

# RECLAMATION

*Managing Water in the West*

Draft Environmental Assessment

## License for Bakersfield Multi-Use Trail along the Friant-Kern Canal

EA-15-061

DRAFT



U.S. Department of the Interior  
Bureau of Reclamation  
South-Central California Area Office

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## **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 Kern River Parkway (Parkway), a natural preserve in Bakersfield, California, runs from the mouth of the Kern River to Interstate 5. The Parkway has three trails; an equestrian trail north of the river, a jogging trail south of the river, and a paved multi-use path called the Parkway Trail. The Parkway Trail is a multi-use path that runs east west approximately 22 miles from Enos Lane to China Grade Loop. All but three miles are located within Bakersfield City limits. The Parkway is a major destination in Bakersfield, featuring rest stops with seating, shade, and educational signage placed periodically along the trail. There are multiple points along the trail that connect to sidewalks leading to parks, commercial centers, and schools.

The City of Bakersfield (City) has requested Reclamation's approval, to construct and maintain the 6-mile Friant-Kern Canal multi-use path (multi-use path) which would connect to the Parkway Trail.

## 1.2 Need for the Proposed Action

The City desires to construct a 6-mile multi-use path along the Friant-Kern Canal, from Seventh Standard Road to the Parkway Trail along the Kern River. The proposed multi-use path would run north south connecting a large portion of northwest Bakersfield to the Parkway (Figure 1). The multi-use path would serve as a means for alternative transportation, recreational purposes, as well as, interconnect to community parks, schools, centers, retail centers, and the Parkway. Construction of the multi-use path would increase pedestrian safety, promote active modes of transportation, and reduce traffic congestion.

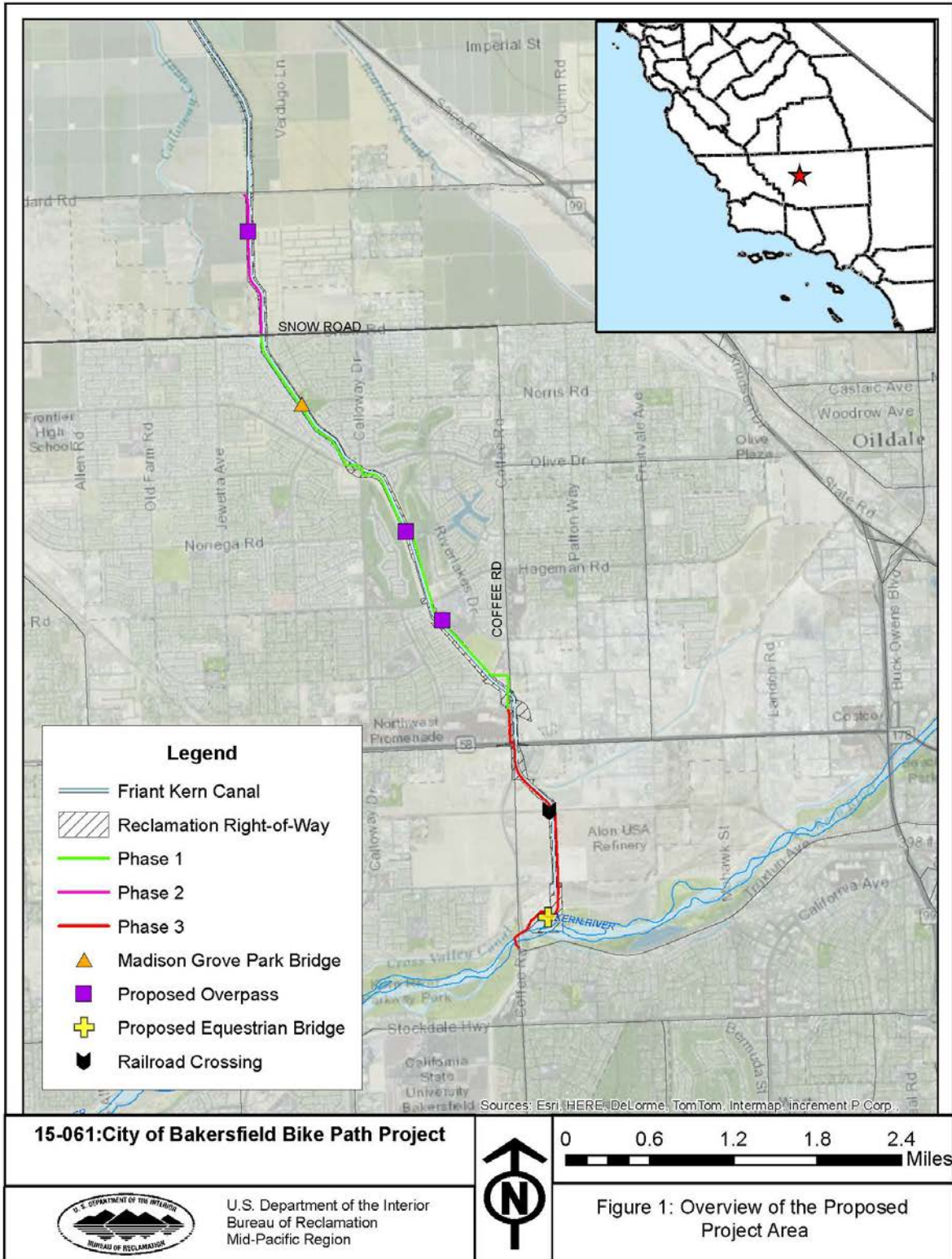


Figure 1 Proposed Action Area

## 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 issue a perpetual land use authorization to the City, for the construction and maintenance of a 6-mile long multiuse path from the Kern River Channel to Seventh Standard Road.

### 2.2 Proposed Action

Reclamation proposes to issue a perpetual land use authorization to the City for the construction and maintenance of a 6-mile long multi-use path along the Friant-Kern Canal that would connect to the Parkway Trail.

The City has proposed to construct the multi-use path over the following three phases:

- Phase 1 would include the construction of an approximately 4-mile long multi-use path along the Friant-Kern Canal from Snow Road south to Coffee Road. Two overpasses and one pedestrian bridge would be installed over the Friant-Kern Canal during this Phase (Figure 2).
- Phase 2 would include the construction of a 1-mile long multi-use path from the northern edge of Phase 1 north to Seventh Standard Road. A single overpass would be installed over the Friant-Kern Canal during this section of the multi-use path (Figure 3).
- Phase 3 would include the construction of a 1.9-mile multi-use path from the southern edge of Phase 1 south to the Kern River. A culvert would be installed under the existing railroad tracks and an equestrian bridge would be installed over an unlined portion of the Friant-Kern Canal during this Phase (Figure 4).



