

# RECLAMATION

*Managing Water in the West*

## Draft Environmental Assessment

### Avenue 50 Canal Crossing Project



U.S. Department of the Interior Bureau of Reclamation  
Yuma Area Office  
Yuma, Arizona

May 2017

## **Mission Statements**

The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about these 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.

# **Environmental Assessment**

## **Avenue 50 Canal Crossing Project**

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# Acronyms and Abbreviations

ALUC	Airport Land Use Commission
APE	Area of Potential Effects
APN	Assessor Parcel Number
BMPs	Best Management Practices
BLM	Bureau of Land Management
CARB	California Air Resources Board
CFR	Code of Federal Regulations
CWA	Clean Water Act
EA	Environmental Assessment
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FONSI	Finding of No Significant Impact
IID	Imperial Irrigation District
ITAs	Indian Trust Assets
LCR	Lower Colorado River
MSHCP	Multi-Species Habitat Conservation Program
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO <sub>2</sub>	Nitrogen Dioxide
NRHP	National Register of Historic Places
NWR	National Wildlife Refuge
O <sub>3</sub>	Ozone
O&M	Operation and Maintenance
OHWM	Ordinary High Water Mark
PM <sub>2.5</sub>	Particulate Matter that is 2.5 microns in diameter or less
PM <sub>10</sub>	Particulate Matter that is 10 microns in diameter or less
POLs	Petroleum, Oil, and Lubricants
Reclamation	Bureau of Reclamation
RMP	Coachella Canal Area Resource Management Plan
SCAQMD	South Coast Air Quality Management District
SO <sub>2</sub>	Sulfur Dioxide
SSAB	Salton Sea Air Basin
SHPO	State Historic Preservation Office
US	United States
USFWS	United States Fish and Wildlife Service
USACE	United States Army Corps of Engineers
VOCs	Volatile Organic Compounds
YAO	Yuma Area Office



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# **1.0 Purpose of and Need for Proposed Action**

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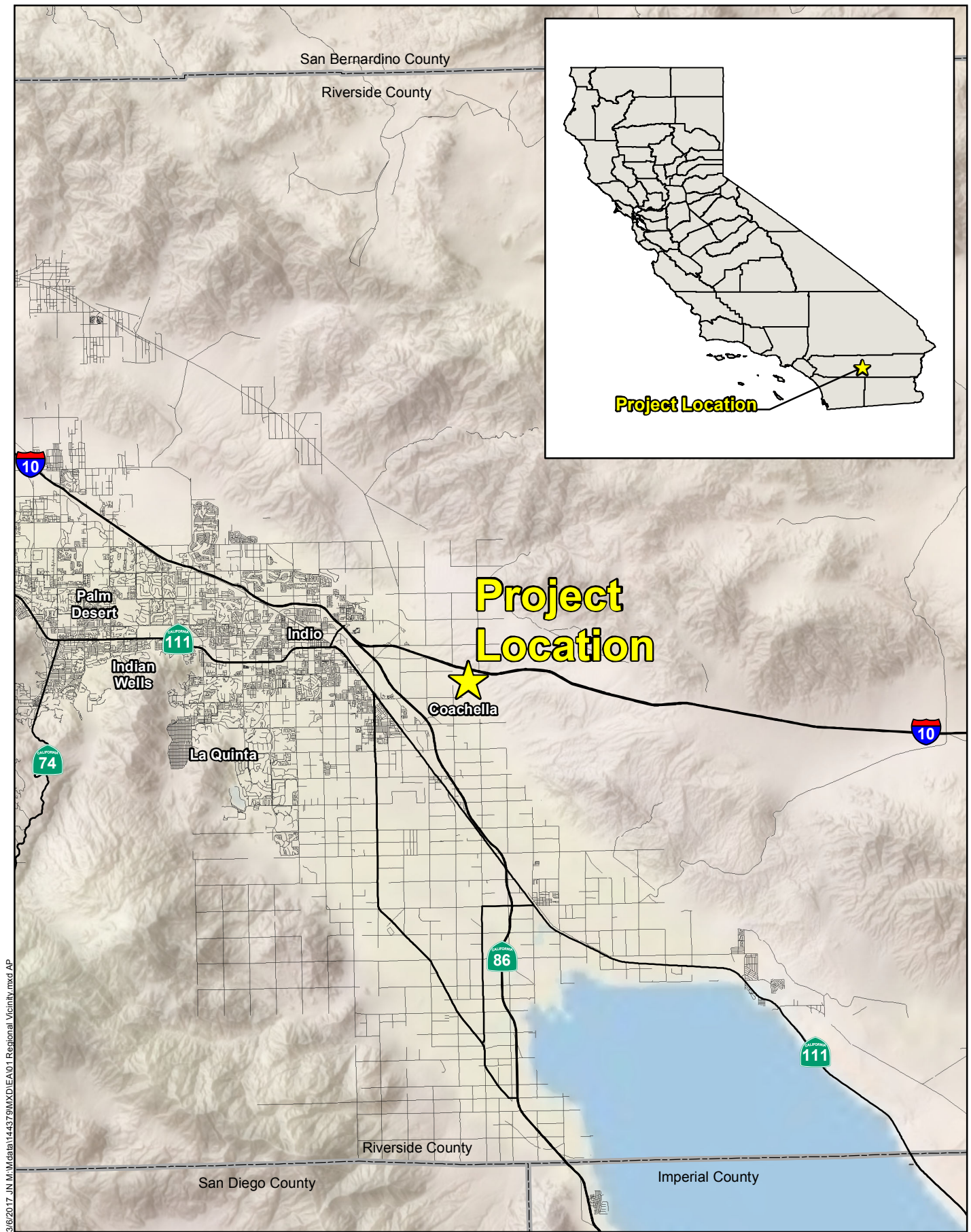
## **1.1 Introduction**

The Bureau of Reclamation (Reclamation) has prepared this Environmental Assessment (EA) to evaluate potential impacts associated with the proposed Avenue 50 Canal Crossing Project (“project” or “Proposed Action”). This EA was prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 (42 UCS 4321 et seq.), the Council on Environmental Quality regulations (40 CFR 1500-1508) for implementing NEPA, and the Department of the Interior’s NEPA Regulations (43 CFR Part 46), and Reclamation Manual NEPA Policy (ENV P03). Reclamation is the lead Federal agency pursuant to NEPA. Because the project would modify Reclamation facilities and introduce new facilities within Reclamation’s right-of-way, a land use authorization license agreement from Reclamation is required in accordance with Reclamation’s Directives and Standards LND 08-01, dated 1/3/2002.

## **1.2 Location**

The project is located in the eastern portion of the Coachella Valley, north of the Salton Sea in the City of Coachella, California. The project site is bounded by vacant land to the north and east, and agricultural lands to the south and west. Refer to Figures 1 and 2 for the project location.

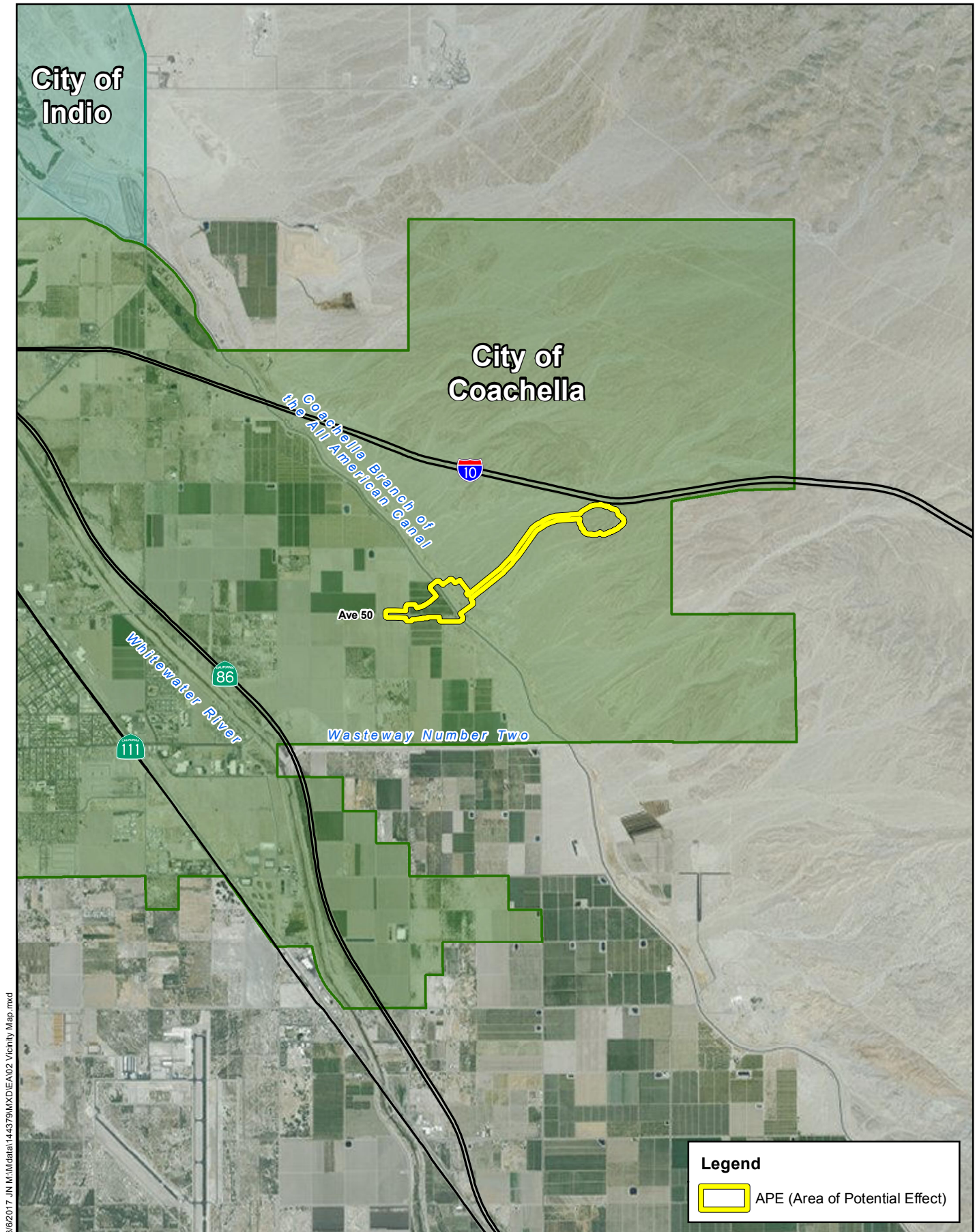
The project site contains vacant and undeveloped land to the north and east; the Coachella Branch of the All-American Canal (Canal) centrally in the site; agricultural lands, a vineyard, and two residences to the south and west; and the existing Avenue 50 alignment to the west. Onsite vegetation within the vacant area of the project site consists of scattered small shrubs, medium shrubs (e.g. creosote), small dispersed trees and date palm trees. Human-made features on the project site include the Canal and East Side Dike, a 250-kilovolt electrical transmission corridor parallel to the Canal, an electrical local distribution line along the site’s southern boundary, and the existing Avenue 50 roadway alignment to the west.



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AVENUE 50 CANAL CROSSING PROJECT  
ENVIRONMENTAL ASSESSMENT (EA)

Vicinity Map

Figure 2





**Photo 1. Looking west at Avenue 50 in the western portion of the study area.**



**Photo 2. Looking south at existing agricultural land uses in the western portion of the study area.**



**Photo 3. Looking north at the Coachella Branch of the All American Canal (Canal).**



**Photo 4. Looking southeast at disturbed creosote bush scrub vegetation community to the east of the Canal.**





**Photo 5. Looking northeast across the central portion of the study area.**



**Photo 6. Looking south across the northern portion of the study area.**

### **1.3 Background**

Avenue 50 is ultimately envisioned as an east-west, six-lane Major Arterial roadway, connecting the City with Interstate 10 (I-10) via a future I-10/Avenue 50 interchange, consistent with the City's *General Plan Update 2035 Mobility Element*. Ultimate development of Avenue 50 is constrained by two major factors; a crossing of the Canal, and a connection to I-10. Development of the new I-10/Avenue 50 interchange is considered a separate project under Caltrans jurisdiction. The Proposed Action would contribute to the ultimate development of the City's Avenue 50 alignment by providing the Canal crossing, facilitating future development of the roadway segment between the Canal crossing and the future I-10/Avenue 50 interchange.

The Coachella Canal branches off from the All American Canal sixteen miles west of Pilot Knob and extends northwest 123 miles to the Coachella Valley. The Canal brings water from Reach 5 of the Lower Colorado River (LCR) into the Imperial and Coachella Valleys.

Development of the canal crossing would require the construction of a temporary Canal bypass channel to facilitate water flow during construction. Permanent modification to the Canal through a box culvert would be implemented in order to facilitate the roadway crossing. In addition, the roadway, as well as utilities, would permanently cross Reclamation right-of-way. Therefore, a land use authorization license agreement from Reclamation is required to install and manage these facilities within Reclamation right-of-way.

