

**DRAFT**

# **Initial Study/ Mitigated Negative Declaration**

## **Otay Pipeline 2 Segment A6 Replacement Project**

**March 2022**

Prepared for:



**City of Chula Vista, Development Services  
276 Fourth Avenue, Building B  
Chula Vista, California 91910  
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Prepared by:



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- Appendix B. Biological Resources Technical Report
- Appendix C. Cultural Resources Survey Report
- Appendix D. Mitigation Monitoring and Reporting Program

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## ***Acronyms and Abbreviations***

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$\mu\text{g}/\text{m}^3$	micrograms per cubic meter
BMP	Best Management Practices
CAAQS	California Ambient Air Quality Standards
CalEEMod	California Emissions Estimator Model
CAP	Climate Action Plan
CEQA	California Environmental Quality Act
CHRIS	California Historical Resources Information System
CNPS	California Native Plant Society
CO	carbon monoxide
CO <sub>2e</sub>	carbon dioxide equivalent
County	County of San Diego
CRHR	California Register of Historical Resources
CRPR	California Rare Plant Rank
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DTSC	Department of Toxic Substances Control
ECORP	ECORP Consulting, Inc.
EIR	Environmental Impact Report
GHG	greenhouse gas
IS	Initial Study
Leq	equivalent continuous sound level
MM	Mitigation Measure
MND	Mitigated Negative Declaration
MSCP	Multiple Species Conservation Program
NAAQS	National Ambient Air Quality Standards
MM	Mitigation Measure
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	oxides of nitrogen
NPDES	National Pollutant Discharge Elimination System
O <sub>3</sub>	ozone
PM <sub>10</sub>	particulate matter less than 10 microns
PM <sub>2.5</sub>	particulate matter less than 2.5 microns
ppb	parts per billion
project	Otay Pipeline 2 Segment A6 Replacement Project
SDAB	San Diego Air Basin
SDAPCD	San Diego Air Pollution Control District
SDG&E	San Diego Gas & Electric
SO <sub>x</sub>	oxides of sulfur
SWPPP	Stormwater Pollution Prevention Plan
VOC	volatile organic compound

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# Initial Study and Mitigated Negative Declaration

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**Project name:** Otay Pipeline 2 Segment A6 Replacement Project

**Project location:** The proposed Otay Pipeline 2 Segment A6 Replacement Project (project) is in the City of Chula Vista, California, just west of 2276 Wueste Road and along the southeastern outskirts of the City of Chula Vista (Figures 1, Regional Location, and 2, Project Site). The project is within the Otay Ranch Preserve in the Salt Creek parcel of the Chula Vista Multiple Species Conservation Program (MSCP) Subarea Plan. The project site is bordered to the east by the Otay Water Treatment Plant and to the west by the Salt Creek/Village 10 parcel boundary. The project lies within a 100-foot corridor owned in fee by the City of San Diego. The project has been proposed in both sensitive and disturbed natural habitat areas.

**APNs:** The project alignment passes through Assessor's Parcel Number 644-080-24.

**Project Applicant:** City of San Diego

**Case Number:** IS21-0001

**Lead agency:** City of Chula Vista  
Development Services  
Dai Hoang  
Phone: 619.585.5694  
Email: dhoang@chulavistaca.gov

**Public review period:** March 18, 2022–April 19, 2022

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## Section 1 Introduction

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### 1.1 Identification of Environmental Effects

An Initial Study (IS) conducted by the City of Chula Vista determined that the proposed Otay Pipeline 2 Segment A6 Replacement Project (project) may have potentially significant environmental impacts; however, mitigation measures (MMs) have been incorporated into the project to reduce these impacts to a less than significant level. This Mitigated Negative Declaration (MND) has been prepared in accordance with Section 15070 of the California Environmental Quality Act (CEQA) Guidelines.

### 1.2 Mitigation Necessary to Avoid Significant Impacts

MMs BIO-1 through BIO-9, CR-1, GEO-1, HAZ-1, HAZ-2, HYDRO-1, and NOI-1 will be implemented to avoid the proposed project's potentially significant impacts to biological resources, cultural and tribal cultural resources, geology and soils, risk of wildfire, hydrology and water quality, and noise-sensitive receptors.

Project MMs are as follows:

- BIO-1, Upland Restoration – Temporary and Permanent Impacts
- BIO-2, San Diego Barrel Cactus Avoidance and Translocation
- BIO-3, Sensitive Plant Avoidance
- BIO-4, Stormwater Pollution Prevention Plan
- BIO-5, Approved Biologist
- BIO-6, Migratory Bird Treaty Act Compliance
- BIO-7, Coastal Cactus Wren, Coastal California Gnatcatcher, and Least Bell's Vireo Pre-Construction Surveys
- BIO-8, Coastal Cactus Wren Habitat Management
- BIO-9, Quino Checkerspot Butterfly
- CR-1, Cultural Resources Monitoring
- GEO-1, Qualified Paleontologist
- HAZ-1, Maintain Construction Area Clear of Combustible Materials
- HAZ-2, Provide Accessible Fire Suppression Equipment
- HYDRO-1, Best Management Practices
- NOI-1, Construction Noise

### **1.3 Agreement to Implement Mitigation Measures**

By signing the line(s) provided below, the Applicant and Operator stipulate that they have each read and understood and have their respective company's or jurisdiction's authority to and do agree to the MMs contained herein and will implement same to the satisfaction of the Environmental Review Coordinator. Failure to sign the line(s) provided below prior to posting of this MND with the County Clerk shall indicate the Applicant's and Operator's desire that the project be held in abeyance without approval and that the Applicant and Operator shall apply for an Environmental Impact Report (EIR).

### **1.4 Consultation**

#### **1.4.1 Individuals and Organizations**

##### **City of Chula Vista**

Dai Hoang, Associate Planner

##### **City of San Diego**

Dirk Smith, Senior Planner

Cheryl Jenkins, Environmental Biologist III

#### **1.4.2 Initial Study**

This environmental determination is based on the City of Chula Vista's IS. The IS reflects the independent judgment of the City of Chula Vista. Further information regarding the environmental review of the project is available from the Development Services Department, 276 Fourth Avenue, Chula Vista, California 91910.

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Dai Hoang, Associate Planner, City of Chula Vista

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Date

## Section 2 Environmental Setting and Project Description

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### 2.1 Project Overview

The City of San Diego (Applicant) proposes to replace 4,000 linear feet of 40-inch steel pipe with 54-inch steel pipe. Segment A6 of Otay Pipeline 2 was originally constructed in 1958 to convey water from the Otay Water Treatment Plant to the users west and north of the plant. It is currently not in service and needs replacement. The project would replace and upsize this pipeline to handle anticipated future water flows from the treatment plant to the east.

### 2.2 Existing Environmental Setting

#### 2.2.1 Project Site

The project is in the City of Chula Vista, California, just west of 2276 Wueste Road and along the southeastern outskirts of the City of Chula Vista (Figure 1, Regional Location). The project lies within a 100-foot corridor owned in fee by the City of San Diego (Figure 2, Project Site). The pipeline replacement has been proposed within both sensitive and disturbed natural habitat areas. The project is within the Otay Ranch Preserve in the Salt Creek parcel of the Chula Vista MSCP Subarea Plan. The project site is bordered on the east by the Otay Water Treatment Plant and the Salt Creek/Village 10 parcel boundary on the west (Figure 2). The alignment passes through Assessor's Parcel Number 644-080-24.

According to the Chula Vista General Plan, the project land use designation for the project site is Open Space (City of Chula Vista 2005a). There is currently no aboveground development within the 100-foot fee ownership area other than the five air vacuum valves located at high points along the terrain and five blow-offs located at the lowest elevation points associated with the current pipeline. The project site varies in elevation from approximately 275 feet to approximately 414 feet above mean sea level at the ridge tops in the northern portion of the project site (Figure 3, USGS Topographical Map). Topography consists of several eroded sloping ridgelines and tributary valleys that drain into the valley that Salt Creek runs through and ultimately flows into Otay River, south of the project site. Salt Creek flows in a north to south direction on the western portion of the site and empties into Otay River. The surrounding area generally has a warm, dry climate with on-average less than 2.5 inches of rain per month.