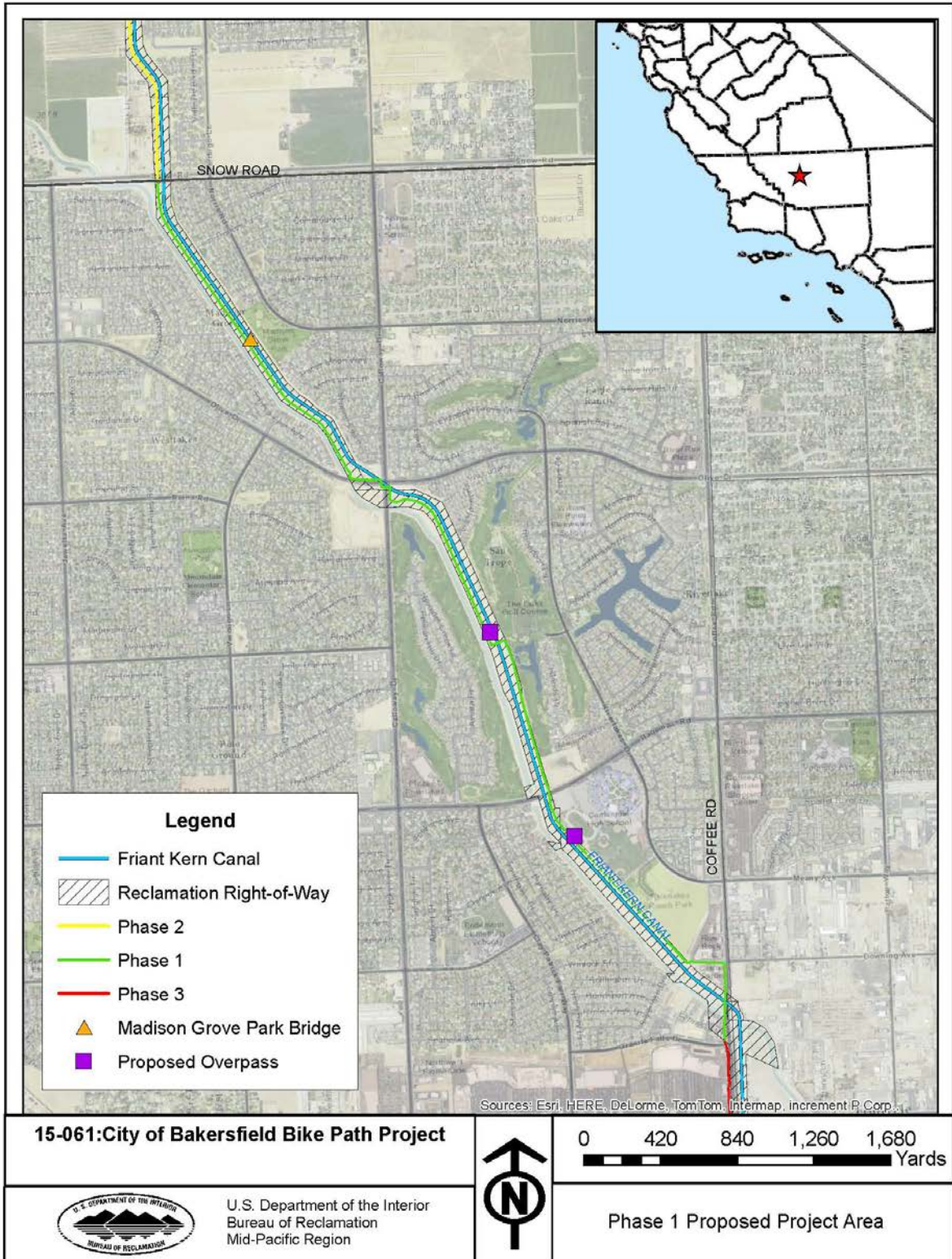


Figure 2 Phase 1 of multi-use path



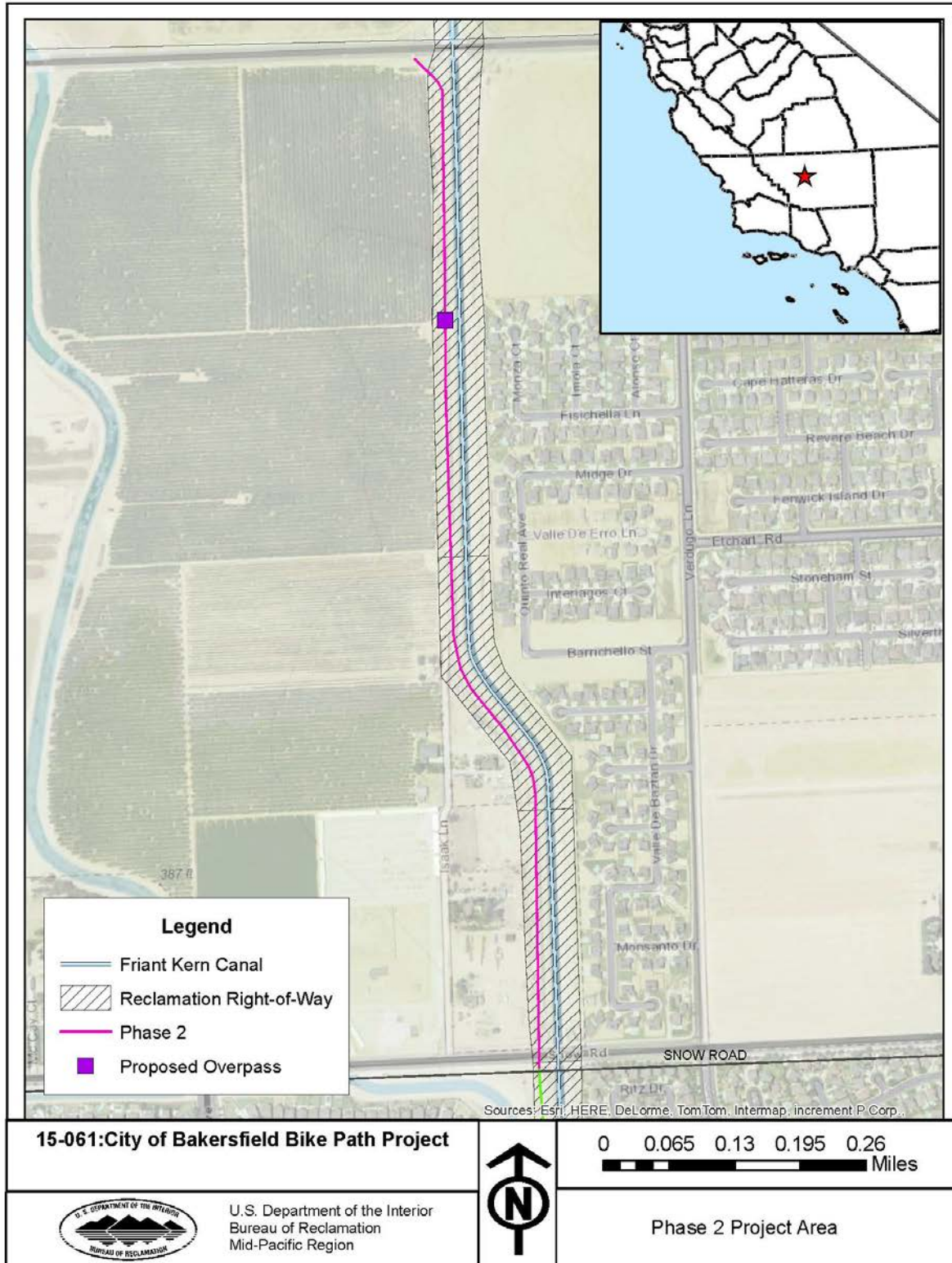


Figure 3 Phase 2 of multi-use path

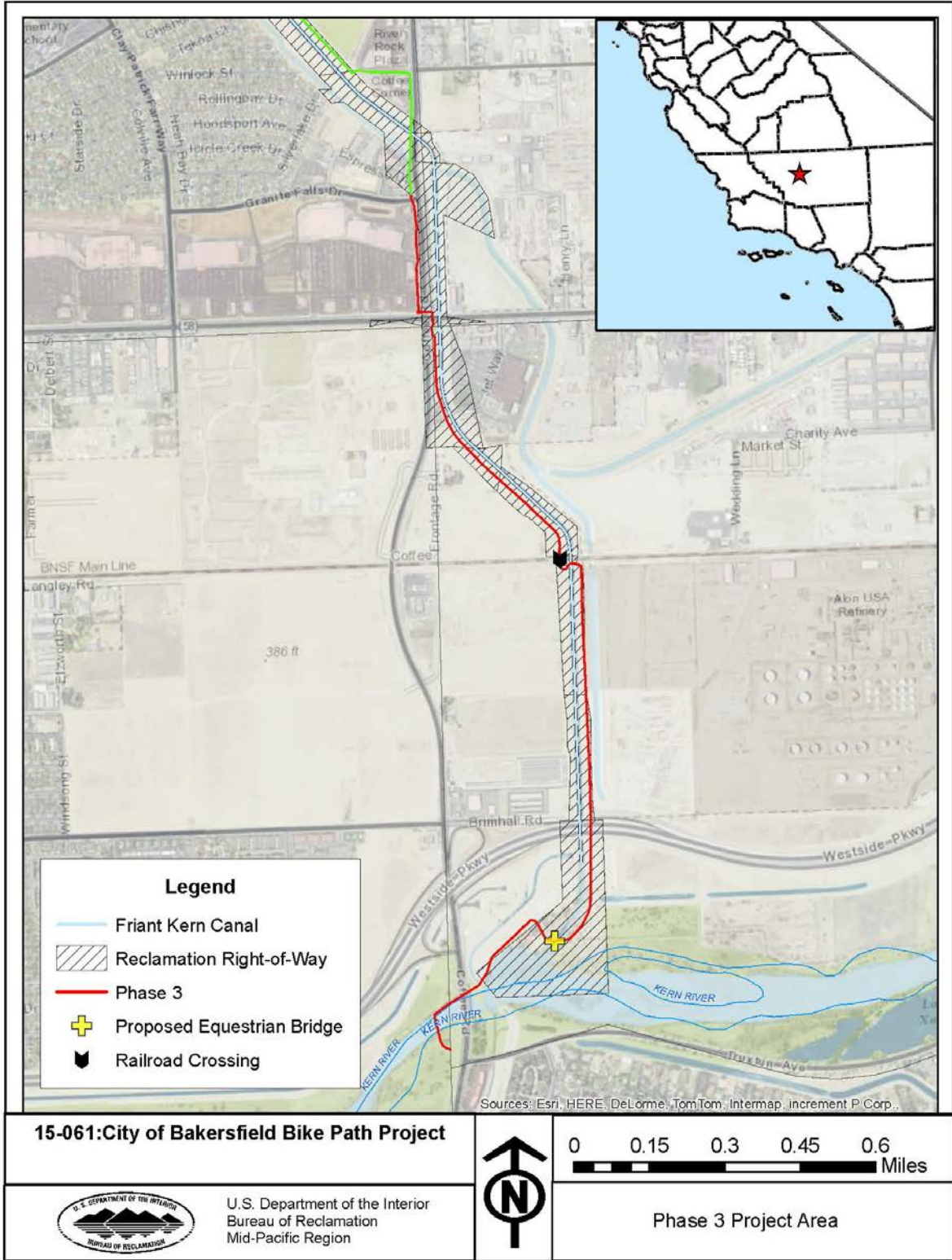


Figure 4 Phase 3 of multi-use path

Specific construction details for the three Phases are included below. It should be noted that the City currently only has plans for Phase 1; however, actions taken in Phase 2 and Phase 3 will be similar to those taken in Phase 1. Any changes or additional construction, operation, or maintenance outside of those described below would require additional environmental review and approval from Reclamation.

The multi-use path would be 12 feet wide and made of asphalt pavement. Dirt shoulders along the multi-use path would be 4 feet wide. Grading depths would not exceed 1 foot.

The City would install standard chain link fencing along both sides of the path boundaries to restrict access to the Friant-Kern Canal. Existing chain link fence would be utilized where possible. Where new fencing is needed, a 9 inch by 12 inch concrete curb would be constructed along the fence line and 6 foot tall chain-link fencing would be installed. Posts would be installed every 8 feet in 10 inch diameter holes dug 3 feet deep. The holes would be filled with concrete to secure the fence posts.