### **1.4 Purpose and Need**

The need for the project is to improve circulation and highway access to the City of Coachella and establish new connectivity to areas within the proposed project vicinity by constructing a new crossing over the Canal at the existing eastern terminus of Avenue 50. The purpose of constructing the proposed improvements is to facilitate future development of the Avenue 50 roadway segment between the Canal crossing and the future I-10/Avenue 50 interchange. Reclamation proposes to issue the City of Coachella (City) a License granting them access to cross the Canal (Reclamation facility) for implementing the Proposed Action.

### **1.5 Reclamation Authority, Policy, and Resource Management Plan**

Reclamation's authority to grant land use authorizations is stated in the Reclamation Manual, in Directives and Standards LND 08-01 (dated 1/3/2002). This document provides standard procedures for issuing land use authorization documents such as easements, leases, licenses, and permits, which allow others to use Reclamation lands and interests in its lands, facilities, and water surfaces. According to LND 08-01 item 2.C, "Permits and

licenses are similar in nature. Permits are generally considered a form, or subset, of licenses. They do not convey possessory interest, but grant only permission to use real property under specific, limited conditions. Licenses, including permits, are use authorizations that grant personal, revocable permission or authority for a person or entity to utilize a specific parcel of land for a specific purpose or purposes. Licenses, including permits do not convey any ownership interest in the land and are not generally considered to be appurtenant to a parcel of land, thus are personal in nature. In Reclamation, the term ‘permit’ is generally used to refer to short-term and less intense uses (less than 3 years) and ‘license’ generally is used to refer to longer and more substantial uses.”

Reclamation proposes to issue a License to the City. The license would grant the City access to the Canal to construct the crossing. It would be the responsibility of the project proponent to adhere to guidance detailed in this EA concerning implementation. It would also be the responsibility of the proponent to provide funding, labor and materials to implement and maintain the plan.

Therefore, since the project would result in the addition of permanent infrastructure involving a Reclamation facility that would be a long and substantial use requiring a license, the project is subject to the provisions in LND 08-01 item 7.A-C regarding licenses.

In addition, the project falls within the boundaries of the Reclamation *Coachella Canal Area Resource Management Plan* (Coachella Canal RMP) and is subject to the provisions within the Coachella Canal RMP. In September 2006, Reclamation prepared the Coachella Canal RMP in order to establish a 10-year plan detailing the management framework for the conservation, protection, enhancement, development, and use of the natural and cultural resources along the Coachella Canal while protecting the authorized Reclamation project purposes as detailed in the Boulder Canyon Project (Project) Act of December 21, 1928 (45 Stat. 1057). The portion of the Coachella Canal Area covered by the Coachella Canal RMP is entirely within Riverside County and consists of about 30 miles of the canal and approximately 3,990 acres of Reclamation lands. The Coachella Canal RMP was developed in participation with the Bureau of Land Management (BLM), Bureau of Indian Affairs (BIA), County of Riverside (County), and Coachella Valley Water District (CVWD), and Reclamation made a concerted effort to involve interested parties, including agencies, special interest groups, landowners, and individuals in planning for the environmental, land, recreation, and wildlife resources within the Coachella Canal Area.

## **1.6 Relationship to Other Projects and Activities**

### **Coachella Canal Area Resource Management Plan**

As discussed in Section 1.5 above, the project falls within the boundaries of the Coachella Canal RMP, issued by Reclamation in 2006 as a tool to effectively manage the Coachella Canal Area's natural resources, recreational developments and opportunities, and to involve the public in the planning process. Refer to Figure 3 for the Canal location in relation to the Coachella Canal RMP area, as shown in Coachella Canal RMP Map 6.1, *Coachella Canal Area Final Resource Management Plan Map*.

### **La Entrada Specific Plan**

On November 13, 2013, the City of Coachella adopted Resolution No. 2013-53, certifying the Final Environmental Impact Report (EIR) for the La Entrada Specific Plan (Specific Plan), State Clearinghouse (SCH) No. 2012071061, in compliance with the California Environmental Quality Act (CEQA) and the CEQA Guidelines. The approved Specific Plan involves the development of a master-planned community in the northeastern portion of the City on approximately 2,200 acres that would include a mix of residential, commercial, open space, school, and recreational uses, as well as associated infrastructure required to support buildout of the Specific Plan. The Specific Plan is planned to be constructed in five (5) separate phases over approximately 30 years, and the Specific Plan site will be divided into three villages (Gateway, Central, and Hillside villages) that would be linked by a Village Paseo and a linear park/trail. The Specific Plan area is currently undeveloped and vacant, and there are no existing structures located on the Specific Plan site.

The Canal borders the Specific Plan site along the Specific Plan's western boundary. The development of Avenue 50 is envisioned in the Specific Plan. The extension of 0.75-mile-long segment of Avenue 50 roadway is a component of the Specific Plan, and would be implemented during Phase 1 of the Specific Plan construction. The proposed Avenue 50 roadway is located within the northwestern portion of the Specific Plan and would extend northeasterly from the Proposed Action boundary to the future I-10/Avenue 50 interchange project boundary; refer to Figure 3 for the Canal location in relation to the Specific Plan area, as well as the Avenue 50 alignment within the Specific Plan area.

### **Interstate 10 (I-10)/Avenue 50 New Interchange Project**

The I-10/Avenue 50 New Interchange Project is a new connection to existing I-10 within the northeastern portion of the City, and as planned, would require approximately 73.8 acres of new right-of-way. The new interchange location is immediately adjacent to the Specific Plan area, and as mentioned previously, would connect to the proposed Avenue 50 roadway extension within the Specific Plan area.

The I-10/Avenue 50 New Interchange Project is currently in the Project Approval/ Environmental Document (PA/ED) phase and is undergoing NEPA approval through Caltrans District 8. Once approved, construction of the new interchange is expected to begin in April 2018 and be completed in October 2019, lasting approximately 18 months. Refer to Figure 3 for the new interchange location in relation to the Canal crossing and Avenue 50 roadway projects.

## **1.7 Determinations to be Made**

This EA will be distributed to appropriate decision-makers within Reclamation for review to determine whether a Finding of No Significant Impact (FONSI) is appropriate. This decision will be based on a determination that potential impacts are either not significant or can be reduced to not significant levels through the implementation of mitigation measures. If any potential impacts are considered significant and cannot be avoided or reduced to not significant levels, the preparation and processing of an Environmental Impact Statement is required.

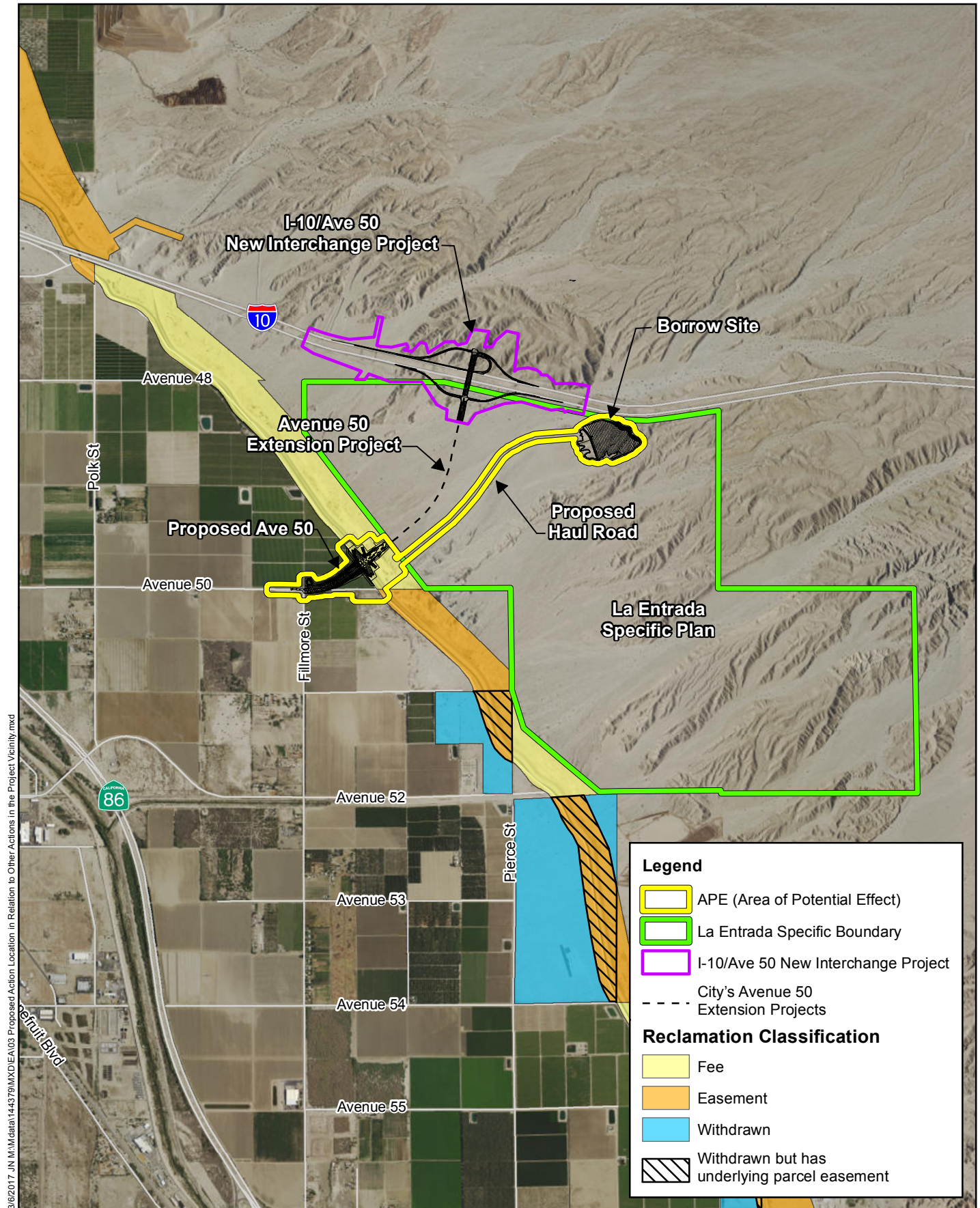
## **1.8 Scoping Process and Issues**

As part of the NEPA process and in order to engage public agencies, stakeholders, organizations, and the members of the public in the project development process, a Notice of Intent (NOI) to prepare an Environmental Assessment (EA) for the Proposed Action was released on May 24, 2016. A total of three written comments on the NOI were received from the following:

- Imperial Irrigation District (IID): noted a number of specific design features required for the project due to existing electrical transmission facilities onsite;
- South Coast Air Quality Management District (SCAQMD): made recommendations regarding the analysis of potential project-related air quality and greenhouse gas impacts required for the associated CEQA document; and
- Riverside County Airport Land Use Commission (ALUC): confirmed that the Proposed Action is not located within an Airport Influence Area, and therefore, ALUC review will not be required. However, in addressing impacts on airports, the comment letter requested that the Environmental Assessment indicate whether any portions of the construction area are located within 20,000 feet of any point on either runway at Jacqueline Cochran Regional Airport.

In addition, on Thursday, June 9, 2016, a public scoping meeting was held at the City Corporate Yard, located at 53462 Enterprise Way in the City of Coachella. One local resident attended the meeting, along with Reclamation staff, City of Coachella staff, and consultants. The one resident in attendance made a number of informal comments about the project, and asked for clarifications from staff.





AVENUE 50 CANAL CROSSING PROJECT  
ENVIRONMENTAL ASSESSMENT (EA)

# Proposed Action Location in Relation to Other Actions in the Project Vicinity



## 2.0 Alternatives Considered

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This chapter describes the alternatives considered for the project activities. It includes the Proposed Action and No Action alternatives. Refer to Figure 4 for the Proposed Action footprint and the associated Area of Potential Effects (APE).

### 2.1 No Action Alternative

NEPA guidelines require that an EA evaluate the “No Action” alternative in addition to the Proposed Action. The No Action Alternative provides a basis for comparison of the environmental consequences of the Proposed Action. In this EA, the No Action Alternative assumes that the project would not occur and the Canal crossing would not be constructed.

### 2.2 Proposed Action

#### 2.2.1 Build Alternative

##### Project Components

The project consists of components described in detail in the following section. In addition, key features of each component have been summarized in Table 1 below.