The project site consists primarily of previously disturbed upland habitat that supports sensitive plant and wildlife species. The project site contains Diegan coastal sage scrub (and disturbed), non-native grassland, a small area of freshwater marsh habitat associated with Salt Creek, non-vegetated channels, disturbed habitat, and urban/developed land. Diegan coastal sage scrub (and disturbed) is the most common vegetation type on site and supports sensitive bird species, including coastal cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), coastal California

gnatcatcher (*Poliioptila californica californica*), and Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*). Non-native grassland occurs throughout the project site and provides suitable foraging habitat for sensitive wildlife species, including Cooper's hawk (*Accipiter cooperii*), northern harrier (*Circus hudsonius*), western bluebird (*Sialia mexicana*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and southern mule deer (*Odocoileus hemionus fuliginatus*). Salt Creek runs north to south through the western portion of the project site and contains riparian wetland habitat that supports sensitive wildlife, including yellow-breasted chat (*Icteria virens*); sensitive riparian plant species, including San Diego marsh elder (*Iva hayesiana*); and other species, including mulefat scrub (*Baccharis salicifolia*) and cattails (*Typha* spp.) (Figure 2). Salt Creek is identified as federally and state-protected jurisdictional wetlands and riparian habitats. In addition to Salt Creek, four unvegetated drainages run north to south through the project site and are considered federally and state-protected jurisdictional non-wetland waters (Figure 2). Developed land and disturbed habitat covers a high percentage of the site, evident with the presence of soil surface disturbance, weedy species, and debris from previous pipeline activity. Several existing dirt access roads and trails regularly used by San Diego Gas & Electric (SDG&E) personnel for routine maintenance activities on its electric power lines also transect the site, further adding to the disturbed areas.

### **2.2.2 City of Chula Vista**

While the project site is within a pipeline corridor owned in fee by the City of San Diego, it is within the jurisdiction of the City of Chula Vista. Because the project is within the City of Chula Vista, the City of Chula Vista is the lead agency in the preparation of this IS/MND. The project site is within the Chula Vista MSCP Subarea Plan (City of Chula Vista 2003) and Chula Vista General Plan (City of Chula Vista 2005a) areas.

The City of Chula Vista is in southern San Diego County along San Diego Bay, north of Imperial Beach and south of National City, in Southern California. It encompasses approximately 52 square miles of land, from San Diego Bay eastward to Otay Lakes, and comprises much of the land area between Sweetwater River to the north and Otay River to the south. It is considered the second largest city in the County and is one of the County's fastest growing cities. The City of Chula Vista is largely built out, predominantly a low-density residential community, and is characterized by urban, one- to three-story developments on relatively flat topography. The Chula Vista greenbelt encircles the community and helps to physically define the City of Chula Vista. The surrounding natural physical features include the San Diego Bayfront, Otay Lakes, and Otay Ranch Preserve.

### **2.2.3 City of San Diego**

As discussed previously, the project site is within a pipeline corridor owned in fee by the City of San Diego, it is within the jurisdiction of the City of Chula Vista. While the project site is within a pipeline corridor owned in fee by the City of San Diego, it is not within the City of San Diego General

Plan area (City of San Diego 2008). The project site is not within the City of San Diego MSCP Subarea Plan (City of San Diego 1997); however, the easternmost portion of the project site (in the Otay Water Treatment Plant property) is mapped within the City of San Diego Multi-Habitat Planning Area under the City of San Diego MSCP Subarea Plan.

The City of San Diego covers approximately 207,000 acres in the southwestern section of the County, in Southern California. The City of San Diego is approximately 17 miles north of the United States-Mexico border and is bordered to the north by the City of Del Mar, the City of Poway, and unincorporated San Diego County land. To the east, the City of San Diego is bordered by the Cities of Santee, El Cajon, and Lemon Grove and unincorporated San Diego County land. To the south, San Diego is bordered by the Cities of Coronado, Chula Vista, National City, and the U.S.-Mexico border. The Pacific Ocean is the City of San Diego's western border. The City of San Diego, with a population of approximately 1.4 million people, is the second largest city in California and the eighth largest city in the United States (City of San Diego 2022).

## **2.3 Surrounding Land Uses**

As depicted on Figure 2, the project is within the Otay Ranch Preserve, containing sensitive plants and wildlife. The Otay Ranch Preserve is managed by the County and the City of Chula Vista and includes Salt Creek Preserve, which surrounds the project site. The parcel immediately west of the site, Village 10, is planned for residential development. East of the site lies the Otay Water Treatment Plant and Lower Otay Lake, which serves as a critical water source for the City of Chula Vista. Otay River is south of the project site and functions as the outlet for Salt Creek to the north. Southeast of the project site are the East Mesa Juvenile Detention Facility and Richard J. Donovan Correctional Facility, which are the nearest full-scale developments. Residential land uses can be observed to the north, with the nearest housing development approximately one mile away. From the western boundary of the project site, the South Bay Expressway (State Route 125) provides vehicle access to and from Spring Valley and the U.S.-Mexico border.

## **2.4 Project Description**

The project includes the replacement of approximately 4,000 linear feet of the Otay Pipeline 2 segment A6 40-inch steel pipe with a 54-inch steel pipe in the same underground location except under Salt Creek, where the pipe will be replaced directly adjacent to the existing pipe. The pipe replacement method under Salt Creek is described in detail later in this section. The project is within a 100-foot corridor owned in fee by the City of San Diego encompassing approximately 10 acres (Assessor's Parcel Number 644-080-24). The project site is within the Otay Ranch Preserve in the Salt Creek parcel of the Chula Vista MSCP Subarea Plan (Figure 2). The project would begin at the Otay Water Treatment Plant on the southwestern side of Lower Otay Lake and extend 4,000 feet west through Salt Creek to the Salt Creek and Village 10 parcel boundary and connect to an existing

pipeline that has already been replaced (Figure 2). Temporary disturbance associated with project construction would remain within the approximately 10-acre, 100-foot fee ownership corridor.

The Otay Pipeline 2 was installed in 1958. The A6 segment is currently not in use and is proposed for replacement because it is in poor condition, with several portions of the current pipe exposed and corroded/oxidized. The project would replace and upsize this pipe to provide a redundant water supply line to handle current and anticipated future water flows from the Otay Water Treatment Plant to users in the City of San Diego.

The existing pipeline infrastructure on the project site is composed of two separate pipelines. Otay Pipeline 3 is an existing adjacent pipeline within the same 100-foot fee ownership corridor that is currently in service. Otay Pipeline 2 provides redundancy for Otay Pipeline 3. The City of San Diego approved the replacement of segment A6 in 2015 as part of a participation agreement with the Otay Land Company, LLC, for the design and construction of the Otay Pipeline 2 relocation and related facilities.

Construction of the project is anticipated to last for approximately one year. The existing pipeline, which is not currently in service, would be removed and disposed of at the appropriate waste facility. Pipeline replacement activities, including staging areas, would be conducted within the 100-foot fee ownership corridor owned by the City of San Diego. Designated staging areas would be restricted to developed land or disturbed habitat. Existing access roads, some of which are currently used by the City of Chula Vista and SDG&E for regular maintenance activities in the area, were identified and field-verified as suitable for construction access and City of San Diego maintenance vehicles access to the pipeline alignment. During construction and operation, the project would use the existing access roads, and no improvements to the access roads outside of the 100-foot fee ownership corridor are proposed as part of the project.