Concrete bridges would be constructed over existing Friant-Kern Canal outlet structures. Concrete bridge locations have been identified, however construction details shall be determined during the design phase of this project.

A 40-foot long, 10-foot wide pedestrian bridge would be installed over the Friant-Kern Canal. Pedestrian bridge locations have been identified, however construction details shall be determined during the design phase of this project.

Pre-fabricated overpasses would be installed over the Friant-Kern Canal. The overpasses would be 9 feet by 19 feet. Bollards requiring 12 inch in diameter by 3 feet deep holes and curb ramps would be installed at all of the bridges. The City would modify their existing gates as entry points and exits to the multi-use path. The pre-fabricated overpass locations have been identified, however construction details shall be determined during the design phase of this project.

Existing crossings at arterial streets would be used by those travelling along the multi-use path. Infrastructure at traffic signals would be altered by the City to accommodate safe crossing. Push buttons and pedestrian heads would be installed at existing poles. No ground disturbance would be required for these activities.

Appropriate striping, pavement markings, and associated signage would be installed by the City. Mile markers would be installed approximately every mile along the path. The mile markers would be located outside of Reclamation rights-of-way at the entrances to the Friant-Kern Canal. The City plans to mount mile markers on existing poles where possible.

The Proposed Action would not contribute to an exceedance of applicable air quality or global greenhouse gas emissions standards. Under the Proposed Action, there would be temporary increases greenhouse gases emissions during construction, but there would be no operational emissions.

### 2.2.1 Environmental Commitments

The City of Bakersfield must implement the following environmental protection measures to avoid environmental consequences associated with the Proposed Action (Table 1).

**Table 1 Resource Protection Measures**

<b>Resource</b>	<b>Protection Measure</b>
Biological Resources	In order to avoid impacts to nesting Swainson’s hawks, construction activities shall occur, when possible, outside of the nesting season (defined as March 1- September 15).
Biological Resources	If construction activities must occur between March 1 and September 15, a qualified biologist shall conduct nest surveys for Swainson’s hawks on and within a ½ mile of the Proposed Action Area in accordance with the <i>Recommended Timing and Methodology for Swainson’s Hawk Nesting Surveys in California’s Central Valley</i> (SHTAC, 2000). Three nest surveys shall be conducted in each of two survey periods, with the survey periods defined as follows: Period I – January 1 to March 20, Period II – March 20 to April 5, Period III – April 5 to April 20, Period IV – April 21 to June 10, and Period V – June 10 to July 30. Surveys shall take place in the two survey periods immediately prior to the start of construction, with the exception of Period III, when no surveys should take place per the SHTAC 2000 guidelines. The surveys shall consist of inspecting all accessible, suitable trees in the survey area for the presence of nests and hawks.
Biological Resources	If any active Swainson’s hawk nests are discovered within the survey area, an appropriate disturbance-free buffer shall be established based on local conditions and Service guidelines. Disturbance-free buffers shall be identified on the ground with flagging, fencing, or by other easily visible means, and shall be maintained until a qualified biologist has determined that the young have fledged and are capable of foraging independently.
Biological Resources	Before the start of any ground-disturbing activities associated with the Proposed Action, a qualified biologist shall conduct focused surveys for burrowing owls in areas of suitable habitat on and within 250 feet of the project footprint. A letter report documenting survey methods and findings shall be submitted to Reclamation at least 5 days before the start of construction on the Proposed Action.
Biological Resources	If occupied burrowing owl burrows are found, Reclamation shall be notified and work on the Proposed Action shall <b>not</b> begin until a qualified biologist has established a non-disturbance buffer of 160 feet during the non-breeding season (September 1 through January 31) or 250 feet during the breeding season (February 1 through August 31). The biologist shall remain on-site during construction to monitor the burrow, and may stop construction at any time to avoid impacts to the owls. The buffer shall remain in place until the biologist determines the nest is no longer active.
Biological Resources	If a burrowing owl is observed at the construction site at any time during construction, a temporary non-disturbance buffer of approximately 160 feet shall be observed to establish a safe area for the animal until it leaves the construction area at its own volition.
Biological Resources	All measures in the Metropolitan Bakersfield Habitat Conservation Plan, and the Terms and Conditions and Reasonable and Prudent Measures in the associated Incidental Take Permit, shall be fully implemented.

Environmental consequences for resource areas assume the measures specified would be fully implemented. Copies of all reports would be submitted to Reclamation.



## 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 2.

**Table 2 Resources Eliminated from Further Analysis**

Resource	Reason Eliminated
Indian Sacred Sites	The Proposed Action 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. Therefore, there would be no impacts to Indian Sacred Sites as a result of the Proposed Action.
Indian Trust Assets	The Proposed Action would not impact Indian Trust Assets as there are none in the Proposed Action area.

### 3.2 Biological Resources

#### 3.2.1 Affected Environment

The Proposed Action Area consists primarily of bare ground along the Friant-Kern Canal levees and access roads. There is some weedy ruderal vegetation along the right-of-way fencing, and there is ornamental vegetation along portions of the Proposed Action Area that border existing commercial development and roads (McCormick 2016). Some non-native grassland and remnant Valley cottonwood riparian forest habitat is present in the segment of the bike trail that would be constructed along the Kern River corridor; however, this portion of the project is outside of Reclamation's right-of-way and is therefore not included in this analysis.

On July 5<sup>th</sup>, 2017 Reclamation requested an official species list from the United States Fish and Wildlife Service (Service) via the Service's website, <http://ecos.fws.gov/ipac>, (Consultation Code: 08ESMF00-2017-SLI-2521). The list covers the Proposed Action Area shown in Figure 1. The California Department of Fish and Wildlife's California Natural Diversity Database (CNDDDB) was also queried for records of protected species within the vicinity of the Proposed Action Area (CNDDDB 2017). Biologists from McCormick Biological Inc. conducted reconnaissance-level surveys of the Proposed Action Area, and a surrounding buffer zone, on July 19<sup>th</sup>, 2016 and July 24<sup>th</sup>, 2016 (McCormick 2016).

The information collected above, in addition to information within Reclamation's files, was combined to determine the likelihood of protected species occurrence within the Proposed Action Area and is summarized in Table 3.