**Table 1: Summary of Project Components**

Component	Proposed Features
Temporary Diversion Channel	<ul style="list-style-type: none"><li>▪ A temporary canal diversion channel would be constructed to facilitate continuous flow of the Canal during canal modification.</li><li>▪ The diversion channel would be in use for approximately 6 to 8 months.</li><li>▪ Once Canal modifications are complete and flow is restored, the temporary diversion channel would be demolished.</li></ul>
Canal Modifications	<ul style="list-style-type: none"><li>▪ Temporary cofferdams would be installed at each end of the future canal crossing site in order to keep the construction site dry.</li><li>▪ The open canal would be demolished and cast in place box culverts would be constructed.</li><li>▪ Access ramps for CVWD maintenance activities would be constructed to allow access to the canal for maintenance after construction is complete.</li></ul>
Canal Crossing	<ul style="list-style-type: none"><li>▪ The road would be installed on the new concrete box culverts constructed within the Canal.</li><li>▪ The right-of-way for Avenue 50 would be minimized along the canal crossing by eliminating the median.</li></ul>
Utility Extension and Relocations	<ul style="list-style-type: none"><li>▪ The development of Avenue 50 along this segment would accommodate utility extensions eastward including: irrigation facilities, potable and recycled water, sewer, gas, electrical lines, fiber optic communication lines, as well as others.</li><li>▪ Utility relocations would also be needed to facilitate construction of the Canal crossing.</li></ul>

Component	Proposed Features
Drainage Improvements	<ul style="list-style-type: none"> <li>▪ East of the Canal, a series of arch culverts would be installed in the existing wash to protect the proposed roadway and convey storm flows under Avenue 50.</li> <li>▪ Along the proposed roadway extension, storm drains and three water quality basins are proposed.</li> </ul>
New Road Easement	<ul style="list-style-type: none"> <li>▪ A new road easement along an existing, but undedicated dirt road, would replace existing access from Avenue 50 that would be eliminated by the canal crossing. The project would not involve any physical improvements associated with the new easement.</li> </ul>

### **Temporary Diversion Channel**

A diversion channel would be installed to accommodate up to 600 cubic feet per second (CFS) of flow for up to 6 months to provide continuous water supply service from the Canal while the canal improvements are constructed. The diversion channel would be constructed along the western side of the Canal and would extend along the length of the proposed Canal crossing. The construction of the diversion channel would include the excavation and compaction of the diversion channel alignment, followed by the installation of a PVC liner within the diversion channel. The PVC lining would be tied into the Canal lining and water would then be diverted into the diversion channel to evacuate water from the main channel during construction of the Canal improvements. While the diversion channel is in operation, it would be under 24-hour surveillance in order to monitor the channel's operation and address any potential issues that may. In the event that the diversion channel experiences a failure, a contingency plan would divert to a spillway east of the project site while repairs to the diversion channel are completed. This would allow for generally continuous water service and protection from flooding due to a failure of the temporary diversion channel. Once Canal improvements are complete, water flow would be restored in the Canal, the diversion channel would be removed, and the area would be filled and compacted.

### **Canal Modifications**

The modifications to the Canal would begin once the cofferdams have been placed both upstream and downstream of the proposed Canal crossing footprint. Once the site has been dried, the concrete canal lining would be demolished and excavation of the project site would begin to prepare the subgrade for installation of the Canal modifications. Once excavation, surcharge, and compaction is complete, the concrete box culverts would be cast-in-place within the existing canal alignment. The box culverts would serve as the foundation of the canal crossing and would also accommodate water flow through the Canal once operational. Along with the box culverts, concrete headwalls and wing walls would be installed on both the upstream and downstream ends of the Canal crossing. Access paths and pads would be constructed to allow for maintenance of the Canal once it is operational. The access paths would accommodate equipment needed for routine maintenance of the Canal crossing. Once the box culverts and other in-canal structures are



complete, the coffer dams would be removed and water flow would be restored to the Canal. Once flow is restored, the roadway components of the Canal crossing would be constructed.

### **Canal Crossing**

The Canal crossing would be developed over the box culverts and related facilities once the initial construction within the Canal has been completed. The Canal crossing would include the construction of the roadway, and utilities across the Canal. As further described under Utility Extensions and Relocations below, a number of utilities would be installed within the canal crossing for future utility service east of the Canal. These utilities would include CVWD Irrigation, potable and recycled water, sewer, gas, electrical, stormwater, telecom, and street lighting. While conduit and other utility transmission infrastructure will be installed during construction, utility lines and utility service may not be installed/initiated until the demand is warranted.

### **Utility Extensions and Relocations**

A number of utilities intersect the project site, and would be relocated in conjunction with construction. Furthermore, utilities will be extended in order to provide utility services east of the Canal as part of the canal crossing. Table 2 below summarizes the utility work associated with the proposed project; therefore, those utilities that will be included in the canal crossing will be subject to licensing agreements with Reclamation.

**Table 2: Summary of Utility Relocations and Extensions**

<b>Utility Type</b>	<b>Agency/ Provider</b>	<b>Modification or Activity</b>
<b>Utility Relocations</b>		
Irrigation Pipeline	CVWD	Relocate
Fiber Optic Cable	AT&T	Relocate
Telephone	Frontier	Relocate
<b>Utility Extensions</b>		
Temporary Overhead Electrical Line	IID	Extension of temporary electrical onto project site for construction.
Reclaimed Water (16")	CWA	Extension of CWA Reclaimed Water to serve area east of the Canal.
Domestic Water Line (24")	CWA	Extension of CWA Domestic Water to serve area east of the Canal.
Sewer (24"/15")	CWA	Extension of CWA sewer system to serve area east of the Canal.
Gas Line (Future Connection)	SCG	Gas line for future gas service east of the Canal.

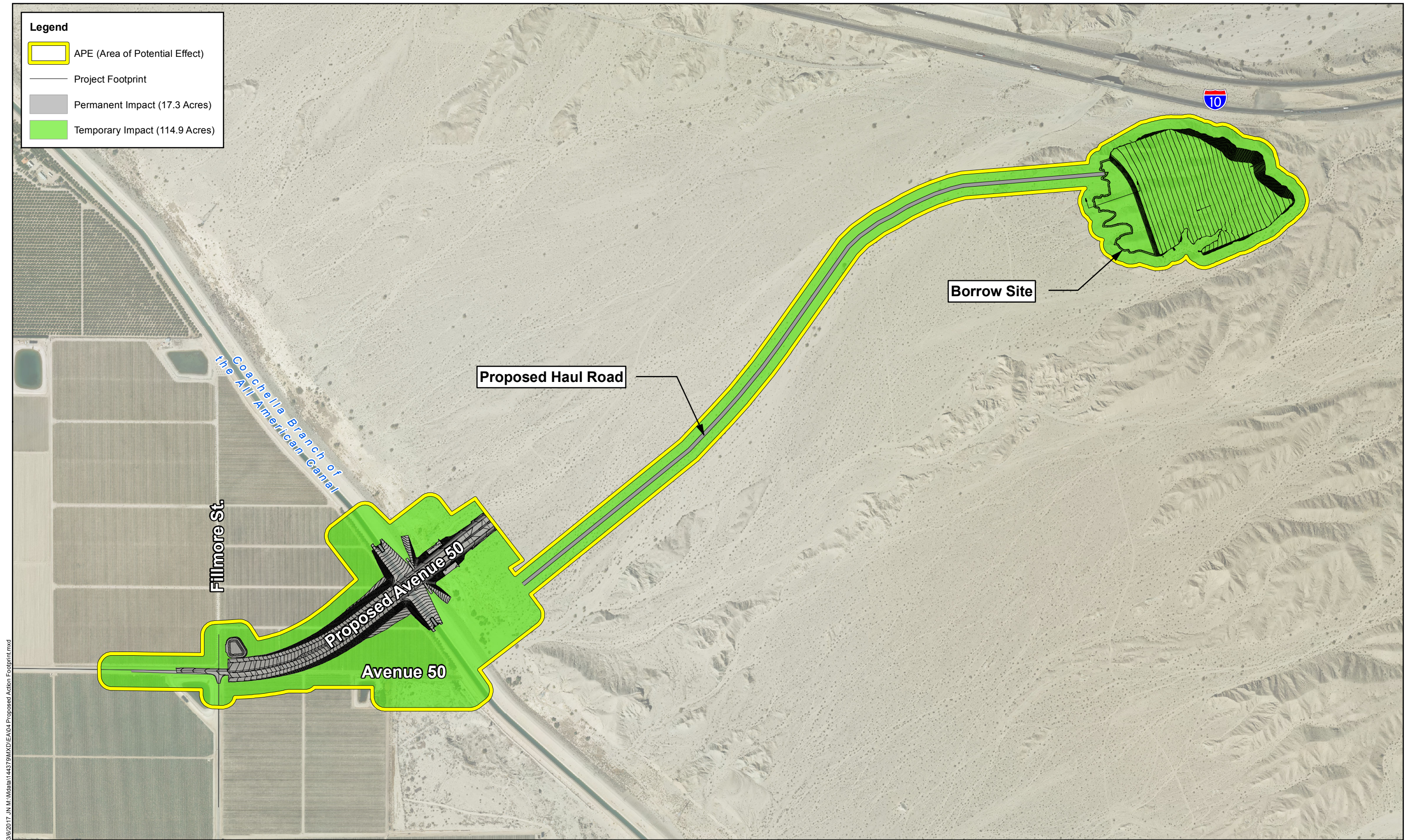
Utility Type	Agency/ Provider	Modification or Activity
Joint Trench and Utility Vaults (Future Connection)	Multiple	Joint trench and vaults that would house IID, Time Warner Cable, and Verizon lines and provide service east of the Canal.
Street Light Conduit	City of Coachella	Three-inch conduit that would allow for the extension of street light service over the Canal crossing and east of the Canal.
Note: Utility conduit will be installed during the initial construction of the canal crossing; however, installation of utility lines within the conduit, and the start of utility service would occur at future date.		

### **Drainage Improvements**

A system of precast arch culverts would be installed directly east of the Canal crossing in order to convey flows associated with an existing drainage on the project site. The arch culverts would be constructed in tandem with the Canal crossing and would be integrated into the roadway extension in order to prevent potential.

In addition, storm drains, catch basins, and manholes will drain roadway flows to the intersection of Fillmore Street and Avenue 50. One (1) basin is located at the intersection of Fillmore Street and Avenue 50, and two (2) basins are located east of the Canal along the proposed Avenue 50 extension.





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## **New Roadway Easement**

Due to the proposed alignment of the Canal crossing, a vacant parcel (APN: 763-090-008) located between the Canal and the alignment would not retain access to Avenue 50. The project would acquire and dedicate a permanent road easement along a segment of Avenue 51, an existing dirt road. No improvements to the access easement are proposed, however, the easement would provide legal access for the otherwise isolated parcel.

### **2.2.1.1 Construction Activities**

#### **Activities**

Project construction would require a number of construction activities such as clearing and grubbing, grading, excavating, trenching, utility installation, placement of backfill, and asphalt and concrete installation. Construction would occur over an 18-month period.

Project construction activities within the Canal would include the construction of both temporary and permanent structures in order to minimize interruption of the Canal water supplies. The phasing of the Canal improvements is imperative to the construction sequence. Construction would occur in the following sequence outlined in Table 3 below; note that tasks may overlap.

**Table 3: Construction Phasing**

<b>Task</b>	<b>Duration</b>
Establishment of haul road (along proposed Avenue 50 extension alignment) and staging areas;	1 Month
Remedial Grading west of the Canal;	1 Month
Relocation of utility's within the project footprint;	1 Month
Development of the temporary diversion channel, connection of the diversion channel to Canal;	1.5 Month
Installation of cofferdams in the Canal, diversion of water into the diversion channel and demolition of the existing canal lining;	1 Month
Excavation and compaction for the preparation of subgrade;	2 Months
Installation of cast-in-place reinforced concrete boxes, wing walls, and other in-canal improvements; Installation of precast arch culverts;	6 Months
Removal of cofferdams	1 Month
Diversion of water flow back to the Canal; Removal of temporary diversion channel and backfill of diversion channel;	0.5 Months
Final construction of the canal crossing roadway surface and appurtenant facilities (e.g. utilities) across the Canal;	6 Months
Development of roadway connecting the canal crossing to the existing Avenue 50 roadway to the west;	1 Month
Demobilization of construction.	1 Month

Due to the linear nature of the project site, many of the construction tasks will be completed in tandem in order to reduce the total construction timeline. It is anticipated that construction will begin on the project site in the summer of 2017 and will require a total time of 18 months, ending construction in approximately the winter of 2018.

### Equipment

Due to the complexity of the proposed project, a variety of equipment will be required during the construction of the project. As noted above, heavy construction would involve grading, excavation, structural erection, and backfilling within project area. Heavy construction could include the following equipment:

- Air Compressors
- Pavement Saw
- Jack hammer
- Back hoe
- Front-end loader
- 10-wheel dump trucks
- Flat-bed delivery truck
- Sweepers
- Crane
- Compactor
- Water Truck
- Trench Shields
- Concrete pump trucks
- Welding trucks
- Side boom pipe handler truck
- Earth movers
- Bulldozers
- Excavators
- Road grader
- Paving equipment

### Permits and Approvals

The Proposed Action would require a number of permits and approvals prior to construction. Table 4 below outlines the necessary permitting actions anticipated for the project.