The existing pipeline runs under Salt Creek in the western portion of the project site. To avoid impacts to Salt Creek, the jack-and-bore method of horizontal boring would be used during pipeline replacement. The jack-and-bore method includes digging the sending and receiving pits at a depth of approximately 17 feet, shoring the walls of the receiving pits, laying the boring machine in the sending pit, and operating the boring machine to push the auger and pipe casing horizontally through from the sending pit to the receiving pit. The replacement pipeline would be tunneled using the jack-and-bore method directly adjacent to the existing pipeline. Upon installation of the replacement pipeline, the existing pipeline under Salt Creek would be filled with an approved concrete slurry mixture, capped, and remain in place to avoid disturbance of Salt Creek. The jack-and-bore method has been chosen for its ability to replace the stretch of pipeline running under Salt Creek without disturbing the surface.

Four non-vegetated channels occur in the eastern and central portions of the project site and are described in detail in Section 3.4.4, Biological Resources. The existing pipeline spans over the

four channels and would be replaced by the new pipe in the same locations, avoiding impacts to the four non-vegetated channels.

Outside of Salt Creek and the four non-vegetated channel limits, the pipeline would be replaced underground in the existing pipeline trench using open-trench construction methods. Materials removed during existing pipeline removal would be replaced with 3,700 cubic yards of fill for bedding under the pipeline and backfill of the trench surrounding the pipeline. The replacement pipeline would measure 54 inches in diameter and would be made of steel with field-welded joints, tape wrapped, mortar coated, and cement lined for increased durability. There would be a minimum one-foot clearance using sand cushions at all locations where the pipeline and existing maintenance access roads cross. After the pipeline within each trench section is replaced, the trench would be backfilled before the next section trench is opened. The construction disturbance during the in-place pipeline replacement would be a temporary impact.

The replacement pipeline would be placed in the same location as the existing pipeline except under Salt Creek, where the pipe will be replaced directly adjacent to the existing pipe. Much of the pipeline would be underground and not visible, with small aboveground components that would not be visible from a distance. Installation of the replacement pipeline would include the replacement of the five air vacuum valves placed at high points along the terrain and five blow-offs at the lowest elevation points outside of Salt Creek and the four drainage areas. The five air vacuum valves and five blow-offs would be spread approximately 400 feet apart and extend approximately three feet above the ground level. Once replaced, the existing air vacuum valves and blow-offs would be cut off at the surface and left in place to reduce disturbance of the surrounding vegetation (Figure 4, Project Components).

Upon completion of the pipeline replacement, approximately 10-foot-wide internal access roads would be graded to connect the existing external access roads to the five air vacuum and five blow-off valves for long-term maintenance access. The internal access roads would be a permanent impact.

## **2.5 Additional Approvals Required for Construction**

Besides review under CEQA, the project would require the following additional approvals and/or permits from the City of Chula Vista outlined in the following subsection. Other public agency approvals are included in Section 3, Initial Study Environmental Checklist.

### **City of Chula Vista**

Approval of the Grading Construction Permits requires meeting certain conditions of approval, including MMs that adhere to the City of Chula Vista Multiple Species Conservation Program (MSCP) Subarea Plan (MSCP Subarea Plan) and Otay Ranch Resource Management Plan (RMP) (City of Chula Vista 2003).

## **2.6 Tribal Consultation**

Assembly Bill 52 (AB 52, Gatto. Native Americans: California Environmental Quality Act) and CEQA (California Public Resources Code, Section 21080.3.1[b] and [d]) require a lead agency to consult with any California Native American Tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed project. As of the date of this IS, no Native American Tribes have requested consultation.

## Section 3 Initial Study Environmental Checklist

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### 3.1 Project Information

1. **Project title:** Otay Pipeline 2 Segment A6 Replacement Project
2. **Lead agency name and address:** City of Chula Vista  
Development Services  
276 Fourth Avenue, Building B  
Chula Vista, California 91910
3. **Contact person name, address, and phone number:** Dai Hoang  
Phone: 619.585.5694  
Email: dhoang@chulavistaca.gov
4. **Project location:** The project is in the City of Chula Vista, California, just west of 2276 Wueste Road and along the southeastern outskirts of the City of Chula Vista (Figures 1 and 2). The project is within the Otay Ranch Preserve in the Salt Creek parcel of the Chula Vista MSCP Subarea Plan. The project site is bordered to the east by the Otay Water Treatment Plant and the Salt Creek/Village 10 parcel boundary to the west. The project lies within a 100-foot corridor owned in fee by the City of San Diego. The pipeline replacement has been within both sensitive and disturbed natural habitat areas.
5. **General Plan designation:** OS (Open Space)
6. **Zoning:** O (Open Space)
7. **Description of project:** Refer to Section 2, Environmental Setting and Project Description, of this IS/MND.
8. **Surrounding land uses and setting:** Refer to Section 2 of this IS/MND.
9. **Other public agencies whose approval is required:** Notice of Intent to the State Water Resources Control Board and preparation of a Stormwater Pollution Prevention Plan (SWPPP) in accordance with the requirements of the most recent National Pollutant Discharge Elimination System (NPDES) General Construction Activities Permit.

### 3.2 Environmental Factors Potentially Affected

The environmental factors checked below would be potentially affected by the project, involving at least one impact that is a “potentially significant impact” as indicated by the checklist on the following pages.

- |   |   |  |
|---|---|--|
| <input type="checkbox"/> Aesthetics                               | <input type="checkbox"/> Agriculture and Forestry Resources | <input type="checkbox"/> Air Quality                                   |
| <input checked="" type="checkbox"/> Biological Resources          | <input checked="" type="checkbox"/> Cultural Resources      | <input type="checkbox"/> Energy  |
| <input checked="" type="checkbox"/> Geology and Soils             | <input type="checkbox"/> Greenhouse Gas Emissions           | <input checked="" type="checkbox"/> Hazards and Hazardous Materials    |
| <input checked="" type="checkbox"/> Hydrology and Water Quality   | <input type="checkbox"/> Land Use and Planning              | <input type="checkbox"/> Mineral Resources                             |
| <input checked="" type="checkbox"/> Noise                         | <input type="checkbox"/> Population and Housing             | <input type="checkbox"/> Public Services                               |
| <input type="checkbox"/> Recreation                               | <input type="checkbox"/> Transportation                     | <input checked="" type="checkbox"/> Tribal Cultural Resources          |
| <input checked="" type="checkbox"/> Utilities and Service Systems | <input checked="" type="checkbox"/> Wildfire                | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

### 3.3 Lead Agency Determination

Based on this initial evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent (state), including implementation of the mitigation measures identified herein. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An EIR is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

---

Dai Hoang, Associate Planner, City of Chula Vista

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Date

The signature below signifies that the Applicant has read and accepts the mitigation measures detailed in the final Mitigated Negative Declaration.

---

Dirk Smith, Senior Planner, City of San Diego

---

Date

### 3.4 Evaluation of Environmental Impacts

This section documents the screening process used to identify and focus on environmental impacts that could result from the project. The checklist portion of the IS begins below and includes explanations of each CEQA issue topic. CEQA requires that an explanation of all answers be provided along with this checklist, including a discussion of ways to mitigate any significant effects identified. The following terminology is used to describe the potential level of significance of impacts:

- **No Impact.** The analysis concludes that the project would not affect the resource in any way.
- **Less than Significant.** The analysis concludes that the project would not cause substantial adverse change to the environment without the incorporation of mitigation.
- **Less than Significant with Mitigation Incorporated.** The analysis concludes that it would not cause substantial adverse change to the environment with the inclusion of mitigation agreed upon by the Applicant.
- **Potentially Significant.** The analysis concludes that the project could result in a substantial adverse effect or significant effect on the environment, even if mitigation is incorporated. If there are one or more “potentially significant impact” entries when the determination is made, an EIR is required.

### 3.4.1 Aesthetics

Except as provided in Public Resources Code Section 21099, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Impact Analysis

### a. Would the project have a substantial adverse effect on a scenic vista?

**Less than Significant Impact.** Visual resources can be valued both objectively and subjectively based on their uniqueness, prominence, quality, relationship to community identity, and economic contributions, such as to land values and tourism. Visual resources are important from an aesthetic perspective when, based on these characteristics, they are identified as containing significant scenic value. Within this understanding, a scenic vista can be defined as the view of an area that is visually or aesthetically unique, such as a valley or a mountain range or as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. In addition, some scenic vistas are officially designated by public agencies or informally designated by the tourism industry. A substantial adverse effect to a scenic vista would be to degrade the view from such a designated viewshed.