**Table 3 Federally Threatened and Endangered Species**

Species	Status <sup>1</sup>	Effects <sup>2</sup>	Potential to occur and summary basis for ESA determination <sup>3</sup>
<b>Amphibians</b>			
California red-legged frog <i>Rana draytonii</i>	T, X	NE	<b>Absent.</b> This species does not occur within the Proposed Action Area due to a lack of suitable habitat. There is no Designated Critical Habitat for this species in the Proposed Action Area. The Proposed Action would have <i>No Effect</i> on this species.
<b>Birds</b>			
Swainson's hawk <i>Buteo swainsonii</i>	MBTA	NT	<b>Possible.</b> No Swainson's hawk nests were observed during the reconnaissance-level surveys of the Proposed Action Area (McCormick 2016); however, the Proposed Action Area may provide suitable foraging habitat for this species and there are some large trees bordering the Action Area that may provide suitable nesting habitat for the species.
Burrowing owl <i>Athene cunicularia</i>	MBTA	NT	<b>Possible.</b> No burrowing owls, burrowing owl sign or burrowing owl nests were observed during the reconnaissance-level survey of the Proposed Action Area (McCormick 2016); however, there are records of this species near the Proposed Action Area, and the Proposed Action Area contains suitable foraging and denning habitat for this species.
Southwestern willow flycatcher <i>Empidonax traillii extimus</i>	E, X	NE	<b>Absent.</b> This species does not occur within the Proposed Action Area due to a lack of suitable riparian habitat. There is no designated Critical Habitat for this species in the Proposed Action Area. The Proposed Action would have <i>No Effect</i> on this species.
Yellow-billed cuckoo <i>Coccyzus americanus</i>	T, X	NE	<b>Absent.</b> This species does not occur within the Proposed Action Area due to a lack of suitable riparian habitat. There is no designated or proposed Critical Habitat for this species in the Proposed Action Area. The Proposed Action would have <i>No Effect</i> on this species.
<b>Fish</b>			
Delta smelt <i>Hypomesus transpacificus</i>	T, X	NE	<b>Absent.</b> This species does not occur within the Proposed Action Area due to a lack of suitable aquatic habitat, and designated Critical Habitat for this species is not present in the Proposed Action Area. There would be <i>No Effect</i> to this species.
<b>Invertebrates</b>			
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	T, X	NE	<b>Absent.</b> This species does not occur within the Proposed Action Area due to a lack of suitable vernal pool habitat. Designated Critical Habitat for this species is not present in the Proposed Action Area. The Proposed Action would have <i>No Effect</i> to this species.
<b>Mammals</b>			
Buena Vista Lake Ornate shrew <i>Sorex ornatus relictus</i>	E, X	NE	<b>Absent.</b> This species does not occur in the Proposed Action Area due to a lack of suitable habitat. There is no designated Critical Habitat for this species in the Proposed Action Area. The Proposed Action would have <i>No Effect</i> on this species.



Species	Status <sup>1</sup>	Effects <sup>2</sup>	Potential to occur and summary basis for ESA determination <sup>3</sup>
Giant kangaroo rat <i>Dipodomys ingens</i>	E	NE	<b>Absent.</b> This species does not occur within the Proposed Action Area. The Proposed Action would have <i>No Effect</i> on this species.
San Joaquin kit fox <i>Vulpes macrotis mutica</i>	E	NLAA	<b>Present.</b> This species is known to occur within the vicinity of the Proposed Action Area and kit fox dens were observed during the reconnaissance-level survey of the Proposed Action Area (McCormick 2016). This species is covered under the Metropolitan Bakersfield Habitat Conservation Plan (Bakersfield HCP). The Bakersfield HCP would be fully implemented; therefore any potential effects to this species would be minimized and mitigated by the HCP and have existing coverage under the Endangered Species Act.
Tipton kangaroo rat <i>Dipodomys nitratooides nitratooides</i>	E	NLAA	<b>Possible.</b> Kangaroo rat burrows were observed in the Proposed Action Area, near the Kern River, during the reconnaissance-level surveys; however, it is unknown whether the burrows were Tipton kangaroo rat burrows or burrows of another kangaroo rat species (McCormick 2016). This species is covered under the Bakersfield HCP. The Bakersfield HCP would be fully implemented; therefore any potential effects to this species would be minimized and mitigated by the HCP and have existing coverage under the Endangered Species Act.
<b>Plants</b>			
Bakersfield cactus <i>Opuntia treleasei</i>	E	NE	<b>Absent.</b> This species does not occur within the Proposed Action Area due to a lack of suitable habitat. The Proposed Action would have <i>No Effect</i> on this species.
California jewelflower <i>Caulanthus californicus</i>	E	NE	<b>Absent.</b> This species was not observed during the reconnaissance-level survey of the Proposed Action Area and there are no extant records of this species near the Proposed Action Area. The Proposed Action would have <i>No Effect</i> on this species.
Kern mallow <i>Eremalche kernensis</i>	E	NE	<b>Absent.</b> This species does not occur within the Proposed Action Area. The Proposed Action would have <i>No Effect</i> on this species.
San Joaquin wooly-threads <i>Monolopia congdonii</i>	E	NE	<b>Absent.</b> This species was not observed during the reconnaissance-level survey of the Proposed Action Area. Suitable soils for this species occur near the portion of the proposed bike trial that would be constructed in the Kern River corridor (McCormick 2016); however this portion of the bike trail is outside of Reclamation's right-of-way and is therefore not included in this analysis.
<b>Reptiles</b>			
Blunt-nosed leopard lizard <i>Gambelia sila</i>	E	NE	<b>Absent.</b> This species does not occur within the Proposed Action Area. The Proposed Action would have <i>No Effect</i> on this species.
Giant Garter Snake <i>Thamnophis gigas</i>	T	NE	<b>Absent.</b> This species does not occur within the Proposed Action Area. The Proposed Action would have <i>No Effect</i> on this species.

<sup>1</sup> Status = Status of federally protected species protected under the ESA.

E: Listed as Endangered

MBTA: Migratory Bird Treaty Act protected species

T: Listed as Threatened

X: Critical Habitat has been designated for this species

2 Effects = Effect determination

NE: No Effect anticipated from the Proposed Action to federally listed species or designated critical habitat

NT: No Take of birds protected under the MBTA

NLAA: Proposed Action Not Likely to Adversely Affect federally listed species

3 Definition of Occurrence Indicators

Absent: Species not recorded in study area and suitable habitat absent.