**Table 4: Anticipated Agreements, Permits, and Approvals**

Agreements, Permits, and Approvals	Agency
<ul style="list-style-type: none"> <li>▪ NEPA Document Approval</li> <li>▪ NEPA Determination</li> <li>▪ License Agreement</li> </ul>	U.S. Bureau of Reclamation
<ul style="list-style-type: none"> <li>▪ CEQA Certification</li> </ul>	City of Coachella
<ul style="list-style-type: none"> <li>▪ National Historic Preservation –Section 106 Compliance</li> </ul>	State Historic Preservation Office (SHPO)
<ul style="list-style-type: none"> <li>▪ California Endangered Species Act (CESA) Compliance</li> </ul>	California Department of Fish and Wildlife (CDFW)
<ul style="list-style-type: none"> <li>▪ National Pollutant Discharge Elimination System (NPDES) Permits/Wastewater Discharge Requirements</li> </ul>	California State Water Resources Control Board (SWRCB), Santa Ana Regional Water Quality Control (RWQCB)
<ul style="list-style-type: none"> <li>▪ Temporary construction easement or encroachment permit for construction access/haul road</li> </ul>	Caltrans

#### **2.2.1.2 Maintenance Activities**

Once construction activities are completed, the City (project proponent) would perform operation and maintenance (O&M) activities on the facilities periodically, as needed, to maintain function of the structures. O&M activities would consist of the periodic removal of accumulated sediment from behind the structures, repair of fence structures, and upgrades to existing access roads. Material removed will be used for improving and/or rebuilding access roads in the area.

### **2.3 Actions Considered but Eliminated for Detailed Analysis**

No other actions besides the No Action Alternative and the Proposed Action were considered for detailed analysis.

## 3.0 Affected Environment, Environmental Consequences, and Management and Mitigation Measures

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This section describes the existing environmental resources in the project area that may be affected by the Proposed Action and the No Action Alternative, if implemented. It also serves as the baseline for the comparisons of alternatives.

The following critical elements of the human environment are not present or would not be affected by the alternatives; therefore, they will not be addressed in this EA: Housing and Population and Recreation.

### 3.1 Land Use

#### 3.1.1 Affected Environment

The Proposed Action area is located within the northeastern portion of the City of Coachella and falls within the boundaries of the Coachella Canal Area RMP and the City's *General Plan Update 2035* Planning Area. As discussed above, the approved La Entrada Specific Plan is located immediately to the east of the Proposed Action site. The Specific Plan envisions the extension of Avenue 50, which would be, in part, facilitated by the Proposed Action. Therefore, the Specific Plan has been included in this land use consistency analysis.

The existing land use designations/classifications and zoning designations in the Proposed Action area are listed in Table 5 below. Existing land uses in the Proposed Action area currently consist of vacant/undeveloped land, agricultural lands, and the Canal.

**Table 5: Proposed Action Area Land Use and Zoning Designations**

Plan/Policy Document	Land Use Designations/ Classifications	Zoning Designations
Coachella Canal Area RMP	Fee; Easement	N/A
General Plan Update 2035	Specific Plan; Residential; Industrial	R-S, Residential Single Family; A-T, Agricultural Transition; O-S, Open Space
La Entrada Specific Plan	Gateway Village, Planning Areas G2 and G3	N/A

It should also be noted that the Proposed Action area is not located within any Airport Influence Areas, according to the Riverside County Airport Land Use Commission (ALUC). As such, the Proposed Action is not required to undergo review by the ALUC. In

addition, no portion of the proposed construction area is located within 20,000 feet of any point on either runway at Jacqueline Cochran Regional Airport, which is located over 20 nautical miles to the northwest of the Proposed Action area.

### **3.1.2 Environmental Consequences**

No Action: Under this alternative, no transportation improvements would be implemented; therefore, the use and status of the existing land would not change. There would be no land use conflict with the Coachella Canal Area RMP under the No Action Alternative. In addition, no impacts to existing agricultural lands would occur.

However, there would be a conflict with other local and regional land use plans--specifically, transportation plans--already in place. The Canal crossing project is included within the future transportation network envisioned in the City's *General Plan Update 2035* Mobility Element as part of the City's effort to enhance connectivity in the City. The project is also included in the Southern California Association of Governments (SCAG) Transportation System Project List of the *2016-2040 Regional Transportation Plan/Sustainable Communities Strategy* (RTP/SCS) (RTP ID 3A01CV002). Therefore, the No Action Alternative would not implement planned transportation improvements and would result in a land use conflict.

Proposed Action: According to the Land Use section of Chapter 5 of the Coachella Canal RMP, through normal operations, numerous crossing agreements between Reclamation and utility companies, irrigation districts, and individuals have also been entered into over the years. Agreements currently exist for the following types of uses: bridges, access roads, crossing agreements, fences, power and transmission lines, telephone lines, fiber optic cables, water pipelines, and gas pipelines. Pre-existing authorized land uses will continue to be honored and protected. The Proposed Action would constitute such a project requiring a crossing agreement over the Canal at Avenue 50. Implementation of the crossing agreement between Reclamation and the City would ensure that no land use impacts would occur with respect to the Coachella Canal RMP.

According to Coachella Canal RMP Map 5.2, *Coachella Canal Area Land Use – Land Cover*, portions of the Proposed Action area are located on designated farmlands. As discussed in the RMP, urban encroachment on irrigation systems has both adverse and beneficial effects on agricultural production. Adverse effects include increased operating costs for irrigation systems resulting from residential and commercial subdivision encroachment. Benefits include increased farm property values resulting from urbanization adjacent to irrigation systems (John Wilkins-Wells 2003).

In addition to the RMP farmland designation discussed above, the Proposed Action area is also located on farmlands designated by other agencies. Specifically, as shown in Figure 5, the following Natural Resource Conservation Service (NRCS)-designated farmlands occur



within the Proposed Action footprint: 0.025 acres of Prime Farmland and 9.5 acres of Unique Farmland. The Proposed Action would result in the conversion of these farmlands to a non-agricultural use.

This impact was analyzed previously within the La Entrada Specific Plan Environmental Impact Report. As discussed in Section 4.2 of the EIR, the loss of this agricultural resource would be considered an unavoidable and adverse impact due to the resource value placed on farmland of this designation. The conversion of the 0.025 acres of onsite Prime Farmland would be equivalent to 0.00075 percent of the total loss of Prime Farmland in the County during the 2008-2010 period. Similarly, the conversion of the 9.535 acres of onsite Unique Farmland would be equivalent to 0.54 percent of the total loss of Unique Farmland in the County during this period.

Although the City has policies encouraging the preservation of agricultural land, the City does not currently utilize a banking or fee program to mitigate impacts to agricultural soils or lands. Therefore, the City does not have a mechanism available to mitigate the permanent loss of agricultural land. As such, impacts to Prime and Unique Farmland in the Proposed Action area, as a result of Proposed Action implementation, would remain unavoidable.

The Proposed Action would provide the connectivity necessary for the City to implement its transportation network, as envisioned in the applicable local land use planning documents described above. With the exception of conversion of farmlands described above, the Proposed Action would not conflict with land use policies or provisions set forth in the Coachella Canal RMP and in applicable local and regional land use planning documents, and management of adjacent lands would not be impacted by the new Canal crossing.

Right-of-Way Acquisition: Permanent right-of-way (ROW) acquisition from privately-owned parcels in the Proposed Action area would be required with implementation of the Proposed Action. However, property owners would be fully compensated for the permanent loss of land, or the temporary use of land, as appropriate under State law. Table 6 below lists the Assessor Parcel Numbers (APNs) that would be impacted as a result of permanent ROW acquisition associated with the Proposed Action, and Figure 6 shows the location of the affected APNs in relation to the Proposed Action boundaries.

The affected properties are composed of active agriculture (table grapes) and vacant land. Parcels would be directly impacted by 1.4 to 49.9 percent. The project would not permanently divide any parcels, and it is expected that the remainder of the parcels would remain viable for existing and future uses. Most of the permanent acquisition supports construction and placement of the new road crossing. In addition, frontage would two parcels (763-090-002 and 763-100-003) along the Avenue 51 alignment would be acquired

to provide legal access via an existing dirt road to parcel 763-090-008, whose current access would be eliminated by the proposed action. Temporary construction easements would be acquired for development and use of the haul site and haul road.

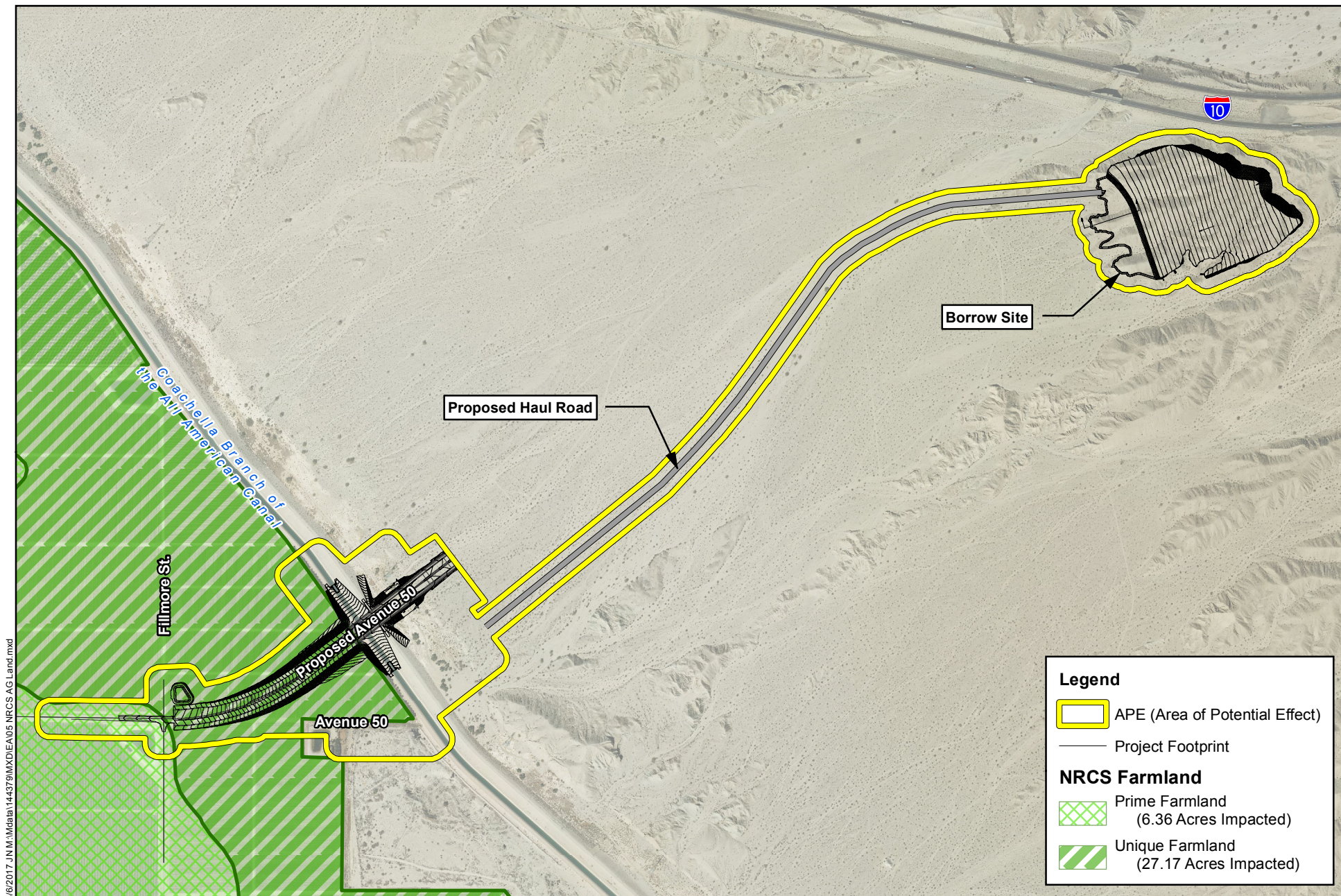
**Table 6: Acquisition from Privately-Owned Parcels**

APN	Parcel Size (acres)	Impact Area		Existing Use
		Size (acres)	%	
Permanent Acquisition				
603-350-008	37.97	2.61	6.9	agriculture
603-580-007	39.27	19.63	49.9	agriculture
763-070-003	37.78	2.78	7.4	vacant
763-090-001	37.97	4.35	11.4	agriculture
763-090-002	79.02	1.33	1.7	vacant
763-090-008	70.15	3.78	5.4	vacant
763-100-003	79.52	0	0	vacant
Total Permanent		34.48	82.7	
Temporary Construction Easement				
603-580-003	71.95	5.56	7.7	vacant
603-580-004	79.98	6.93	8.7	vacant
603-580-001	33.45	5.58	16.7	vacant
603-580-001	332.25	4.51	1.4	vacant
603-580-002	444.86	40.07	9.0	vacant
Total Temporary		962.49	43.5	

### 3.1.3 Management and Mitigation Measures

Prior to construction, the City would coordinate with appropriate land management agencies related to issues outside the Canal's easement. In addition, property owners impacted by the City's ROW acquisition from privately-owned parcels in the Proposed Action area would be fully compensated for loss of land. No additional mitigation measures would be required.