The project is within the Otay Ranch Preserve in the Salt Creek parcel of the Chula Vista MSCP Subarea Plan. Salt Creek flows in a north to south direction in the western portion of the project site, and has been identified as a federally protected jurisdictional wetland that supports several critical wildlife and plant species. Lower Otay Lake, located approximately 0.5 mile from the project site, has been designated by the City of Chula Vista as a scenic vista and open space area (City of Chula Vista 2005a). Construction of the project would affect the visual environment during trenching, pipeline installation, and on-site storage of equipment and materials; however, although views may be altered, construction would be short term and temporary. Temporary visual

impacts could include views of large construction equipment, storage areas, and any potential signage. All construction equipment would be removed from the project site upon completion of the project, and the pipeline would be placed underground and would not be visible. The pipeline would include the replacement of five air vacuum valves located at high points along the terrain and five blow-offs located at the lowest elevation points spaced approximately 400 feet apart. The five air vacuum valves and five blow-offs would extend approximately three feet above the ground level like the existing components proposed for replacement. These valves and blow-offs would be small relative to the expansive open space of the project site and surrounding area and would not result in significant impacts to scenic vistas and resources. Therefore, impacts to scenic vistas would be less than significant, and no mitigation is required.

**b. Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?**

**Less than Significant Impact.** There are no officially designated state scenic highways in the City of Chula Vista (City of Chula Vista 2005a). The project would not cause substantial long-term damage to scenic resources or historic buildings because much of the pipeline would be placed underground and would not be visible after construction. The project alignment passes entirely within the City of San Diego's existing 100-foot pipeline corridor that has been previously disturbed by past construction and maintenance of the pipeline. The required trenches for construction would be backfilled, and the project site would be returned to pre-existing conditions. As discussed previously in Section 3.4.1(a), the aboveground air vacuum valves and blow-offs associated with the pipeline would replace existing aboveground components along the pipeline alignment and would not introduce new visual features that would impact a scenic resource in the surrounding area. Furthermore, these air valves and blow-offs would be positioned low to the ground surface and would be small relative to the expansive open space of the project site and surrounding area and would not impact the view of any potential scenic resources in the surrounding area. The project, to the extent feasible, would avoid impacts to trees and sensitive biological resources, and impacts to these biological resources would be mitigated to less than significant levels (see Section 3.4.4, Biological Resources). Therefore, impacts to scenic resources would be less than significant, and no mitigation is required.

**c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?**

**Less than Significant Impact.** The project site is within the Otay Ranch Preserve in the Salt Creek parcel of the Chula Vista MSCP Subarea Plan. However, the project alignment passes entirely within the City of San Diego's existing 100-foot pipeline corridor that has been previously disturbed by past construction and maintenance of the pipeline. The pipeline would be placed underground

and would not be visible to the surrounding areas with small aboveground components that would not be visible from a distance. No long-term change would occur to the existing character of the project site, and no long-term change would occur to the views of the site from surrounding uses. Therefore, the project would not substantially degrade the existing visual character or quality of the project site or surroundings, and impacts would be less than significant with no mitigation required.

**d. Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

**No Impact.** As discussed in Sections 3.4.1(a) through 3.4.1(c), most of the project components would be underground and not visible once construction is complete. The project does not propose the use or construction of a light source. Temporary construction activities would occur during daytime hours, and no temporary nighttime lighting is anticipated during construction. Therefore, no significant impacts related to the creation of new sources of light or glare would result with development of the project, and no mitigation would be required.

### 3.4.2 Agriculture and Forestry Resources

In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Impact Analysis

- a. **Would the project convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

**No Impact.** Based on a review of the California Department of Conservation's Farmland Mapping and Monitoring Program maps, the project site is classified as Other Land and Non-Agricultural or Natural Vegetation (DOC 2016). The project site does not contain land designated as Prime

Farmland, Farmland of Statewide Importance, or Unique Farmland. Development of the project would not convert Prime Farmland, Farmland of Statewide Importance, or Unique Farmland to a non-agricultural use. Therefore, no impact would result, and no mitigation would be required.

**b. Would the project conflict with existing zoning for agricultural use, or a Williamson Act contract?**

**No Impact.** The project site is not under a Williamson Act contract (DOC 2022a). Therefore, construction of the project would not create conflicts with existing zoning for agricultural use or property under a Williamson Act contract, and no impact would result.

**c. Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

**No Impact.** According to the Chula Vista General Plan, the project land use designation is Open Space. The project would not alter the existing land use and zoning designations, and the existing land use and zoning designations are not intended to support forest land, timberland, or timberland production (City of Chula Vista 2005a). Therefore, construction of the project would not create conflicts with existing zoning for forest land, timberland, or timberland production, and no impact would occur.

**d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?**

**No Impact.** The project site does not contain any forest land (City of Chula Vista 2005a). Therefore, development of the project would not result in the loss of forest land or the conversion of forest land to non-forest use. No impact would occur.

**e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?**

**No Impact.** As discussed in Sections 3.4.2(a) through 3.4.2(d), implementation of the project would not involve other changes in the existing environment that, due to their location or nature, could result in the conversion of farmland to non-agricultural use or conversion of forest land to non-forest use. No impact would occur.

### 3.4.3 Air Quality

Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied upon to make the following determinations. Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following discussion is based on the Air Quality and GHG Emissions Analysis prepared by Harris & Associates in November 2018 and updated in December 2020 for the project (Appendix A).

### Impact Analysis

#### a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

**No Impact.** Projects that are consistent with existing General Plan documents, which are used to develop air emissions budgets for the purpose of air quality planning and attainment demonstrations, would be consistent with the San Diego Air Basin’s (SDAB) Air Quality Plans, including the San Diego Regional Air Quality Strategy and the State Implementation Plan. Both plans contain strategies for the region to attain and maintain the ambient air quality standards. Provided a project proposes the same or less development as accounted for in a General Plan, the project would not conflict with or obstruct implementation of the Regional Air Quality Strategy or State Implementation Plan.

The project would replace an existing pipeline. The pipeline is not currently in use, but the replacement pipeline would serve and would not support growth beyond planned development. The project does not propose changes to the existing land use (open space), and operation of the project would be similar to existing conditions; therefore, the project would not conflict with or obstruct implementation of the Regional Air Quality Strategy or State Implementation Plan and would result in no impact.

- b. **Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard)?**

**Less than Significant Impact.** Neither construction nor long-term operation of the project would contribute substantially to air quality problems currently experienced in the SDAB, as discussed below. Existing climate and air quality conditions, as well as the applicable air quality significance criteria and project impacts, are also summarized below.

### **Existing Air Quality Levels**

The San Diego Air Pollution Control District (SDAPCD) operates a network of ambient air monitoring stations throughout the County. The purpose of the monitoring stations is to measure ambient concentrations of the pollutants and determine whether the ambient air quality meets the California Ambient Air Quality Standards (CAAQS) and the National Ambient Air Quality Standards (NAAQS). The closest monitoring station to the project site is the Otay Mesa-Donovan monitoring station, which measures ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), particulate matter less than 10 microns (PM<sub>10</sub>), and particulate matter less than 2.5 microns (PM<sub>2.5</sub>) concentrations. Concentrations of pollutants from the station from 2015 to 2017 are presented in Table 1.

The concentration of 1-hour O<sub>3</sub> exceeded CAAQS once in 2017, and the 8-hour O<sub>3</sub> CAAQS and NAAQS were exceeded all three years. The NAAQS were not exceeded in any of the years for PM<sub>10</sub>, but CAAQS were exceeded multiple times in all three years. The monitored 24-hour PM<sub>2.5</sub> values exceeded NAAQS in all three years. The 1-hour and annual NAAQS and CAAQS for NO<sub>2</sub> were not exceeded. No carbon monoxide (CO) data is available from any monitoring site in the SDAB after 2012, and no data is available for SO<sub>2</sub> after 2013. However, with one exception for CO during the firestorms of October 2003, the SDAB has not violated the state or federal standards for CO or SO<sub>2</sub> in the last 20 years (SDAPCD 2018).