Present: Species recorded in area and suitable habitat present.

Possible: Species recorded in area and habitat suboptimal.

There is no Critical Habitat in the Proposed Action Area. Several of the special-status species named on the official species list have no potential to occur within the Proposed Action Area due to a lack of suitable habitat, and would therefore not be affected by the Proposed Action. Federally protected species with some potential to occur in or near the Proposed Action Area include Swainson's hawk, burrowing owl, San Joaquin kit fox, and Tipton kangaroo rat.

### ***Swainson's Hawk***

The Swainson's hawk is a federal species of concern and is protected under the federal Migratory Bird Treaty Act (MBTA). They are found in the grasslands and agricultural lands of California's Central Valley in spring and summer. Swainson's hawks exhibit a high degree of nest site fidelity and usually construct nests in large trees including Fremont cottonwood, willow, and mature oak trees (Bloom 1980). This species spends large amounts of time soaring over grasslands and agricultural fields in the Central Valley and can travel up to 18 miles to forage for prey. Swainson's hawks prey on small mammals, insects, and birds. They have adapted to use certain croplands, including alfalfa, grain, tomatoes, beets and other row crops, for foraging (Estep 1989).

### ***Burrowing Owl***

The burrowing owl is a federal species of concern and is protected under the MBTA. Their diet consists of small mammals, birds, amphibians, invertebrates and insects. Burrowing owls forage in pastures, croplands, and areas with sparse vegetation. They nest in mammal burrows or natural cavities. The primary reason for the species decline is habitat loss and degradation. The use of pesticides in agricultural areas also contributes to the decline of burrowing owls by reducing burrowing mammal populations and potentially poisoning the owls (Klute et al. 2003).

### ***San Joaquin Kit Fox***

The San Joaquin kit fox is federally listed as an endangered species. Their diet varies based on prey availability, and includes small to mid-sized mammals, ground-nesting birds, and insects. Kit foxes generally live in arid, relatively flat annual grassland and saltbush scrub habitats, but they are also found in urban areas like parks and golf courses. Kit foxes excavate their own dens or could use other animal and human-made structures (culverts, abandoned pipelines, and banks in sumps or roadbeds). Primary reasons for the species decline include loss and degradation of habitat (Service 2010).

### ***Tipton Kangaroo Rat***

The Tipton kangaroo rat is federally listed as an endangered species. Their diet consists primarily of seeds, and includes some small amount of green vegetation and insects when available. Tipton kangaroo rats live in arid, relatively flat areas with sparse or low-growing vegetation in the Tulare Basin on the Valley Floor that are not subject to flooding, such as Valley Sink Scrub or Valley Saltbush Scrub communities. Tipton kangaroo rats excavate and occupy

burrows in slightly elevated mounds or in other areas that are higher than the surrounding terrain (canal embankments, bases of shrubs, fence edges, etc.). The primary reason for the species decline is habitat loss from conversion of suitable habitat to agricultural land (Service 1998).

### **3.2.2 Environmental Consequences**

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

Under the No Action alternative, Reclamation would not allow the City to construct a multi-use recreational trail along the Friant-Kern Canal. Because conditions would remain unchanged from current conditions, there would be no new impacts to biological resources.

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

Potential effects from the Proposed Action are discussed below in further detail for each special-status species with the potential to occur in the Proposed Action Area.

#### ***Migratory Birds***

There are 3 CNDDDB-recorded occurrences of Swainson's hawks within 10 miles of the Proposed Action Area (CNDDDB 2017). No Swainson's hawks or Swainson's hawk nests were observed during the reconnaissance-level survey of the Proposed Action Area (McCormick 2016); however, there are some large ornamental trees bordering portions of the Proposed Action Area that may provide marginally suitable nesting habitat for Swainson's hawks, and there are multiple ground squirrels in the Proposed Action Area which would provide suitable prey for this species.

If construction occurs within 0.25 miles of an active Swainson's hawk nest during the critical phases of the species nesting cycle (March 1- September 15) it may result in nest abandonment or failure (CDFG 1994). To insure that the Proposed Action does not cause any take of Swainson's hawks, if work on the Proposed Action is scheduled to occur between March 1<sup>st</sup> and September 15<sup>th</sup>, a qualified biologist would survey areas of suitable nesting habitat within 0.5 miles of the Proposed Action Area for active Swainson's hawk nests. If an active Swainson's hawk nest is found, an appropriate disturbance-free buffer shall be established until a qualified biologist determines that the young have fledged and are capable of foraging independently.

There are 9 CNDDDB-recorded occurrences of burrowing owls within 5 miles of the Proposed Action Area (CNDDDB 2017). No burrowing owls, burrowing owl burrows, or burrowing owl sign were observed during the reconnaissance-level survey of the Proposed Action Area (McCormick 2016). The Proposed Action Area consists of flat areas of bare soil with multiple ground squirrel burrows which may provide suitable nesting and/or foraging habitat for burrowing owls. Although burrowing owls were not observed during the survey, there is a potential for them to forage or den within the Proposed Action Area.

If burrowing owls are present within the Proposed Action Area during construction, the Proposed Action may displace or disturb the burrowing owls and could result in nest failure. Surveys for burrowing owls would be conducted prior to the start of construction on the Proposed Action. If burrowing owls and/or burrowing owl burrows are found during the survey, avoidance measures would be implemented in order to avoid take of burrowing owls during the construction phase of the Proposed Action.

Once construction is complete the Proposed Action Area would become a recreational bike trail and would be subjected to increased human disturbance. The Proposed Action Area is already subjected to some human disturbance from routine maintenance activities along the Friant-Kern Canal, homeless people living along the Friant-Kern Canal, and from adjacent urban development; so Swainson's hawks and/or burrowing owls nesting in or near the Proposed Action Area would likely already be somewhat accustomed to human presence. Ground squirrels are expected to remain along the margins of the bike trail, and would continue to provide suitable prey for both species.

With the implementation of the provided avoidance measures, Reclamation has determined that there would be *No Take* of Swainson's hawks or burrowing owls.

### ***San Joaquin Kit Fox***

There are multiple CNDDDB records of San Joaquin kit foxes in and near the Proposed Action Area. San Joaquin kit foxes are known to occur along the proposed multi-use path, and 23 known kit fox dens were observed during the July 2016 reconnaissance-level survey of the Proposed Action Area (McCormick 2016).