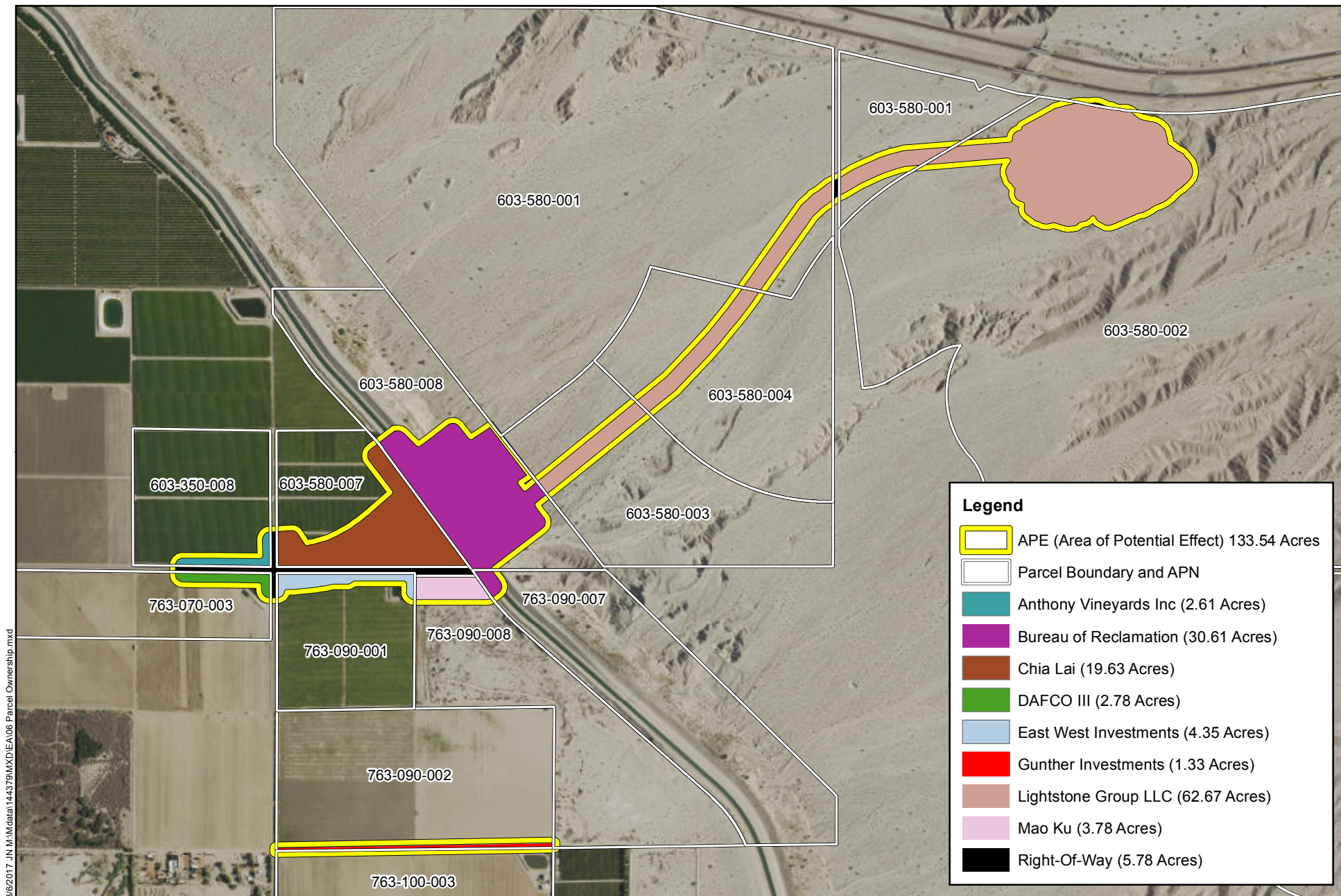


AVENUE 50 CANAL CROSSING PROJECT  
ENVIRONMENTAL ASSESSMENT (EA)  
**Agricultural Lands**

Figure 5







3/6/2017 JN M:\Mdata\144379\MXD\EA\06 Parcel Ownership.mxd



## **3.2 Air Quality**

### **3.2.1 Affected Environment**

The Proposed Action site is located in Riverside County within the northeastern portion of the Salton Sea Air Basin (SSAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD) and the California Air Resources Board (CARB). The SSAB is comprised of the eastern portions of Riverside County, and all of Imperial County.

The Clean Air Act, as amended in 1990, requires EPA to set National Ambient Air Quality Standards (NAAQS) for wide-spread pollutants from numerous and diverse sources considered harmful to public health and the environment. The SSAB is an unclassified/attainment area for carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), and particulate matter (PM)<sub>2.5</sub> for both State and Federal standards. The SSAB is a nonattainment area for ozone (O<sub>3</sub>) and PM<sub>10</sub> under both State and Federal standards.

### **3.2.2 Environmental Consequences**

No Action: Under the No Action Alternative, air quality in the area would not change from its present readings.

Proposed Action: Construction activities associated with the Proposed Action have the potential to release small amounts of ozone precursors such as nitrogen oxides (NO<sub>x</sub>) or volatile organic compounds (VOCs) from vehicle and machine exhaust. Ground disturbance associated with the movement of dirt and other dry material has the potential to generate dust, resulting in an increase in PM<sub>10</sub> emissions.

### **3.2.3 Management and Mitigation Measures**

Best Management Practices (BMPs) would be followed to limit dust and PM<sub>10</sub> emissions, including at a minimum:

- Vehicle and equipment traffic would be limited to paved or graveled roads as much as possible.
- Vehicle speed shall not exceed 15 miles per hour within the construction limits.
- Where equipment traffic, excavation, or demolition is required outside of paved or graveled roads, water or soil binders would be applied to exposed surfaces.
- Equipment should be properly maintained to minimize exhaust emissions, and equipment idling would be limited.
- Ground disturbing activities would cease temporarily when wind speeds at the site exceed 20 miles per hour.

### 3.3 Biological Resources

#### 3.3.1 Affected Environment

A Habitat Assessment and Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Consistency Analysis was conducted on the Proposed Action site. The Proposed Action is located within the boundaries of the CVMSHCP but is not located within any identified Conservation Areas. The City of Coachella is a Permittee and is required to comply with the requirements set forth in the CVMSHCP. In developing the conservation goals and objectives of the CVMSHCP, the Proposed Action was identified as a facility to be developed, and therefore, is considered to be a Covered Activity under the CVMSHCP. Since the Proposed Action has been identified as a Covered Activity and is located outside designated conservation areas, Proposed Action implementation is expected to be consistent with the applicable avoidance, minimization, and mitigation measures set forth in Section 4.4 of the CVMSHCP. With implementation of these measures, the Proposed Action would be in compliance with the CVMSHCP.

As shown in Coachella Canal RMP Map 5.4, *Coachella Canal Area Biological Survey Parcels*, the Proposed Action site falls within the boundaries of two (2) Biological Survey Parcels: Parcel ID numbers 25 and 26. According to Map 5.4, parcels on the east side of the Coachella Valley bordering the Canal (including the Proposed Action area parcels) have varying degrees of disturbance.

Vegetation: According to the *Habitat Assessment and CVMSHCP Consistency Analysis*, the biological survey area associated with the project site contains one vegetation community: creosote bush scrub, primarily found east of the Canal and encompassing approximately 122.6 acres. Approximately 9.0 acres of this vegetation community, immediately northeast of the Canal, has been disturbed as a result of off-road vehicle use and routine maintenance activities associated with the Canal and electrical transmission corridor. Dominant plant species occurring within this vegetation community include creosote (*Larrea tridentata*), sweetbush (*Bebbia juncea*), Blue paloverde (*Parkinsonia florida*), indigo bush (*Psoralea schottii*), smoke tree (*Psoralea spinosus*), desert lavender (*Condea emoryi*), white bursage (*Amrposia dumosa*), desert holly (*Atriplex hymenelytra*), California croton (*Croton californicus*), desert trumpet (*Eriogonum inflatum*), and tamarisk (*Tamarix ramosissima*). In addition, there were three (3) human-modified areas observed within the biological survey area: agriculture (24.2 acres), disturbed (20.7 acres), and developed (2.1 acres).

No special-status plant species were observed. However, based on existing conditions and surrounding habitats, it was determined that portions of the biological survey area have a low potential to support gravel milk-vetch (*Astragalus sabulonum*), ribbed cryptantha (*Cryptantha costata*), winged cryptantha (*Cryptantha holoptera*), glandular ditaxis (*Ditaxis claryana*), Newberry's velvet-mallow (*Horsfordia newberryi*), and Mecca-aster

(*Xylorhiza cognata*). The remaining special-status plant species are presumed absent based on specific habitat requirements, known distributions, and availability and quality of the onsite habitat.

Wildlife: No fish or amphibians were observed. Several ephemeral washes occur throughout the northern portions of the biological survey area; however, these ephemeral washes do not support standing water that would be sufficient to support fish or amphibian populations.

Four (4) reptilian species were observed desert iguana (*Dipsosaurus dorsalis*), western zebra-tailed lizard (*Callisaurus draconoides rhodostictus*), Great Basin whiptail (*Aspidoscelis tigris tigris*), and red racer (*Coluber flagellum piceus*). Other common reptilian species expected to occur include desert horned lizard (*Phrynosoma platyrhinos*), western side-blotched lizard (*Uta stansburiana elegans*), and Colorado Desert sidewinder (*Crotalus cerastes laterorepens*).

The biological survey area provides suitable habitat for a limited variety of mammalian species; however, most mammal species are nocturnal and are difficult to observe during a diurnal field visit. Three (3) mammalian species were observed during the field investigation: desert cottontail (*Sylvilagus audubonii*), black-tailed jackrabbit (*Lepus californicus*), and coyote (*Canis latrans*). Other common mammalian species that could occur within the biological survey area include white-tailed antelope squirrel (*Ammospermophilus leucurus*), and Merriam's kangaroo rat (*Dipodomys merriami*), desert pocket mouse (*Chaetodipus penicillatus*), deer mouse (*Peromyscus maniculatus*), and San Diego desert wood rat (*Neotoma lepida*).

A total of ten (10) avian species were identified during the field investigation, including mourning dove (*Zenaida macroura*), northern mockingbird (*Mimus polyglottos*), greater roadrunner (*Geococcyx californianus*), black-tailed gnatcatcher (*Polioptila melanura*), lesser nighthawk (*Chordeiles acutipennis*), Common raven (*Corvus corax*), verdin (*Auriparus flaviceps*), horned lark (*Eremophila alpestris*), rock pigeon (*Columba livia*), and house finch (*Haemorhous mexicanus*). However, no active avian nests or birds displaying breeding behaviors were observed. Vegetation within the biological survey area provides suitable foraging and cover habitat, and nesting opportunities for a variety of resident and seasonal avian species. Further, several remnant avian nests were observed throughout the northern portion of the biological survey area in stands of creosote, tamarisk, and blue paloverde.

Black-tailed gnatcatcher (*Polioptila melanura*) was the only special-status wildlife species observed during the field investigation. However, based on existing conditions and surrounding habitats, it was determined that portions of the biological survey area have a high potential to support burrowing owl (*Athene cunicularia*). The project site has a low

potential to support other special-status wildlife species including desert tortoise (*Gopherus agassizii*), Palm Springs pocket mouse (*Perognathus longimembris bangsi*), American badger (*Taxidea taxus*), Le Conte's thrasher (*Toxostoma lecontei*), and Palm Springs round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorus*).

### **3.3.2 Environmental Consequences**

No Action: Under the No Action Alternative, no structures would be constructed. There would be no impacts to the biological resources discussed above from the construction of new facilities associated with the Canal crossing.

Proposed Action: Construction and operation of the Proposed Action could result in potential impacts to one special-status wildlife species observed during the field investigation (Black-tailed gnatcatcher), as well as burrowing owl and/or nesting birds. Burrowing owl is a species protected under the MBTA, California Fish and Game Code, and the CVMSHCP. Although payment of the CVMSHCP mitigation fee would reduce impacts to the burrowing owl, mitigation is required to ensure compliance with the MBTA and the California Fish and Game Code as it applies to this species. Under the MBTA of 1918 and under Sections 3503, 3503.5, and 3800 of the California Fish and Game Code, burrowing owls, their nests, and their eggs are protected from "take" (meaning destruction, pursuit, possession, etc.).

There is no critical habitat for the endangered desert tortoise within the Proposed Action area. While the creosote bush scrub habitat onsite has the potential to provide suitable habitat for desert tortoise, no suitable tortoise burrows were observed during the habitat assessment. Further, the Proposed Action area is not located within an identified CVMSHCP conservation areas, or within identified desert tortoise linkages.

Implementation of the mitigation measures below would mitigate potential impacts by requiring pre-construction surveys to ensure compliance with State and federal regulations related to the burrowing owl, consistent with survey protocols established by the CDFW, preventing the direct take of a burrowing owl or any raptor and prescribes avoidance measures in the event a burrowing owl is found onsite, and ensuring compliance with California Fish and Game Code and the MBTA. These measures would reduce the impacts to nesting birds and allow the young to fledge without disturbance.