**Table 1. Ambient Background Concentrations at Otay Mesa-Donovan Monitoring Station (ppm unless otherwise indicated)**

Pollutant	Averaging Time	2015	2016	2017	CAAQS Threshold	NAAQS Threshold
O <sub>3</sub>	1 hour	0.087	0.092	0.097	0.09	NA
	8 hours	0.071	0.075	0.082	0.070	0.070
PM <sub>10</sub> (ug/m <sup>3</sup> )	State maximum 24-hour concentration	136	79	69	50	NA
	Federal maximum 24-hour concentration	136	79	68	NA	150
PM <sub>2.5</sub> (ug/m <sup>3</sup> )	Maximum 24-hour concentration	35.6	42.1	42.7	NA	35
	Annual average concentration	—	12.8	—	12	12
NO <sub>2</sub> (ppb)	Maximum 1-hour concentration	61	67	74	180	100
	Annual average concentration	8	8	8	30	53

Source: CARB 2022.

Notes: ug/m<sup>3</sup> = micrograms per cubic meter; — indicates insufficient data was available to determine the value; CAAQS = California Ambient Air Quality Standards; NA = a threshold has not been set; NAAQS = National Ambient Air Quality Standards; NO<sub>2</sub> = nitrogen dioxide; O<sub>3</sub> = ozone; PM<sub>2.5</sub> = particulate matter less than 2.5 microns; PM<sub>10</sub> = particulate matter less than 10 microns; ppb = parts per billion

## Criteria Thresholds and Analysis Methodology

Appendix G of the CEQA Guidelines states that significance criteria established by the applicable air quality management or air pollution control district may be relied on to make determinations of impact. SDAPCD Rule 20.2 presents Air Quality Impact Analysis Trigger Levels that can be used as numeric methods to demonstrate that a project’s total emissions would not result in a significant impact to air quality. The City of Chula Vista and the City of San Diego use the Air Quality Impact Analysis Trigger Levels to determine whether project-level emissions are significant. Because SDAPCD does not have Air Quality Impact Analysis thresholds for emissions of PM<sub>2.5</sub> and volatile organic compounds (VOCs), it is appropriate to use the City of San Diego’s Significance Determination Thresholds (City of San Diego 2020) as thresholds for these pollutants. The relevant screening thresholds are listed in Table 2.

**Table 2. Screening Level Criteria Thresholds for Air Quality Impacts**

Pollutant	Emission Rate (pounds/day)
PM <sub>10</sub>	100
PM <sub>2.5</sub> <sup>1</sup>	55
NO <sub>x</sub>	250
SO <sub>x</sub>	250
CO	550
VOC <sup>2</sup>	137

Source: City of San Diego 2016.

Notes: CO = carbon monoxide; NO<sub>x</sub> = oxides of nitrogen; PM<sub>2.5</sub> = particulate matter less than 2.5 microns; PM<sub>10</sub> = particulate matter less than 10 microns; SO<sub>x</sub> = oxides of sulfur; VOC = volatile organic compounds

<sup>1</sup> PM<sub>2.5</sub> is not currently regulated under SDAPCD Rule 20.2. PM<sub>2.5</sub> thresholds are based on South Coast Air Quality Management District significance thresholds 5 lbs/day for construction and operation, and 10 tons/year for operation, consistent with the City of San Diego’s Significance Determination Thresholds.

<sup>2</sup> VOCs are not regulated under SDAPCD Rule 20.2. City of San Diego’s Significance Determination Threshold for VOC is applied.

The thresholds listed in Table 2 represent screening level thresholds that can be used to evaluate whether project-related emissions could cause a significant impact on air quality. Emissions below the screening level thresholds would not cause a significant impact. For non-attainment pollutants (O<sub>3</sub>, with O<sub>3</sub> precursors oxides of nitrogen [NO<sub>x</sub>] and VOCs, and PM<sub>10</sub>), if emissions exceed the thresholds shown in Table 2, the project could result in a cumulatively considerable net increase in these pollutants and thus could have a significant impact on the ambient air quality.

With regard to evaluating whether a project would have a significant impact on sensitive receptors, air quality regulators typically define sensitive receptors as schools (preschool–12th grade), hospitals, resident care facilities, daycare centers, or other facilities that may house individuals with health conditions who would be adversely impacted by changes in air quality. Any project that has the potential to directly impact a sensitive receptor within one mile and results in a health risk greater than 10 in 1 million would be deemed to have a potentially significant impact.

SDAPCD Rule 51 (Public Nuisance) prohibits emission of any material that causes nuisance to a considerable number of persons or endangers the comfort, health or safety of any person. A project that proposes a use that would produce objectionable odors would be deemed to have a significant odor impact if it would affect a considerable number of off-site receptors.

### **Construction Emission Impacts**

Project construction emissions were estimated using the California Emissions Estimator Model (CalEEMod), VERSION 2016.3.2, based on construction information provided by Hale Engineering. Construction is estimated to last approximately one year and would require site preparation, grading and trenching, pipeline installation, and revegetation of the temporary impact areas on the project site. A total of 5.13 acres would be temporarily disturbed. Approximately 5,000 cubic yards of export and 3,700 cubic yards of import soil would be required. CalEEMod defaults for vehicle trips and construction fleet are assumed, except for trenching equipment added to the grading phase. Detailed assumptions and modeling data sheets are provided in Appendix A. Emissions levels associated with construction of the project are shown in Table 3.

**Table 3. Estimated Construction Daily Maximum Air Pollutant Emissions**

Construction Phase	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
pounds/day						
Site preparation	4	46	23	<1	22	12
Grading and trenching	3	36	20	<1	8	5
Pipeline installation	3	24	20	<1	2	1
Site recovery	1	13	13	<1	1	1
Significance Threshold	137	250	550	250	100	55
Significant?	No	No	No	No	No	No

**Source:** Appendix A.

**Notes:** CO = carbon monoxide; NO<sub>x</sub> = oxides of nitrogen; PM<sub>2.5</sub> = particulate matter less than 2.5 microns; PM<sub>10</sub> = particulate matter less than 10 microns; SO<sub>x</sub> = oxides of sulfur; VOC = volatile organic compounds

Emission quantities are rounded to the nearest whole number. Exact values provided in Appendix A.

Construction of the project would be short term and temporary, and as shown in Table 3, emissions associated with construction would be below the significance thresholds for all pollutants. Furthermore, the project would be required to comply with SDAPCD Rule 55, which is designed to control fugitive dust emissions. This requirement was not accounted for in the air quality modeling, resulting in conservative emissions impact estimates. Thus, the emissions associated with project construction would be less than significant.

### Operation Emission Impacts

Operation of the pipeline would not generate new sources of operational emissions. The pipeline would be a passive, gravity-fed pipeline. Future maintenance operations would be like existing conditions in the area and would not result in the need for additional maintenance trips. Furthermore, sensitive land uses, including detention facility bed towers and residences, would be separated from the construction by distance (one mile or more) and topography. Operational emissions would be less than significant.

### Cumulative Impacts

A project could result in a cumulatively significant impact if it would generate emissions that constitute a cumulatively considerable net increase of PM<sub>2.5</sub> or PM<sub>10</sub> or exceed quantitative thresholds for O<sub>3</sub> precursors (NO<sub>x</sub> and VOCs). The project site is surrounded by an area that is largely undeveloped, but emissions from existing development, including heavy industrial uses south of the project site, are part of the air quality background (see Table 1).

