the Table Mountain Rancheria. Therefore, the Proposed Action would not adversely affect ITA.

Cumulative Impacts

As the Proposed Action and overall Project would not adversely impact ITA, no cumulative impacts to ITA would occur.

3.7 Water Resources

3.7.1 Affected Environment

The Friant Division is an integral part of the Central Valley Project (CVP), but is hydrologically independent and therefore operated separately from the other divisions of the CVP. Major facilities of the Friant Division include Friant Dam and Millerton Lake, the Madera Canal and the FKC. The FKC serves over 800,000 acres of farmland and communities in four counties. Water for the Friant Division is released from Millerton Lake into the 152-mile long FKC flowing south to its terminus at the Kern River. The FKC is an earthen and concrete-lined structure operated on behalf of Reclamation by the FWA. The FKC extends underneath Millerton Road in a north-south direction in the western portion of the Proposed Action (Figure 2).

A wetland delineation for the County's overall Project was prepared and submitted to the Corps in October 2009. The Corps and AES conducted a site visit on November 24, 2009 to verify the delineation. The delineation was revised based on informal consultation with the Corps and the Corps issued a preliminary jurisdictional determination on February 26, 2013 (Corps 2013). According to this preliminary jurisdictional determination (Appendix D), approximately 2.351 acres of wetlands and 3.829 acres of other waters of the U.S. occur within the overall Project area. Approximately 0.263 acres of these features occur within Reclamation's Proposed Action area. Potential waters of the U.S. occurring within the Proposed Action area include the FKC (0.20 acre), channels (0.004 acre), ephemeral drainages (0.01 acre), roadside ditches (0.01 acre), and seasonal wetlands (0.039 acre) (Appendix D).

3.7.2 Environmental Consequences

No Action

Under the No Action alternative, Reclamation would not issue additional right-of-way to Fresno County for their Project. Water resources would remain the same as the existing conditions described above.

Proposed Action

Potential short-term impacts to surface waters may occur during construction, mainly from exposure of loose soil during construction-related activities, such as grading and excavation. Suspended solids, dissolved solids, and organic pollutants may enter surface water bodies while soils are disturbed and dust is generated. In addition, construction activities have the potential to generate waste materials (concrete, metal, rubble, etc) or discharge pollutants to surface waters from construction wastes and fuel spills/leaks. The County would implement required erosion and pollutant control measures in compliance with the NPDES General Permit prior to commencement of construction in order to avoid these potential impacts. Control measures would include the development of a Stormwater Pollution Prevention Plan (SWPPP) and implementation of Best Management Practices (BMPs) included in the County's MMRP (Appendix A); thereby, reducing the potential for adverse effects to water quality as a result of construction activities.

Installation of a new bridge over the FKC would not result in long-term impacts to water flow or water quality. There may be temporary impacts during construction from potential introduction of soil and/or construction-related pollutants; however, the County preferred period of installation would be when the FKC is dewatered for maintenance reducing potential impacts to flowing water. In addition, the County would implement Mitigation Measure HYD-1 of its MMRP in order to avoid potential water quality impacts (Appendix A).

Drainage and Stormwater The Project would increase the amount of impermeable surfaces in the Proposed Action area thereby increasing the amount of stormwater runoff. The County would install additional conveyance for stormwater through roadside ditches within the right-of-way of Millerton Road to accommodate the additional flow. The additional drainage would connect with the existing drainage that leads into the two unnamed tributaries to Little Dry Creek and ultimately to the San Joaquin River. The stormwater conveyance facilities have been designed by the County to provide sufficient capacity to contain the anticipated changes to stormwater runoff, including those within Reclamation's Proposed Action area (AECOM 2009,

Section 2.0). Therefore, no adverse effects would occur as a result of changes to existing drainage patterns.

Floodplain The Action Area is located in areas designated by FEMA as being outside of a 100- and 500-year flood event. The Project includes stormwater conveyance capacity designs sufficient to contain the anticipated increase of stormwater runoff, including those within the Action Area. Therefore, no adverse effects associated with flooding would occur (AECOM 2009).

Wetlands and Waters of the U.S. The Proposed Action would impact approximately 0.063 acres of waters of the U.S. within the Action Area, including 0.039 acres of seasonal wetlands, through direct removal, filling, hydrological interruption, or other means. Authorization to proceed under NWP 14 was issued by the Corps on December 5, 2014 for the overall Project. Implementation of Mitigation Measure BR-9 within the County's MMRP (Appendix A) would minimize the impact to and mitigate for the loss of federally protected wetlands and waterways. Minimizing impacts is the compilation of permits described as BR-9 in Appendix A. Mitigation would consist of the County purchasing 1.38 credits at the National Fish and Wildlife Foundation In-Lieu-Fee program to mitigate for the loss of 0.36 acres of waters of the U.S for the entire Project.