### **3.3.3 Management and Mitigation Measures**

The following avoidance and minimization measures would be implemented during construction, and would reduce potentially adverse impacts regarding biological resources in the Proposed Action area:

- The Project Applicant shall retain a qualified biologist to conduct pre-construction surveys for burrowing owls within the construction area and adjacent areas within



500 feet of the development footprint, or to the edge of the property if less than 500 feet, no less than 14 days prior to any ground-disturbing activities. The pre-construction surveys shall be approved by the City of Coachella Director of Development Services and conducted in accordance with current survey protocols provided in the California Department of Fish and Wildlife (CDFW) Staff Report on Burrowing Owl Mitigation (March 7, 2012).

- In the event a burrowing owl is found to be present onsite during the pre-construction survey, the Project Applicant shall ensure the following applicable avoidance measures, derived from the guidelines of the Staff Report on Burrowing Owl Mitigation (March 7, 2012), are implemented:
  - Avoid disturbing occupied burrows during the breeding nesting period, from February 1 through August 31. If burrows are occupied by breeding pairs, an avoidance buffer should be established by a qualified biologist. The size of such buffers is generally a minimum of 300 feet, but may increase or decrease depending on surrounding topography, nature of disturbance and location and type of construction. The size of the buffer area will be determined by a qualified biologist. Continued monitoring will be required to confirm that the specified buffer is adequate to permit continued breeding activity.
  - Avoid impacting burrows occupied during the nonbreeding season by migratory or non-migratory resident burrowing owls.
  - Avoid direct destruction of occupied burrows through chaining (dragging a heavy chain over an area to remove shrubs) or disking.
  - Develop and implement a worker awareness program to increase the onsite worker's recognition of and commitment to burrowing owl protection.
  - Place visible markers near burrows to ensure that equipment and other machinery does not collapse occupied burrows.
  - Do not fumigate, use treated bait, or other means of poisoning nuisance animals in areas where burrowing owls are known or suspected to occur.

If an occupied burrow is present within the development area, the Project Applicant shall ensure that a clearance mitigation plan is prepared in accordance with the Staff Report and is approved by the CDFW prior to implementation. This plan will specify the procedures for confirmation and exclusion of non-breeding owls from occupied burrows, followed by subsequent burrow destruction. There shall also be provisions for maintenance and monitoring to ensure that owls do not return prior to construction. Breeding owls shall be avoided until the breeding cycle is complete.

- The project site should be cleared of vegetation outside the general bird nesting season (February 1 through August 31) to minimize potential conflicts with the Migratory Bird Treaty Act (MBTA). In the event that vegetation is not removed outside the bird nesting season, a pre-construction nesting bird survey shall be conducted by a qualified biologist three (3) days prior to vegetation removal. If nesting birds protected by the MBTA are found, the biologist shall prescribe avoidance measures to be approved by the City of Coachella Director of Development Services, such as a construction buffer, until the nesting activity is concluded. The specific details of these measures depend on such factors as the species, nesting stage, topography, and type of adjacent work. Any specified buffer less than 300 feet will require continued monitoring until nesting is complete to verify its adequacy for preventing nest failure due to construction disturbance.

## **3.4 Cultural Resources**

### **3.4.1 Affected Environment**

The National Historic Preservation Act (NHPA) establishes national policy for protecting significant cultural resources that are defined as “historic properties” under 36 CFR 60.4. NHPA Section 106 (36 CFR §800) requires that Federal agencies consider and evaluate the effect that Federal projects may have on historic properties under their jurisdiction. The area of potential effect for this undertaking includes the locations noted in Section 2.2 above.

A Cultural Resources Assessment was conducted on the Proposed Action site. The site, occupies 133.54 acres in portions of Sections 2 and 3, Township 6 South, Range 8 East, and portions of Sections 34, 35, and 36, Township 5 South, Range 8 East, San Bernardino Baseline and Meridian, in the City of Coachella, Riverside County, California. It is depicted on the United States Geological Survey (USGS) Thermal Canyon (1972) and Indio (1972), California 7.5-minute topographic quadrangles. Of the total 133.54 acres, 30.61 is owned by Reclamation, 5.78 is in road right-of-way, and the remaining 97.15 acres is privately owned. See Figures 2 and 4 for the APE boundaries in relation to the Proposed Action area.

The records search revealed that seven cultural resource studies have taken place resulting in the recording of two cultural resources within a one-mile radius of the APE. Of the seven previous studies, three have previously assessed a portion of the APE for cultural resources, resulting in the identification of one cultural resource (the historic-period Coachella Canal, designated P-33-005705) within its boundaries.

During the records search and field survey, an operating segment of the Coachella Canal (P-33-005705) was identified within a portion of the APE. No other cultural resources were identified within the APE. The Coachella Canal has been assessed and evaluated and is considered eligible for listing in the National Register of Historic Places (NRHP) and California Register of Historical Resources (CRHR), based upon recommendations of

professional consultants and concurrence by the California State Historic Preservation Officer. As such this resource is recommended a “historic property” under Section 106 of the NHP.

### **3.4.2 Environmental Consequences**

No Action: Under the No Action Alternative, no structures would be built. This alternative would maintain the current status of the historic resource within the Proposed Action boundaries, as identified in the Cultural Resources Assessment (Coachella Canal segment).

Proposed Action: As discussed above, the Coachella Canal segment within the Proposed Action boundaries was determined to be a historic resource. However, based on the small percentage of the Canal that would be subject to direct impacts (0.005 percent of the contributing segment), the Proposed Action would not result in an adverse effect on the historic property (under Section 106 of the NHPA) known as the Coachella Canal (P-33-005705). Disturbances associated with construction of the existing Coachella Canal and with Avenue 50 have been severe, and have disrupted soil beyond depths at which cultural resources are likely. Also, no buried discoveries have occurred in the vicinity of the Proposed Action site, and the sediments present outside of the disturbed areas consist mainly of rocky sand with very little organic material. As a result, the potential to encounter in-situ remains associated with significant archaeological materials during project-related excavation is low and no mitigations are recommended.

### **3.4.3 Management and Mitigation Measures**

In accordance with 36 CFR Part 800.5, Reclamation has applied the criteria of adverse effect to historic properties to determine if the Proposed Action would directly or indirectly alter any of the characteristics of historic properties that qualify them for inclusion in the NRHP. Based on the finding of no adverse effect, no mitigation measures are proposed. Construction activities would be designed to avoid and minimize impacts to cultural resources by predominantly limiting project activities to previously disturbed areas. Consultation with the State Historic Preservation Officer (SHPO) under Section 106 of the NHPA will be conducted prior to implementing the Proposed Action.

If during the course of any activities associated with the implementation of the Proposed Action any sites, buildings, structures, or objects not addressed in this assessment are discovered, activities would cease in the vicinity of the resource. Reclamation’s Environmental Group Manager and project archaeologist would be notified immediately. Reclamation would ensure that the stipulations of 36 CFR Part 800.11 are satisfied before activities in the vicinity of the previously unidentified property resume.

Native American monitoring would be conducted during ground disturbing activities, in particular areas of Tribal concern, consistent with a proposed monitoring plan. Should

buried deposits be encountered, the Monitor may request that destructive construction halt and the Monitor shall notify a qualified Archaeologist to investigate and, if necessary, prepare a mitigation plan for submission to the SHPO and the Agua Caliente Tribal Historic Preservation Office.

## **3.5 Indian Trust Assets**

### **3.5.1 Affected Environment**

Indian Trust Assets (ITAs) are legal interests in property held in trust by the US for Indian tribes or individuals, or property in which the US is charged by law to protect for Indian tribes or individuals. In accordance with the Indian Trusts Fund Management Reform Act of 1994, as amended, all the Department of the Interior agencies, including Reclamation, are responsible for protecting ITAs from adverse impacts resulting from their programs and activities. In cooperation with tribes, Federal agencies must inventory and evaluate assets, and mitigate or compensate for adverse impacts to the asset. While most ITAs are located on reservation lands, they may also be located off-reservation. Examples of ITAs include, but are not limited to, land, minerals, rights to hunt, fish, and gather, and water rights.

Water from the Lower Colorado River (LCR) has been a major source of supply for the Coachella Valley since 1949 with the completion of the Coachella Canal. This water is used for agricultural and non-urban purposes, as well as groundwater recharge. The Colorado River is managed and operated in accordance with the Law of the River, the collection of interstate compacts, federal and state legislation, various agreements and contracts, an international treaty, a U.S. Supreme Court decree, and federal administrative actions that govern the rights to use of Colorado River water within the seven Colorado River Basin states.

The water authority for the project area is the Coachella Valley Water District (CVWD) and the adjacent Cabazon Indian Reservation is within the CVWD service area. As mentioned previously, the Coachella Canal is a branch of the All-American Canal that brings water from the LCR (Reach 5) into the Imperial and Coachella Valleys. Historically, CVWD received approximately 330,000 acre-feet per year (AFY) of Priority 3A LCR water delivered via the Coachella Canal. The service area for LCR water delivery under CVWD's contract with Reclamation is defined as Improvement District No. 1 (ID-1) which encompasses most of the East Valley and a portion of the West Valley north of Interstate 10. Under the 1931 California Seven Party Agreement, CVWD has water rights to Colorado River water as part of the first 3.85 million AFY allocated to California. CVWD is in the third priority position along with Imperial Irrigation District (IID).



### **3.5.2 Environmental Consequences**

Reclamation departmental policy requires the agency to address potential impacts to ITAs even if impacts are found to be non-significant. The Proposed Action site is located 2.6 miles to the east of the Cabazon Indian Reservation.

#### ***Trust Lands***

The Proposed Action is not located on ITA lands. The nearest tribal land, the Cabazon Indian Reservation (Cabazon Band of Mission Indians), is located approximately 2.6 miles away from the Proposed Action site. There are no tribal residences and/or facilities within the Proposed Action area.

#### ***Water Rights***

The nearest tribal land, the Cabazon Band of Mission Indians, is served by CVWD as part of CVWD's water rights contract with Reclamation.

#### ***Hunting, Fishing, and Gathering Rights***

LCR water (Reach 5) is currently delivered to the project vicinity via the Coachella Canal, and is primarily used for non-potable uses such as agricultural, golf course irrigation, fish farming operations, duck clubs, and recreational lake uses. In addition, the Coachella Canal is concrete lined. As such, hunting, fishing and gathering generally does not occur in the Coachella Canal within the City's Planning Area.

No Action Alternative: Under the No Action Alternative, construction of the Canal crossing would not take place. Therefore, no change to Federal actions will occur that could result in an adverse effect to ITAs.

#### **Proposed Action:**

#### ***Trust Lands***

The Proposed Action would not interfere with any Trust Lands. The Proposed Action is not located on Trust Lands and would not prevent the use or management of any tribal or Trust Lands.

#### ***Water Rights***

The Proposed Action would not result in a change to any tribal water right, or to the diversion or delivery of tribal water entitlements.

#### ***Hunting, Fishing, and Gathering Rights***

The Proposed Action would not interfere with any hunting, fishing or gathering rights which could be exercised by any tribe.

### 3.5.3 Management and Mitigation Measures

No mitigation measures are proposed.

## 3.6 Environmental Justice and Socio-Economic Conditions

### 3.6.1 Affected Environment

Executive Order (EO) 12898 requires Federal agencies to identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations in the US.

Minority populations include persons identified by the Census of Population and Housing to be of Hispanic or Latino Origin, as well as, non-Hispanic persons who are African American, American Indian and Alaska Native, Native Hawaiian or other Pacific Islander.

Low-income populations are those that fall within the annual statistical poverty thresholds from the U.S. Census Bureau for the 2010 Census. The definition of poverty is dependent on the size of the family. For example, the poverty threshold for a family of three is \$17,374; whereas, \$22,314 is the threshold for a family of four (U.S. Census Bureau 2010b). If the total income of a person's family is less than the threshold appropriate for that family, then the person is considered as being below the poverty level.

The immediate project vicinity is currently vacant and contains no residents. However, it is anticipated that Riverside County and City of Coachella residents living within the vicinity of the portion of the Coachella Canal addressed in this EA would potentially be most affected by implementation of the alternatives. Information on total population, minority population, and poverty status for Riverside County and the City of Coachella, is provided in Table 7. As shown in Table 7, the City of Coachella has a substantially larger percentage of minority residents than Riverside County as a whole. In addition, the poverty level in Coachella is nearly double that of the County. Therefore, there is a large representation of both minority and low-income populations within the vicinity of the Proposed Action.

**Table 7: Total Population, Minority Population, and Poverty Status for Riverside County and the City of Coachella**

Location	Total Population	Percent Minority	Percent Population Living Below Poverty Level
Riverside County, CA	2,189,641	60.3	16.9
Coachella, CA	40,704	97.7	31.5

Source: US Census Bureau 2010a

### **3.6.2 Environmental Consequences**

No Action: Under the No Action Alternative, the project would not take place. Therefore, no Federal actions would occur that could result in a disproportionately high and adverse effect on the health or environment of minority or low-income populations.