A localized pollutant concentration analysis is applicable to the analysis of the cumulative impacts of construction emissions because construction emissions would be temporary. Pollutant emissions would disperse or settle out following construction and would not contribute to long-term concentrations of emissions in the SDAB. Short-term emissions from construction would present a localized health concern if multiple construction projects would take place at the same time and would exceed the significance thresholds. Therefore, construction projects that do not take place at the same time do not

contribute to the same short-term cumulative impact. The project is in an area designated as Open Space. As such, no development projects are anticipated in the immediate vicinity of the project. Additionally, as shown in Table 3, construction emissions from the project would be well below the significance thresholds. Therefore, emissions from the project would not be expected to combine with a cumulative project to exceed significance thresholds, and a cumulative impact would not occur.

Furthermore, ongoing operational emissions associated with the project would not increase above existing levels and would not contribute to a cumulative air quality impact. Therefore, the project's contribution would not be cumulatively considerable.

### **Impacts to Sensitive Receptors**

Single-family residential uses are considered potentially sensitive receptors for air quality purposes because some residents, such as the very young, older adults, and those with certain illnesses or disabilities, are particularly sensitive to air pollution. Likewise, schools and schoolyards are also considered potentially sensitive receptors.

Residences and detention facilities are one mile or more from the project site. Additionally, as discussed above, short-term air emissions from construction of the project would be well below significance thresholds, and operational emissions associated with the project would not increase above existing levels. Therefore, impacts to sensitive receptors would be less than significant.

### **Odor Impacts**

During construction of the project, diesel equipment operating at the site could generate nuisance odors; however, surrounding sensitive land uses would be separated from the construction by distance and topography. Furthermore, construction would be short term. Due to the temporary and short-term nature of construction, odors associated with project construction would be less than significant.

According to the California Air Resources Board's CEQA Air Quality and Land Use Handbook, land uses associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting activities, refineries, landfills, dairies, and fiberglass molding operations (CARB 2005). The project proposes the replacement of a water pipeline. Future operations would not include any new sources of objectionable odors that would affect a substantial number of people. Therefore, odor impacts associated with project operation would not be significant.

#### **c. Would the project expose sensitive receptors to substantial pollutant concentrations?**

**Less than Significant Impact.** See discussion under Section 3.4.3(b).

#### **d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?**

**Less than Significant Impact.** See discussion under Section 3.4.3(b).

### 3.4.4 Biological Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following discussion is based on the Biological Resources Technical Report prepared by Harris & Associates in March 2022 for the project (Appendix B).

### Impact Analysis

- a. **Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

**Less than Significant Impact with Mitigation Incorporated.**

## Sensitive Plant Species

### Construction

**Direct Impacts.** Sensitive plant species that have been observed or have a high potential to occur on the project site are listed in Appendix B, Sections 5.4.2, Sensitive Plant Species Observed, and 5.4.3, Sensitive Plant Species Not Observed With a High Potential to Occur. Implementation of the project could result in the direct loss of four sensitive plant species. Table 4 lists the four sensitive plant species that could be directly impacted by project construction. Figures 5 and 5a through 5d, Sensitive Plant Impacts, show the locations of the sensitive plant species mapped on the project site that may be subject to direct impacts from project construction.

**Table 4. Summary of Potential Direct Impacts to Sensitive Plant Species**

Plant Species	Status (Federal/State/ CNPS/Regional)	Impacts (acres)		Impacts (individuals)	
		Permanent	Temporary	Permanent	Temporary
Palmer's grapplinghook ( <i>Harpagonella palmeri</i> )	None/None/4.2/None	0.05	0.67	NA	NA
San Diego County viguiera ( <i>Bahiopsis laciniata</i> )	None/None/4.3/None	0.06	0.41	NA	NA
San Diego barrel cactus ( <i>Ferocactus viridescens</i> )	None/None/2B.1/CV MSCP, SD MSCP	NA	NA	3	39
San Diego marsh elder ( <i>Iva hayesiana</i> )	None/2B.2/None	—	0.11	NA	NA
South coast saltscale ( <i>Atriplex pacifica</i> )	None/1B.2/None	NA	NA	—	3
Southwestern spiny rush ( <i>Juncus acutus</i> ssp. <i>leopoldii</i> )	None/4.2/None	NA	NA	—	2

**Notes:** CV MSCP = Chula Vista MSCP Subarea Plan-covered species; SD MSCP = City of San Diego MSCP Subarea Plan-covered species; NA = not applicable; None = No status indicated for species

**CNPS Rare Plant Ranking:** 1B = Rare, threatened, or endangered in California and elsewhere; 2A = Presumed extirpated in California but more common elsewhere; 2B = Rare, threatened, or endangered in California but more common elsewhere; 4 = A watch list of species of limited distribution

Impacts to certain species listed in Table 4 would not be significant due to their lack of sensitivity listing (are not state or federally listed or not listed by California Native Plant Society, are not Chula Vista MSCP Subarea Plan- or City of San Diego MSCP Subarea Plan-covered, or are California Rare Plant Rank [CRPR] List 3 or 4). These species include San Diego County viguiera (*Bahiopsis laciniata*), Palmer's grapplinghook (*Harpagonella palmeri*), and southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*). San Diego County viguiera, Palmer's grapplinghook, and southwestern spiny rush are CRPR 4 species, which are relatively common in this portion of the County and are not considered significantly rare. The three species are not covered by the Chula Vista MSCP Subarea Plan or City of San Diego MSCP Subarea Plan, and therefore, impacts to these non-covered species would not be significant under CEQA, and direct impacts are less than significant.

Implementation of the project would result in direct impacts to San Diego barrel cactus (*Ferocactus viridescens*), a Chula Vista MSCP Subarea Plan- and City of San Diego MSCP Subarea Plan-covered and CRPR 2.1 species. Approximately three San Diego barrel cactus individuals occur in the pipeline alignment and would be removed during pipeline replacement and grading of the on-site maintenance access road, resulting in a permanent direct impact to these individuals. Approximately 39 San Diego barrel cactus individuals occur in the temporary construction impact area on the project site and could be disturbed by construction activity, resulting in temporary impacts to these individuals. These permanent and temporary direct impacts to San Diego barrel cactus are significant.

Implementation of the project would result in temporary direct impacts to an approximately 0.11-acre patch of San Diego marsh elder, a CRPR 2B.2 species, in the western portion of the project site (Figures 6 and 6a, Sensitive Plant Observations). While this San Diego marsh elder patch occurs outside of the pipeline alignment, it occurs in the temporary construction impact area on the project site and could be disturbed by construction activity. These temporary direct impacts to San Diego marsh elder are significant. Several patches of San Diego marsh elder (approximately 0.06 acre) occur within the Salt Creek corridor and Drainage 4 (Figures 6 and 6a through 6d). As discussed in Appendix B, Section 1, Introduction, the project has been designed to avoid impacting on-site jurisdictional aquatic resources, including Salt Creek and the four non-vegetated channels. Therefore, the San Diego marsh elder that occur within these aquatic resource areas would be avoided, and impacts to these San Diego marsh elder individuals would not occur.

Implementation of the project would result in direct impacts to approximately three south coast saltscale individuals, a CRPR 1B.2 species. While these south coast saltscale individuals occur outside of the pipeline alignment, the species occurs in the temporary construction impact area on the project site and could be disturbed by construction activity. These temporary direct impacts to south coast saltscale are significant.

Critical habitat for Otay tarplant (*Deinandra* (= *Hemizonia*) *conjugens*) occurs on the project site (Figure 7, Critical Habitat). Otay tarplant was not observed on the project site during the 2018 and 2020 surveys, however, it has high potential to occur on the project site due to the suitable open Diegan coastal scrub habitat throughout the project site. These potential impacts to Otay tarplant are significant.

**Indirect Impacts.** Indirect impacts to sensitive plants would primarily result from adverse edge effects. During construction of the project, edge effects could include trampling, dust, which could disrupt plant vitality in the short term, as well as construction-related pollutant discharges, soil erosion, and runoff. Temporary indirect impacts to sensitive plants during construction activities are potentially significant.