San Joaquin kit foxes may be affected by the construction of the proposed multi-use path; however, the Proposed Action would be completed under the Bakersfield Habitat Conservation Plan (HCP) and its accompanying Endangered Species Act (ESA) Section 10(a)(1)(B) Incidental Take Permit PRT-786634, which provides take coverage for the San Joaquin kit fox. The Bakersfield HCP, and its associated implementing agreement and Incidental Take Permit, identify potential impacts to San Joaquin kit foxes that are likely to result from the Proposed Action and contain measures to minimize those anticipated impacts. All of the measures in the Bakersfield HCP, and the terms and conditions and reasonable and prudent measures in the Incidental Take Permit, would be fully implemented. With the implementation of the Bakersfield HCP Reclamation has determined, and the Service confirmed, that there is existing ESA coverage for potential effects to the San Joaquin kit fox (Leeman 2016).

### ***Tipton Kangaroo Rat***

There are 4 CNDDDB-recorded occurrences of Tipton kangaroo rats within 5 miles of the Proposed Action Area (CNDDDB 2017). Burrows indicative of kangaroo rats were observed in the portion of the Proposed Action Area near the Kern River; however, without small mammal trapping surveys it is unknown whether Tipton kangaroo rats are actually present in the Proposed Action Area or if the burrows belong to a non-federally listed species of kangaroo rat (*Dipodomys* spp.) (McCormick 2016).

Tipton kangaroo rats may be affected by the construction of the proposed multi-use path; however, the Tipton kangaroo rat is a species covered under the Bakersfield HCP and its associated Incidental Take Permit. The Bakersfield HCP, and its associated implementing agreement and Incidental Take Permit, identify potential impacts to Tipton kangaroo rats that are likely to result from the Proposed Action and contain measures to minimize those anticipated impacts. All of the measures in the Bakersfield HCP, and the terms and conditions and reasonable and prudent measures in the Incidental Take Permit, would be fully implemented. With the implementation of the Bakersfield HCP Reclamation has determined, and the Service

confirmed, that there is existing ESA coverage for potential effects to the Tipton kangaroo rat (Leeman 2017).

### ***Cumulative Impacts***

The Proposed Action would convert an approximately 6-mile long section of Friant-Kern Canal access road into a paved bike trail over three phases. The site is currently exposed to human disturbance from ongoing routine maintenance activities along the Friant-Kern Canal, adjacent urban development, and a population of homeless people. The Proposed Action is expected to result in increased human presence from recreational trail users in the Proposed Action Area once the project is complete. Although this project may affect the federally listed San Joaquin kit fox and Tipton kangaroo rat, it is not expected to result in any net habitat loss for these species, as an equivalent amount of habitat for these species would be acquired and protected under the Bakersfield HCP.

Reclamation is currently unaware of any future State or private activities planned for the Proposed Action Area. The land within the Proposed Action Area is federally owned by Reclamation; therefore, any future State or private activities proposed within the Action Area would undergo appropriate review in accordance with Section 7 of the ESA (16 U.S.C. §1531 et seq.).

## **3.2 Cultural Resources**

Cultural resources is a broad term that includes prehistoric, historic, architectural, and traditional cultural properties. The National Historic Preservation Act of 1966 is the primary Federal legislation that outlines the Federal Government's responsibility to cultural resources. Section 106 of the National Historic Preservation Act 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 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, determine if historic properties are present within that area of potential effects, determine the effect that the undertaking will have on historic properties, and consult with the State Historic Preservation Office (SHPO), 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.

### **3.2.1 Affected Environment**

A records search of the California Historical Resources Information System (CHRIS) Southern San Joaquin Valley Information Center at the California State University, Bakersfield took place on April 19, 2018 with a 0.25 mile radius for previously located cultural resources and inventories in the Friant-Kern Canal right-of-way. The CHRIS search determined that two recorded sites are located within the study area, and include two historic period sites; the Friant-Kern Canal and the Santa Fe Railroad Minkler Spur.

Reclamation utilized the results of a reconnaissance-level inventory of the Friant Kern Canal by JRP Historical Consulting, LLC, performed in 2017. The inventory identified the contributing elements of the Friant-Kern Canal within the study area. The railroad spur has been previously determined to be ineligible for listing in the National Register. The Friant-Kern Canal has been determined to be eligible for the National Register under a 1997 consensus determination by SHPO.

Reclamation initiated consultation with the SHPO on May 25, 2018 and requested concurrence on a finding that the Proposed Action would not affect any historic properties, pursuant to 36 CFR § 800.5(d)(1) (See Appendix A). Reclamation received concurrence from SHPO on the finding of no adverse effect to historic properties on June 19, 2018.

### **3.2.2 Environmental Consequences**

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

Under the No Action alternative, Reclamation would not allow the City to construct a multi-use recreational trail along the Friant-Kern Canal. Because conditions would remain unchanged from current conditions, there would be no new impacts to Cultural Resources.

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

The Proposed Action would convert an approximately 6-mile long section of Friant-Kern Canal access road into a paved bike trail over three phases. JRP Historical Consulting, LLC conducted a cultural resources inventory for the proposed project area and identified no cultural resources. Reclamation consulted with SHPO and a finding of no adverse effect to historic properties was found.

#### ***Cumulative Impacts***

The Proposed Action would not contribute to any cumulative impacts to Cultural Resources.

## **3.3 Recreation**

### **3.3.1 Affected Environment**

The Parkway is a network of trails providing multiple recreation opportunities and access to commercial and non-commercial properties. The Parkway is maintained and managed by the City.



### 3.3.2 Environmental Consequences

#### **No Action**

Under the No Action alternative, Reclamation would not allow the City to construct a multi-use recreational trail along the Friant-Kern Canal. Because conditions would remain unchanged from current conditions, there would be no new impacts to recreation activities.

#### **Proposed Action**

Under the Proposed Action, the construction of a North to South connection to the Parkway would enhance public recreation activities. Visitors would have greater access to the natural preserve, as well as, the horseback riding, biking, jogging, and picnicking opportunities there.

#### **Cumulative Impacts**

The Proposed Action would allow the City to construct a 6-mile long section of the Friant-Kern Canal access road into multiuse path that would connect to the Parkway. Visitor access to the Parkway could be expected to increase due to the North South connection. The Proposed Action is expected to result in increased human presence from recreational trail users in the Proposed Action Area once the project is complete.