Proposed Action: Implementation of the Proposed Action would not disproportionately affect the minority and impoverished population in the area. Coachella has a large Hispanic population in comparison with Riverside County as a whole. Project impacts, if any, would be short-term construction-related impacts that would cease upon project completion, and would not affect this population disproportionately greater than other populations. The Proposed Action would have a long-term beneficial impact on the community by providing transportation infrastructure via a crossing over the Canal, and by increasing connectivity throughout the northeastern portion of the City. The Proposed Action is not expected to measurably affect local socioeconomic character.

Based on the analysis for air quality, water resources, and hazardous materials in this EA, changes resulting from implementing the Proposed Action would not result in disproportionately high and adverse impacts to the environment or to the health of low-income and minority populations.

### **3.6.3 Management and Mitigation Measures**

No mitigation measures are proposed.

## **3.7 Hazardous Materials or Solid Waste**

### **3.7.1 Affected Environment**

The project site is currently vacant and uninhabited. No hazardous materials are currently used or stored anywhere at the site.

### **3.7.2 Environmental Consequences**

No Action: Under this alternative, no ground disturbance or utility relocation would occur, nor would construction vehicles be required on the project site. Therefore, impacts related to hazardous materials associated with construction activities and vehicles would not occur under the No Action Alternative.

Proposed Action: During excavation and filling activities, and utility relocations that would occur under the Proposed Action, there is the potential to encounter hazardous materials in soils on the project site. There is also potential for contaminated soils and groundwater onsite, particularly in areas used for agriculture just west of the Canal. Therefore, management and mitigation measures have been prescribed to reduce impacts related to potential hazardous materials found in soils and groundwater during construction.

### **3.7.3 Management and Mitigation Measures**

Mitigation actions designed to limit the potential impact of hazardous materials or solid waste would be implemented according to State and Federal regulations.

Other hazardous materials anticipated to be used during construction of the project are small volumes of petroleum hydrocarbons and their derivatives (for example, fuels, oils, lubricants, and solvents) required to operate the equipment used in the construction activities. These materials are those routinely associated with the operation and maintenance of heavy equipment or other support vehicles, including gasoline, diesel fuels, and hydraulic fluids.

- A site-specific contingency spill plan would be developed and implemented. The plan shall consist of reporting guidelines in the event of a spill, Best Management Practices (BMPs) applicable to the hazardous materials, and employee training in the use of required equipment and proper handling of potentially hazardous materials.
- Hazardous materials used for this project would be contained within vessels engineered for safe storage.
- Staging areas for refueling of equipment would be located away from the Canal to prevent any accidental fuel leakage from contaminating surface water, groundwater, or soils.

## **3.8 Noise**

### **3.8.1 Affected Environment**

Noise that currently exists in the area generally comes from agricultural equipment and operations, and vehicle travel along the existing portion of Avenue 50 on the west side of the Canal. There are no noise-sensitive land uses in the general project vicinity with the exception of one residence located approximately 0.25 miles west of the Canal at Avenue 50.

### **3.8.2 Environmental Consequences**

No Action: Under the No Action Alternative, no short-term construction-related noise would occur since the project would not be constructed. Long-term operational noise levels including noise from agricultural operations and adjacent roadway noise would continue at the present levels.

Proposed Action: Short-term construction-related noise would occur in the vicinity of the project area due to the use of construction equipment during the implementation of the project, which could affect adjacent areas. However, noise impacts would be temporary and would cease upon completion of project construction. In addition, noise generated during the construction phase would be in compliance with the time periods specified in the



City's Municipal Code (City of Coachella Municipal Code, Chapter 7.04, Noise Control, and Section 7.04.075, Construction Activities).

Long-term operational noise impacts are likely to occur with the addition of traffic utilizing the new Avenue 50 roadway over the new Canal crossing. However, while the Proposed Action would contribute to the ultimate development of the City's Avenue 50 alignment by providing the Canal crossing, the Canal project itself would not result in additional traffic. Rather, the extension of Avenue 50 northeast through the La Entrada Specific Plan area--once complete--would add traffic in the project vicinity. However, the Avenue 50 extension is a separate project from the Canal crossing and a separate environmental analysis has been conducted for that project. Therefore, the Proposed Action would not result in increased long-term operational noise impacts.

### **3.8.3 Management and Mitigation Measures**

Compliance with construction time periods specified in Chapter 7.04, Noise Control, and Section 7.04.075, Construction Activities, of the City's Municipal Code is considered adequate to reduce construction-related noise impacts and no additional mitigation is required.

## **3.9 Water Resources**

### **3.9.1 Affected Environment**

The Coachella Canal branches off from the All American Canal sixteen miles west of Pilot Knob and travels northwest 123 miles to the Coachella Valley. The Canal brings water from Reach 5 of the Lower Colorado River (LCR) into the Imperial and Coachella Valleys. The Whitewater River is also located approximately 2.5 miles west of the Canal and runs nearly parallel to the Canal throughout most of the City. Normally, surface discharges of the streams flowing in the Coachella Valley infiltrate into the alluvium and become part of the ground water supply. Only during periods of floodflow does surface runoff reach the Salton Sea.

The U.S. Army Corps of Engineers (USACE), under Section 404 of the Clean Water Act (CWA), regulates the discharge of dredged, excavated, or fill material in wetlands, streams, rivers, and other US waters. According to a Jurisdictional Delineation conducted for the La Entrada Specific Plan area, which included the Proposed Action footprint, no USACE jurisdictional waters were present onsite.

### **3.9.2 Environmental Consequences**

No Action: Implementation of the No Action Alternative would not entail any construction activity; therefore, no impacts to surface water, or jurisdictional waters would occur due to construction.

Proposed Action: The Proposed Action's impacts on water resources are anticipated to be minimal, with no changes to water delivery operations. The temporary diversion channel that would be constructed to facilitate continuous flow of the Canal during canal modification would not interfere with water delivery operations. Proposed modifications to the Canal associated with the Proposed Action would result in beneficial long-term operational impacts to the Canal. The open canal would be demolished and cast in place box culverts would be constructed, and storm drains and three water quality basins would also be constructed.

Potential impacts to surface water could include water quality degradation as a result of construction-related activities. Although highly unlikely, spills from construction activities could migrate into surface water conduits or infiltrate the groundwater, contaminating the source. If a spill were to occur, the impacts to water resources could be minimized with immediate response and clean-up procedures.

No construction components of the Proposed Action would affect surface waters of the US, as no jurisdictional waters exist in the Proposed Action area.

### **3.9.3 Management and Mitigation Measures**

No mitigation measures are required for the Proposed Action. However, appropriate Best Management Practices (BMPs) shall be implemented during construction in order to protect water resources in the Proposed Action Area. No refueling equipment should be permitted within the Canal area, and staging areas will be located outside the Canal areas. Should an accident or spills occur, the City would implement a Spill Prevention, Control, and Countermeasures Plan (SPCCP) to contain and/or remove contamination to groundwater.

## **3.10 Geology and Soils**

### **3.10.1 Affected Environment**

The Proposed Action site lies within the Salton Trough, which comprises a portion of the Colorado Desert Geomorphic Province. The Salton Trough is characterized by its exposures of the San Andreas Fault and related faults that form the margin between the Pacific and North American tectonic plates. Originally the Salton Trough was formed as a result of crustal stretching and sinking from seismic activity during the Miocene period, 5 to 23 million years ago. The Salton Trough has continued to develop during the formation of the northern section of the Gulf of California rift basin for the last 12 to 15 million years. The Salton Sea is located within the Salton Trough.

As shown in Coachella Canal Area RMP Area Map 5.5, *Coachella Canal Area Soil Associations*, the majority of the Proposed Action site is located in the Carsitas-Myoma-

Carrizo Association. A small portion of the site that is comprised of the borrow site is located in the Badland-Beeline-Rillito Association.

The Carsitas-Myoma-Carrizo Association soils are nearly level to moderately steep, somewhat excessively drained or excessively drained sands, fine sands, gravelly sands, cobbly sands, and stony sands on alluvial fans and valley fill. The soils in this association formed in coarse-textured alluvium and are very deep. Elevations range from 220 feet below sea level to 1800 feet above sea level. Slopes are generally less than 5 percent but range to 30 percent in minor isolated areas. The soils are calcareous and mildly to moderately alkaline throughout. The content of organic matter is very low and decreases irregularly with increasing depth. Nitrogen and phosphorus are deficient for maximum plant growth. Small areas along the San Andreas Fault zone have a water table at a depth of 1 to 5 feet.

The Badland-Beeline-Rillito Association soils are formed on moderately sloping to steep dissected drainages and in mixed alluvium. These relatively barren soils are underlain by sediments and eroded sedimentary rock, including soft sandstone and shale. Soil texture ranges from gravelly loam to sandy loam and the soils are calcareous. These soils are generally somewhat excessively drained and exhibit slow-to-medium runoff and moderate permeability. There is a severe erosion hazard associated with this soil type.

### **3.10.2 Environmental Consequences**

No Action: Under this alternative, there would be no changes to soils. Soil disturbance would not occur and existing land uses in the Proposed Action area would continue as they are currently.

Proposed Action: Implementation of the Proposed Action Alternatives would disturb soils during construction and operation of the project. It is possible that during construction, soils could become loose during disturbance, thus increasing the probability of erosion, slope instability, spreading, subsidence, collapse, and/or expansive soils. Therefore, management and mitigation measures have been prescribed to reduce impacts related to geology and soils.

### **3.10.3 Management and Mitigation Measures**

The following mitigation actions designed to limit the potential impact on geology and soils would be implemented according to State and Federal regulations:

- Preparation of an area-specific Geotechnical Study shall be submitted to the City of Coachella for review and approval by the City Engineer.

## **3.11 Visual Resources**

### **3.11.1 Affected Environment**

Visual resources consist of natural and manmade features that give a particular environment its aesthetic qualities. Landscape character is evaluated to assess whether the project will appear compatible with the existing features or would contrast noticeably with the setting and appear out of place. Visual sensitivity includes public values, goals, awareness, and concern regarding visual quality.

Visual resources within the project area generally include open space, agricultural areas, and desert habitats. The landscape surrounding the proposed project site is characterized by undeveloped desert lands and sloping hills. Visible manmade structures in the Proposed Action area consist of the Coachella Canal and isolated residences to the west.

### **3.11.2 Environmental Consequences**

No Action: Under the No Action Alternative, no changes would occur to the sites characteristics. Additionally, no new sources of light and glare would be developed.

Proposed Action: Development associated with implementation of the Proposed Action could have a substantial adverse effect on a scenic vista and/or substantially alter the current visual character within and surrounding the project area. Long-term visual impacts are likely to occur with the addition of traffic utilizing the new Avenue 50 roadway over the new Canal crossing. However, while the Proposed Action would contribute to the ultimate development of the City's Avenue 50 alignment by providing the Canal crossing, the Canal project itself would not result in substantial visual impacts. Rather, the extension of Avenue 50 northeast through the La Entrada Specific Plan area--once complete--will alter the overall visual resources in the project vicinity. However, the Avenue 50 extension is a separate project from the Canal crossing and a separate environmental analysis has been conducted for that project. Therefore, the Proposed Action would not result in increased long-term visual impacts.

The proposed new canal crossing could also create new sources of light and glare as a result of new street lights and traffic signals.

### **3.11.3 Management and Mitigation Measures**

All development in the City is required to adhere to lighting requirements contained in the City's Municipal Code, including the following: Chapter 16.28.150(L) (Improvements and Grading); Chapter 17.56.010(J)(2)(e); (Signs); 17.54.010 (Off-Street Parking and Loading); Chapter 17.36.030(F) and (H), and 17.36.140(7) (Specific Plan District); and Chapter 17.62.010(17) (Site Plans). These measures are uniformly applied to development in the City.



## **3.12 Floodplain**

### **3.12.1 Affected Environment**

According to the Federal Emergency Management Agency (FEMA), Federal Insurance Rate Map (FIRM) No. 0605C2300G (August 28, 2008), the Proposed Action site is located within Zone X, areas determined to be outside the 0.2 percent annual chance (500-year) floodplain, and Zone D, areas in which flood hazards are undetermined, but possible. The Coachella Canal branches off from the All American Canal sixteen miles west of Pilot Knob and travels northwest 123 miles to the Coachella Valley. The Canal brings water from Reach 5 of the Lower Colorado River (LCR) into the Imperial and Coachella Valleys.

The Whitewater River is also located approximately 2.5 miles west of the Canal and runs nearly parallel to the Canal throughout most of the City. Normally, surface flood discharges of the streams flowing in the Coachella Valley infiltrate into the alluvium and become part of the ground water supply. Only during periods of floodflow does surface runoff reach the Salton Sea.

### **3.12.2 Environmental Consequences**

No Action: The No Action Alternative would not impact the integrity of the floodplain or create potential flood hazards.