## ***Operation***

Because the replacement pipeline would be underground and operate passively and similarly to current conditions, project operation would not result in permanent development-related direct or indirect impacts to plant species. Therefore, permanent direct and indirect operational impacts to sensitive plant species are less than significant.

## **Sensitive Wildlife Species**

### ***Construction***

**Direct Impacts.** Sensitive wildlife species that were observed on the proposed project site during surveys or have a high potential to occur on the project site are described in Appendix B, Sections 5.4.4, Sensitive Wildlife Species Observed, and 5.4.5, Sensitive Wildlife Species Not Observed With a High Potential to Occur. The project has the potential to impact these species through temporary construction activities including those that could displace individual wildlife or eliminate portions of their habitat (Figure 8, Sensitive Wildlife Impacts). In addition, some of the smaller species, such as reptiles and rodents, could be killed or injured by clearing, grading, and other construction activities. Implementation of the project would result in both permanent and temporary direct loss of habitat, including nesting and foraging habitat, for the majority of the sensitive wildlife species described in Appendix B, Sections 5.4.4 and 5.4.5. These species include the following: Bell's sparrow (*Artemisiospiza belli*), coastal cactus wren, coastal California gnatcatcher, Cooper's hawk, least Bell's vireo (*Vireo bellii pusillus*), northern harrier, Southern California rufous-crowned sparrow, yellow-breasted chat, western bluebird, monarch butterfly (*Danaus plexippus*), Quino checkerspot butterfly (*Euphydryas editha quino*), San Diego black-tailed jackrabbit, southern mule deer, orange-throated whiptail (*Aspidoscelis hyperythra*), red diamond rattlesnake (*Crotalus ruber*), and Blainville's horned lizard (*Phrynosoma blainvillii*).

Approximately 7.11 acres of Diegan coastal sage scrub occurs on the project site and provides suitable nesting habitat for sensitive bird species observed on and surrounding the project site, including coastal cactus wren, coastal California gnatcatcher, and Southern California rufous-crowned sparrow. Coastal cactus wren and coastal California gnatcatcher were observed in the Diegan coastal sage scrub (and disturbed) habitat on and surrounding the project site during the 2018 and 2020 surveys (Figure 8). Southern California rufous-crowned sparrow was observed in the Diegan coastal sage scrub north of the project site during the 2020 survey (Figure 8). Diegan coastal sage scrub also provides suitable habitat for other sensitive wildlife species, including San Diego black-tailed jackrabbit, orange-throated whiptail, red diamond rattlesnake, and Blainville's horned lizard. Direct and indirect impacts to Diegan coastal sage scrub could result in direct impacts to these sensitive wildlife species in the form of permanent and temporary habitat loss. Potential impacts to these sensitive wildlife species are significant.

Approximately 0.58 acre of non-native grassland occurs on the project site and provides suitable foraging habitat for sensitive wildlife species, including Cooper's hawk, northern harrier, western bluebird, San Diego black-tailed jackrabbit, and southern mule deer. Western bluebird was observed in the non-native grassland in the eastern portion of the project site (Figure 8). San Diego black-tailed jackrabbit was observed in the non-native grassland directly outside of the project site during the 2020 survey (Figure 8). Direct and indirect impacts to non-native grassland could result in direct impacts to these sensitive wildlife species in the form of permanent and temporary habitat loss. Potential impacts to these sensitive wildlife species are significant.

One yellow-breasted chat was observed in the Salt Creek riparian corridor during the 2020 survey (Figure 8). As discussed in Section 2, the project has been designed to avoid impacting Salt Creek, thereby avoiding direct impacts to the riparian habitat potentially occupied by yellow-breasted chat. Direct impacts to yellow-breasted chat would not occur.

Coastal cholla (*Cylindropuntia prolifera*) patches occur throughout the project site and provide suitable nesting habitat for the sensitive coastal cactus wren, which was observed throughout the western portion of the project site during the 2018 and 2020 surveys (Figure 8). Direct impacts to coastal cholla patches on the project site would result in direct impacts to coastal cactus wren in the form of permanent and temporary habitat loss. These potential impacts to coastal cactus wren are significant.

Adult monarch butterflies were observed flying through the project site during the 2020 surveys. However, no milkweed patches -the monarch caterpillar host plant- were observed on the project site. Therefore, direct impacts to monarch butterfly from implementation of the project are less than significant.

Critical habitat for Quino checkerspot butterfly does not occur on the project site; however, critical habitat can be found within the Otay Ranch Preserve less than 0.5 mile both east and south of the project site and a known population occurs in the Otay Ranch Preserve surrounding the project site (Figure 7). Therefore, this species is assumed to occur on the project site. Consistent with the avoidance and minimization measures for Quino checkerspot butterfly in Section 5.2.8.1 of the Chula Vista MSCP Subarea Plan, dot-seed plantain (*Plantago erecta*) and significant Quino checkerspot butterfly habitat patches were mapped on the project site during the 2018 and 2020 habitat assessments (Figure 9, Quino Checkerspot Butterfly Suitable Habitat). Although Quino checkerspot butterfly was not observed on the project site during the 2018 and 2020 surveys, consistent with Section 5.2.8.1 of the Chula Vista MSCP Subarea Plan, the project is designed to avoid impacts to the significant Quino checkerspot butterfly habitat patches mapped on the project site to the maximum extent practicable. If significant Quino checkerspot butterfly habitat patches cannot be avoided during project construction, potential impacts to significant Quino checkerspot butterfly habitat patches would be significant, and mitigation consistent with Section 5.2.8.1 of the Chula Vista MSCP Subarea Plan would be required.

**Indirect Impacts.** Temporary construction-related indirect impacts to wildlife generally include noise, vibration, lighting, increased human activity, hydrologic quality, increased turbidity, excessive sedimentation, flow interruptions, and changes in water temperature), and trash and garbage, which can attract both introduced terrestrial and native terrestrial and avian predators (predators, such as American crows, common ravens, coyotes, domestic dogs, raccoons and striped skunks). These temporary construction-related impacts in the form of habitat disturbance and potential predation could have a significant impact on the sensitive wildlife species identified in Appendix B, Sections 5.4.4 and 5.4.5.

### ***Operation***

Because the replacement pipeline would be underground and operate passively and similarly to current conditions, project operation would not result in permanent development-related direct or indirect impacts to sensitive wildlife species. Therefore, permanent direct and indirect operational impacts to sensitive wildlife species are less than significant.

### **Nesting Birds**

As previously discussed, suitable nesting habitat for sensitive birds, including Bell's sparrow, coastal cactus wren, coastal California gnatcatcher, least Bell's vireo, and Southern California rufous-crowned sparrow, occurs within the Salt Creek riparian corridor, Diegan coastal sage scrub, and coastal cholla patches throughout the project site. Although active coastal cactus wren nests and nesting behavior were not observed during any of the biological surveys, an inactive coastal cactus wren nest was observed in the eastern portion of the project site in 2018. Coastal California gnatcatchers that could be a part of at least one, but potentially upwards of three to five family groups were observed in the Diegan coastal sage scrub vegetation throughout the project site in 2018 and 2020. Temporary direct and indirect construction-related impacts could have a significant impact on the nesting bird species observed on the project site in the form of nesting habitat loss.

### **Mitigation Measures**

#### ***Sensitive Plant Species***

The project would result in direct impacts to San Diego barrel cactus and indirect impacts to San Diego marsh elder, south coast saltscale, and Otay tarplant during construction activities. Direct and indirect impacts to these sensitive plant species are considered significant and would be reduced to less than significant with implementation of MM BIO-1. Application of MM BIO-1 would preserve or restore sensitive upland vegetation communities that provide suitable habitat for sensitive plant species, including San Diego barrel cactus, San Diego marsh elder, south coast saltscale, and Otay tarplant.

San Diego barrel cactus occurring within the temporary construction impact area on the project site would be avoided where feasible. Implementation of MM BIO-2 would translocate three San Diego barrel cactus individuals that occur along the pipeline alignment and on-site access roads, as well as any other individuals that have the potential to be impacted by temporary construction activities, in suitable habitat outside of the permanent impact areas on the project site.