Cumulative Impacts

The Proposed Action includes project features, which avoid and/or reduce potential impacts associated with water quality, drainage, and flooding; therefore, the Proposed Action would not contribute to adverse cumulative water resources impacts.

Section 4 Consultation and Coordination

4.1 Public Review Period

Reclamation intends to provide the public with an opportunity to comment on the Draft Finding of No Significant Impact and Draft EA during a 30-day public review period.

4.2 List of Agencies and Persons Consulted

Reclamation has consulted and/or coordinated with the following regarding the Proposed Action:

- California State Historic Preservation Office,
- U.S. Army Corps of Engineers
- U.S. Fish and Wildlife Service
- County of Fresno

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

Section 7 of the ESA 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.

The Proposed Action has the potential to affect California tiger salamander, vernal pool fairy shrimp, and San Joaquin kit fox. Pursuant to Section 7, the Corps consulted with and received a Biological Opinion from the Service for the Project, which included Reclamation's Proposed Action and Action Area. The Service concurred with the Corps' determination that the Project is not likely to adversely affect the San Joaquin kit fox. Additionally, the Service Biological Opinion stated that the Project "is not likely to jeopardize the continued existence" of the California tiger salamander, vernal pool fairy shrimp, or vernal pool tadpole shrimp and "is not likely to adversely modify designated Critical Habitat for the California tiger salamander and vernal pool fairy shrimp" (Appendix B). An Incidental Take Statement was issued within the Biological Opinion that listed terms and conditions, to ensure that the take of the species is permitted. All conditions outlined within the Biological Opinion issued by the Service on October 22, 2013 shall be adhered to. Terms and conditions of the take statement and minimum preservation and avoidance measures are outlined within the County's MMRP, included as Appendix B to this EA.

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

NHPA of 1966, as amended (54 U.S.C. § 300101 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, i.e., cultural resources that are eligible for inclusion in the National Register. The 36 CFR Part 800 regulations implement 54 U.S.C. § 306108, commonly known as Section 106 of the NHPA.

For the current undertaking, formal consultation with the SHPO, on a finding of no adverse effect on historic properties, was conducted by the Corps and Reclamation. In both instances, the SHPO provided concurrence with that finding, pursuant to 35 CFR § 800.5(b) (Appendices C and E).

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

Section 401 of the 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 Corps 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. Section 404 of the CWA authorizes the Corps to issue permits to regulate the discharge of “dredged or fill materials into waters of the United States” (33 U.S.C. § 1344)

The County will obtain a 401 Water Quality Certification Permit and apply for coverage under the NPDES General Permit for Discharges of Storm Water Runoff Associated with Construction Activity for the Project from the State Water Resources Control Board (SWRCB). All terms and conditions of the permits would be adhered to.

Approximately 0.263 acres of federally protected waters of the U.S. as defined by Section 404 of the CWA would be impacted by the Proposed Action through direct removal, filling, hydrological interruption, or other means. A NWP Number 14 application for linear transportation projects was submitted to the Corps on December 14, 2010 for the Project, including Reclamation’s Action Area. The Corps responded to the request on December 5, 2014 stating that the activities were authorized by NWP 14, permitting that a Section 401 Water Quality Certification be issued or waived, and that the project proceeds subject to the conditions of the certification and the NWP. Additionally, the Corps provided a list of special conditions that are outlined within the issued NWP. All conditions outlined within the Corps verification letter dated December 5, 2014 shall be adhered to.

4.6 Executive Order 11988 – Floodplain Management

Executive Order 11988 requires that all Federal agencies take action to reduce the risk of flood loss, to restore and preserve the natural and beneficial values served by floodplains, and to minimize the impact of floods on human safety, health, and welfare. The Project includes stormwater conveyance facilities designed with sufficient capacity to contain the anticipated changes to stormwater runoff resulting from the Proposed Action (AECOM 2009). Proposed

modifications to drainage facilities have been designed to maintain the capacity of the existing facilities; therefore, flood patterns would not be altered and the Project is consistent with Executive Order 11988.

4.7 San Joaquin Valley Air Pollution Control District Indirect Source Review (Rule 9510)

The Air District implements the Indirect Source Review Program to reduce emissions from development projects, including roadway expansion projects. This Program was developed as a result of California requirements outlined in the California Health and Safety Code, Section 40604 and the State Implementation Plan. Projects with construction exhaust emissions over 2.0 tons/year of NO_x and 2.0 tons per year of PM₁₀ are subject to Indirect Source Review (Air District 2012). The County will submit an application to the Air District prior to Project approval and compliance will be shown prior to the issuance of a construction permit.

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