Proposed Action: The Proposed Action's impacts on the floodplain are anticipated to be minimal, with no substantial changes to floodplain management. Project activities would be conducted in phases in order to ensure floodplain management is not impacted.

### **3.12.3 Management and Mitigation Measures**

No mitigation measures are proposed.

## **3.13 Traffic and Transportation**

### **3.13.1 Affected Environment**

The immediate project area is currently vacant and contains no residences and no transportation infrastructure, apart from the existing Avenue 50 alignment to the west of the Canal; Avenue 50 east of the Canal currently does not exist.

The approved La Entrada Specific Plan is anticipated to eventually add 7,800 new residences with associated new roadways within the Specific Plan area, including Avenue 50 from its current terminus at the Canal to the future new interchange at I-10.

### **3.13.2 Environmental Consequences**

No Action: The No Action Alternative would not add any new transportation infrastructure in the project vicinity. Without the new Canal crossing at Avenue 50, the

new Avenue 50 alignment east of the Canal would not be able to be constructed as envisioned in the City's Transportation Plan, and the approved La Entrada Specific Plan, resulting in a continued lack of connectivity in the northeastern portion of the City.

**Proposed Action:** The Proposed Action would result in a long-term beneficial traffic impact, as it would enhance connectivity between I-10 and the City of Coachella, and provide transportation infrastructure that is necessary to implement the approved La Entrada Specific Plan. No adverse traffic or transportation impacts are anticipated with implementation of the Proposed Action.

Temporary construction-related impacts that may result with implementation of the Proposed Action include a disruption of the normal flow of traffic as a result of the movement of construction vehicles and heavy equipment within the public right-of-way (ROW). The City requires preparation and implementation of a Traffic Management Plan (TMP) for projects that require construction in the public ROW. The TMP must be reviewed and approved by the City's Traffic Engineer prior to the start of construction activity in the public ROW. In order to minimize this potential impact, the Proposed Action would be required to develop a TMP, which would implement measures such as deploying appropriate temporary signage and identifying any detour routes to ensure safe and efficient movement of vehicles, including emergency vehicles, during the Proposed Action's construction phase. With implementation of the TMP, impacts regarding general traffic circulation, as well as emergency access, would not be substantial.

### **3.13.3 Management and Mitigation Measures**

As discussed above, construction-related impacts would be minimized with implementation of a TMP during the Proposed Action's construction phase. No additional mitigation is required.

## **3.14 Cumulative Effects of the Proposed Action**

Cumulative effect is the impact on the environment that results from the incremental impacts of an action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or nonfederal) or person undertakes such actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time (40 CFR 1508.7). Several former, current and planned projects either located within or in the vicinity of the planning area and having the potential to impact common resources will be addressed in this section. Table 8 below lists the cumulative projects including a brief project description, location and status for each project.

**Table 8: Cumulative Projects in the Project Vicinity**

Map I.D. No.	Project Name	Project Description	Location	Status
<b>Land Development Projects</b>				
1	Vista Escondida	282 single-family unit subdivision on 46.64 acres	Northwest corner of Shady Lane/ Ave 54, Coachella, 92236	25% of homes built; park and offsite improvements complete. Future phases to begin construction in 2017.
2	AM/PM Expansion Project	Construct new carwash, drive-thru restaurant and retail buildings on 4.85 ac	Southwest corner of Ave 48/Grapefruit Blvd, Coachella, 92236	Plan Check Approved. Grading Permit issued. Expected completion date is 9/1/16.
3	Baghdad Apartments/ Chelsea	General plan amendment from low-density residential; architectural review for 144-unit family apartments and parcel map modification	Southwest corner of Calle Avila/Bagdad, Coachella, 92236	1 <sup>st</sup> phase complete (56 units); offsite improvements complete. 2 <sup>nd</sup> phase to be completed on 6/1/17.
4	Prado	232 single-family unit subdivision	West of Frederick between Ave 50 and 51, Coachella, 92236	65 homes built; all offsite improvements complete. Next phase of construction expected in 2018.
5	Sundate II	169 single-family unit subdivision	Northwest corner Ave 53/ Frederick, Coachella, 92236	Tentative map revision approved. 1 <sup>st</sup> phase of construction expected in 2018.
6	Nickel Creek	322 single-family unit subdivision on 64.64 acres	Ave 44, West of Dillon, Coachella, 92236	Tentative map approved. Construction expected in 2019 or later.
7	Brandenburg & Butters	Revised Plan includes 212 single-family unit subdivision	North of Ave 54, between Fillmore and Polk Street, Coachella, 92236	Tentative map approved. Construction expected in 2019 or later.
8	Eagle Falls	295 single-family unit subdivision on more than 90 acres	North of I-10 W of Harrison, Coachella, 92236	Final Specific Plan and MMRP adopted November 2006. Tentative map approved. Construction expected in 2018.
9	Rancho Coachella Vineyards	272 single-family unit subdivision 80 acres	Northwest corner of Ave 55/Pierce, Coachella, 92236	Tentative map approved. Time extension granted. Construction expected in 2019 or later.

Map I.D. No.	Project Name	Project Description	Location	Status
10	Shadow View	1600 single-family unit subdivision on 368 acres	Southeast of Dillon Rd between I-10 and 86 Expressway, Coachella, 92236	Tentative maps approved. Construction expected in 2019 or later.
11	Villa Palmeras	111 single-family attached and detached residential units on 11.58 acres	South side of Ave 50 between Jackson and Calhoun St, Coachella, 92236	Tentative map approved. Construction expected in 2019 or later.
12	The Vineyards Phase 2	46 RV lots with typical 512 sf garage/utility structures on 3.84 acres	44-800 Dillon Rd, Coachella, 92236	Project modification in progress; Application for RV Subdivision submitted. Construction expected in 2018.
13	La Entrada Specific Plan	7,800 residential units; mixed uses including high-density residential, commercial, public facilities, and other non-residential uses; three elementary schools and one middle school; 345 acres of parks/recreation uses, including multipurpose trails; 112 acres of roadway uses; and 557 acres of open space.	South of I-10 and east of SR-86	Final Environmental Impact Report adopted November 2013. Specific Plan and Development Agreement approved. 1 <sup>st</sup> phase of construction expected by 2018.
<b>Transportation Infrastructure Projects</b>				
14	I-10/Dillon Road Interchange (RTP ID: 3M0715)			Project Initiation Document approved 2010. No known start date.
15	SR-86/Avenue 50 Interchange (RTP ID: RIV061159)			Project Initiation Document approved 2005. No known start date. Construction anticipated to be completed in 2020.
16	SR-86/Dillon Road Interchange (RTP ID: 3M0716)			Project Initiation Document approved 2010. No known start date.
17	Avenue 50 Improvements (RTP ID: 3A04CV113)			Final design

Map I.D. No.	Project Name	Project Description	Location	Status
18	Avenue 50 Bridge over Coachella Valley Stormwater Channel (RTP ID: RIV110825)			Preliminary engineering (estimated completion 2016)
19	Avenue 50 Canal crossing over All American Canal (RTP ID: 3A01CV002)			Final design
20	Avenue 50 Extension (RTP ID: 3A01CV004)			Final design
Source: Personal communication with Luis Lopez, City of Coachella Development Services Director, and Oscar Espinoza, City of Coachella Senior Civil Engineer (March 2016)				

### 3.14.1 Impacts by Resource

#### Land Use

The Proposed Action would establish a new transportation land use by implementing a new crossing over the Canal at Avenue 50, resulting in a change to an existing land use. However, the Proposed Action is included as a necessary transportation improvement within applicable local and regional land use planning documents. The Proposed Action would provide the connectivity necessary for the City to implement its transportation network, as envisioned in the City's General Plan. The Proposed Action would not conflict with any land use policies or provisions set forth in the Coachella Canal RMP. In addition, the Proposed Action would not disrupt any wildlife or recreational areas, and management of adjacent lands would not be impacted by the new Canal crossing.

All future public or private development projects in the City would be subject to independent environmental reviews on a case-by-case basis, and would be required to implement mitigation to offset potential adverse land use impacts. Therefore, implementation of the Proposed Action in conjunction with the other actions identified in Table 8 is not anticipated to have cumulative adverse land use impacts.

#### Air Quality

Implementation of the Proposed Action and other actions identified in Table 8 may result in increased area emissions associated with construction activities. Due to the mobile nature and short duration of most emission sources, project emissions in combination with future emission sources would not be expected to contribute to an exceedance of an ambient air quality standard. Future public or private development projects in the City would be subject to independent environmental reviews on a case-by-case basis, and would be required to implement mitigation to offset potential adverse air quality impacts. As a result, the Proposed Action, in combination with other foreseeable projects and mitigation requirements, would not produce substantial cumulative impacts to air quality and climate conditions.



## **Biological Resources**

The Proposed Action Alternative and the projects identified above have the potential for biological impacts due to short-term construction-related habitat loss for sensitive and common wildlife species. However, with incorporation of avoidance, minimization, and mitigation measures, the Proposed Action Alternative, in conjunction with the other actions, is not anticipated to have negative cumulative impacts to biological resources.

## **Cultural Resources**

Reclamation has made a finding of no adverse effect to historic properties for the activities associated with the implementation of the Proposed Action. During construction, there is potential for unforeseen cultural resources to be discovered or damaged. Reclamation has established “stop work” procedures that shall be implemented should and unanticipated discovery situation arise. Therefore, the Proposed Action, in conjunction with other projects listed above, would not result in cumulative impacts on cultural resources.

## **Indian Trust Assets**

There are no ITAs or other resources of tribal concern in the project area, and adverse impacts on ITAs or other tribal resources from implementation of the Proposed Action would not occur. Therefore, the Proposed Action, in combination with other proposed or on-going projects, would not cause adverse cumulative effects on ITAs.

## **Environmental Justice and Socioeconomics**

The Proposed Action would have negligible effects on minority and/or low-income populations or other socioeconomic issues. The Proposed Action would not displace persons or housing, nor would it induce substantial population growth in the area, either directly or indirectly. The types of potential effects identified (e.g., increased noise, and fugitive dust) for the Proposed Action and the other projects identified in Table 8 would be localized and short-term. The Proposed Action, in combination with other foreseeable projects, is not expected to have a cumulatively considerable impact on socioeconomics and minority or low-income populations.

## **Hazardous Materials**

The Proposed Action site is not located in close proximity to any known or suspected hazardous waste or petroleum waste sites. However, incidental spills of petroleum products could occur during construction activities, and such spills could result in adverse impacts to water quality. With the implementation of mitigation measures, the risks of incidental spills would be reduced. Other projects identified in Table 8 have hazards/hazardous materials related impacts due to construction activities. However, with anticipated mitigation measures, these risks would be cumulatively less than considerable as these impacts are localized and temporary.

## **Noise**

The Proposed Action would require some use of heavy equipment to assist in the construction of the new Canal crossing at Avenue 50. However, impacts would be temporary in nature and would cease upon project completion. Other projects identified in Table 8 would have similar temporary construction noise. The Proposed Action, in conjunction with the other actions, is not anticipated to have long-term noise cumulative impacts in the vicinity of the proposed project area.

## **Water Resources**

The Proposed Action would result in beneficial long-term operational impacts to the Canal due to the cast in place box culverts, storm drains, and water quality basins that be constructed. Future public or private development projects in the City would be subject to independent environmental reviews on a case-by-case basis, and would be required to implement mitigation to offset potential adverse impacts upon water resources. Therefore, the Proposed Action, in conjunction with the other actions, is not anticipated to have long-term cumulative impacts to water resources in the vicinity of the proposed project area.

## 4.0 Consultation, Coordination, and List of Preparers

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### 4.1 Agencies Consulted

An electronic copy of this EA has been posted for public viewing on Reclamation's Yuma Area Office web site at <http://www.usbr.gov/lc/yuma/>. Paper copies of the Notice of Availability memorandum and EA were distributed to the following entities:

- City of Coachella
- US Fish and Wildlife Service
- Bureau of Land Management
- CA Department of Fish and Wildlife
- Cabazon Band of Mission Indians

Consultations with the State Historic Preservation Office are ongoing under Section 106 of the NHPA (36 Part 800) for undertaking involving Federal facilities.

- CA State Parks; State Historic Preservation Office

### 4.2 List of Preparers

#### 4.2.1 Bureau of Reclamation

Cindy Flores	Group Manager, Water and Lands Contracts
Julian DeSantiago	Group Manager, Environmental Planning
Nicholas Heatwole	Environmental Protection Specialist
James Kangas	Archaeologist
Doug McPherson	Southern California Area Office Environmental Specialist

#### 4.2.2 Michael Baker International

Christine Donoghue	Sr. Project Manager
Tim Haile	Transportation Manager
Paul Mittica	Transportation Manager
Travis McGill	Biologist
Renee Gleason	Environmental Planner
Peter Minegar	Environmental Planner
Kari Cano	Environmental Planner
Alex Pohlman	GIS Specialist

#### 4.2.3 BCR Consulting, LLC

David Brunzell, M.A., RPA	Cultural Resource Project Manager/Principal Investigator
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