## 3.4 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 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 the Proposed Action equal or exceed certain *de minimis* amounts thus requiring the federal agency to make a determination of general conformity.

### 3.4.1 Affected Environment

The Proposed Action area lies within the San Joaquin Valley Air Basin and is under the jurisdiction of the San Joaquin Valley Air Pollution Control District (Air District). The pollutants of greatest concern in the San Joaquin Valley are carbon monoxide, ozone, ozone precursors such as reactive organic gases (ROG) or volatile organic compounds (VOC),

inhalable particulate matter between 2.5 and 10 microns in diameter (PM<sub>10</sub>) and particulate matter less than 2.5 microns in diameter (PM<sub>2.5</sub>). The San Joaquin Valley Air Basin has reached Federal and State attainment status for carbon monoxide, nitrogen dioxide, and sulfur dioxide. Although Federal attainment status has been reached for PM<sub>10</sub>, the State standard has not been met and both are in non-attainment for ozone and PM<sub>2.5</sub> (San Joaquin Valley Air Pollution Control District 2018). There are no established standards for nitrogen oxides (NO<sub>x</sub>); however, they do contribute to nitrogen dioxide standards and ozone precursors (San Joaquin Valley Air Pollution Control District 2018).

### **3.4.2 Environmental Consequences**

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

Under the No Action Alternative, there would be no impact to regional air quality, as existing conditions would continue.

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

There would be no operational emissions associated with the project; however, minimal short-term air quality impacts would occur associated with construction; generally arising from dust generation (fugitive dust) and operation of construction equipment. Fugitive dust results from land clearing, grading, excavation, concrete work, and vehicle traffic on paved and unpaved roads. Fugitive dust is a source of airborne particulates (PM) less than 10 microns, including PM<sub>10</sub> and PM<sub>2.5</sub>. Large earth-moving equipment, trucks, and other mobile sources powered by diesel or gasoline are also sources of combustion emissions, including nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), ROG, sulfur dioxide, and small amounts of air pollutants.

Construction of the Proposed Action would be accomplished with a small grader, skip loader, water truck, dump truck, paving machine, steel drum roller, pneumatic roller, end dump truck, and sheeps foot compactor. Construction of the Proposed Action would occur over a 31 day period.

Estimated air quality emissions for construction activities associated with the Proposed Action were calculated utilizing the South Coast Air Quality Management District's *EMFAC2007 Version 2.3* emission factors (2018). Annual estimated emissions can be found in Table 4 below.

**Table 4 Estimated Emissions due to Construction of the Proposed Action**

Source	Total Emission (Metric Tons per Year)					
	CO	ROG	NO <sub>x</sub>	SO <sub>x</sub>	PM	CO <sub>2</sub>
Construction emissions	.21	.03	.28	0	.01	50.70
Operation emissions	0	0	0	0	0	0
<b>Total Emissions</b>	<b>.21</b>	<b>.03</b>	<b>.28</b>	<b>0</b>	<b>.01</b>	<b>50.70</b>
<b>Conformity Thresholds (SJVAPCD)</b>	<b>100</b>	<b>10</b>	<b>10</b>	<b>27</b>	<b>15</b>	<b>2,5000</b>
CO=carbon monoxide. ROG=reactive organic gases. NO <sub>x</sub> =. SO <sub>x</sub> = sulfur oxides. PM=particulate mater. CO <sub>2</sub> = carbon dioxide. -Source: San Joaquin Valley Air Pollution District 2015 thresholds.						

Estimated emissions for construction and operation of the Facility are well below the *de minimis* thresholds established by the Air District; therefore, a conformity analysis is not required. In addition, the City and/or its contractor would employ best management practices to reduce fugitive dust emissions during ground disturbance. Consequently, the Proposed Action would not result in an adverse impact upon air quality.

### **Cumulative Impacts**

Construction emissions for the Proposed Action are well below the *de minimis* thresholds established by the Air District and are expected to be temporary in duration. As a result, the Proposed Action is not expected to contribute to cumulative adverse impacts to air quality.

## **3.6 Global Climate Change**

### **3.6.1 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. Some greenhouse gases, such as carbon dioxide (CO<sub>2</sub>), occur naturally and are emitted to the atmosphere through natural processes and human activities. Other greenhouse gases (e.g., fluorinated gases) are created and emitted solely through human activities. The principal greenhouse gases that enter the atmosphere because of human activities are: CO<sub>2</sub>, methane (CH<sub>4</sub>), nitrous oxide, and fluorinated gasses (EPA 2014a).

During the past century humans have substantially added to the amount of greenhouse gases 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 CO<sub>2</sub> and CH<sub>4</sub>, 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).

Recently, the U.S. Global Research Program (USGRP) concluded in its Climate Science Special Report (2017) that “Many lines of evidence demonstrate that it is extremely likely that human influence has been the dominant cause of the observed warming since the mid-20th century.” The USGRP also concludes that “Global climate is projected to continue to change over this century and beyond. The magnitude of climate change beyond the next few decades will depend primarily on the amount of greenhouse (heat trapping) gases emitted globally and on the remaining uncertainty in the sensitivity of the Earth’s climate to those emissions (very high confidence).”

Reclamation developed a global climate model in 2016 for the Sacramento and San Joaquin Basins. The model predicts increased temperatures, increased precipitation, increased runoff, and reduced snowpack at higher latitudes during the 21st century.

### **3.5.2 Environmental Consequences**

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

If no action were taken, there would be no resultant greenhouse gases emissions. Current trends would be unaffected.

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

Under the Proposed Action, there would be temporary and minor increase in greenhouse gases emissions (Table 4). Annual construction emissions of CO<sub>2e</sub> are estimated to 50.70 metric tons per year, and are well below the 25,000 metric tons or more per year thresholds.

#### ***Cumulative Impacts***

Although greenhouse gas emissions are considered cumulatively significant, the estimated annual carbon dioxide emissions required to construct the project (Table 5) is well below the 25,000 metric tons per year threshold for reporting greenhouse gas. As a result, the Proposed Action is not expected to contribute to cumulative adverse impacts to global climate change.

## **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 Environmental Assessment during a 30-day public review period.

### **4.2 List of Agencies and Persons Consulted**

Reclamation has consulted with the following regarding the Proposed Action:

- The City of Bakersfield
- U.S. Fish and Wildlife Service

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