San Diego marsh elder, south coast saltscale, and Otay tarplant occurring within the temporary construction impact area on the project site would be avoided where feasible. Implementation of MM BIO-3 would avoid San Diego marsh elder, south coast saltscale and Otay tarplant to the greatest extent feasible by flagging for avoidance.

As discussed in Appendix B, Section 3.3.1.1, the project is in a 100 Percent Conservation Area within Otay Ranch (a Covered Project) under the Chula Vista MSCP Subarea Plan. In accordance with Section 5.2.3.2 in the Chula Vista MSCP Subarea Plan, the Otay tarplant (a narrow endemic species) on the project site will be avoided to the maximum extent practicable. In accordance with Section 5.2.3.2 of the Chula Vista MSCP Subarea Plan, if impacts cannot be avoided, impacts up to five percent of the total Otay tarplant population on the project site is allowed with findings of equivalency submitted to the wildlife agencies.

Potential temporary indirect impacts to sensitive plant species, including San Diego barrel cactus, San Diego marsh elder, south coast saltscale, and Otay tarplant, from soil erosion, litter, fire, and hydrologic changes occurring during construction activities would be reduced to less than significant with implementation of MMs BIO-4 and BIO-5. Application of MMs BIO-4 and BIO-5 would reduce indirect impacts to sensitive plant species to a less than significant level through preparing a SWPPP, an approved biologist conducting pre-construction surveys, and implementing standard best management practices (BMPs) and requirements that address erosion and runoff, including the construction-related minimization measures required by the City of Chula Vista and City of San Diego MSCP Subarea Plans, Clean Water Act (CWA), and NPDES.

Implementation of MMs BIO-1 through BIO-5 would reduce direct and indirect permanent and temporary impacts to sensitive plant species to below a level of significance.

MMs BIO-1 through BIO-5 are as follows:

**BIO-1: Upland Restoration – Temporary and Permanent Impacts.** Temporary impacts to sensitive upland vegetation communities, including Diegan coastal sage scrub (including disturbed) and non-native grassland, occurring in the temporary construction impact area on the project site are anticipated to require a total of 6.47 acres of revegetation. Temporary impacts to 6.13 acres of Diegan coastal sage scrub (including disturbed) and 0.35 acre of non-native grassland shall require in-kind revegetation in place.

Prior to issuance of land development permits, including clearing, grubbing, grading, and construction permits, the Applicant shall provide a City of Chula Vista-approved Revegetation Plan for temporary impacts to 6.13 acres of Diegan coastal sage scrub (including disturbed) and 0.35 acre of non-native grassland (Appendix F, Revegetation Plan [of the Biological Resources Technical Report prepared for the project]). Revegetation for temporary impacts shall occur on the project site.

A 3:1 ratio of off-site restoration for permanent impacts to 0.75 acre of Diegan coastal sage scrub (including disturbed) occurring in the on-site maintenance access road permanent impact area would satisfy the mitigation ratio for impacts to Diegan coastal sage scrub outlined in the City of Chula Vista and City of San Diego Multiple Species Conservation Program Subarea Plans. Prior to issuance of land development permits, including clearing, grubbing, grading, and construction permits, the Applicant shall provide a City of Chula Vista-approved Revegetation Plan for permanent impacts to 0.75 acre of Diegan coastal sage scrub (including disturbed) at a 3:1 ratio (Appendix F, Revegetation Plan [of the Biological Resources Technical Report prepared for the project]). The revegetation of 2.25 acres of Diegan coastal sage scrub shall occur on restorable land in the Wolf Canyon parcel that has disturbed habitat and non-native grassland areas suitable for Diegan coastal sage scrub restoration. The Wolf Canyon parcel is part of the Otay Ranch Preserve and is owned by the City of Chula Vista and managed by the Preserve Owner/Manager.

A 2:1 ratio of off-site mitigation for permanent impacts to 0.06 acre of non-native grassland occurring in the on-site maintenance access road permanent impact area would satisfy the mitigation ratio for impacts to non-native grassland outlined in the City of Chula Vista and City of San Diego Multiple Species Conservation Program Subarea Plans. Prior to issuance of land development permits, including clearing, grubbing, grading, and construction permits, the Applicant shall provide a City of Chula Vista-approved Revegetation Plan for permanent impacts to 0.06 acre of non-native grassland at a 2:1 ratio (Appendix F, Revegetation Plan [of the Biological Resources Technical Report prepared for the project]). The revegetation of 0.12 acre of native grassland shall occur on restorable land in the Wolf Canyon parcel that has disturbed habitat and non-native grassland areas suitable for native grassland restoration. The Wolf Canyon parcel is part of the Otay Ranch Preserve and is owned by the City of Chula Vista and managed by the Preserve Owner/Manager.

The Revegetation Plan shall include but not be limited to an implementation plan; appropriate seed mixtures and planting method; irrigation method; quantitative and qualitative success criteria; maintenance, monitoring, and reporting program; estimated completion time; and contingency measures. The Applicant shall be required to enter into

a Secured Agreement with the City of Chula Vista consisting of a letter of credit, bond, or cash for 100 percent of the estimated costs associated with the implementation of the Revegetation Plan. The Applicant shall be required to prepare and implement the Revegetation Plan subject to the oversight and approval of the Development Services Director (or their designee).

**BIO-2: San Diego Barrel Cactus Avoidance and Translocation.** San Diego barrel cactus occurring within the temporary construction impact area on the project site shall be avoided where feasible. Prior to construction activities, including clearing, grubbing, and grading, the approved biologist (Mitigation Measure BIO-5) shall flag each San Diego barrel cactus occurring in the temporary construction impact area on the project site for avoidance during the pre-construction survey. Removal of three individuals of San Diego barrel cactus occurring in on-site maintenance access road permanent impact area shall be mitigated at a 1:1 ratio in accordance with the City of Chula Vista and City of San Diego San Diego Multiple Species Conservation Program Subarea Plans. Mitigation shall consist of salvaging the three San Diego barrel cactus individuals within the pipeline corridor, on-site access roads, and any other individuals determined to be impacted within temporary construction areas and relocation of these individuals to areas of suitable habitat on the project site consistent with the City of Chula Vista and City of San Diego San Diego Multiple Species Conservation Program Subarea Plans.

Prior to issuance of any land development permits, including clearing or grubbing and grading permits, the Applicant shall prepare a Salvage and Translocation Plan (Appendix G, San Diego Barrel Cactus and Coastal Cholla Salvage and Translocation Plan [of the Biological Resources Technical Report prepared for the project]) for the San Diego barrel cactus. The Salvage and Translocation Plan shall be prepared by a qualified biologist to the satisfaction of the Development Services Director (or their designee). At a minimum, the plan shall identify and/or include (1) the areas where salvageable cacti are located, (2) number of cacti to be salvaged, (3) the methodology salvaging the cacti, (4) the location of suitable receptor sites, (5) the requirements for the preparation of receptor sites, and (6) the short- and long-term monitoring and maintenance requirements. The Applicant shall be required to enter into a Secured Agreement with the City of Chula Vista consisting of a letter of credit, bond, or cash for 100 percent of the estimated costs associated with the implementation of the Revegetation Plan. Upon the City of Chula Vista's approval of the Salvage and Translocation Plan, the Applicant shall implement and monitor the plan subject to the oversight of the Development Services Director (or their designee).

**BIO-3: Sensitive Plant Avoidance.** San Diego marsh elder and south coast saltscale within the temporary construction impact area on the project site shall be avoided to the maximum extent feasible. All Otay tarplant occurring within the temporary construction impact

area on the project site shall be avoided to the maximum extent feasible. Prior to construction activities, including clearing, grubbing, and grading, the approved biologist (Mitigation Measure BIO-5) shall flag the extent of each species patch or individual on the project site for avoidance during the pre-construction survey. If San Diego marsh elder, south coast saltscale, or Otay tarplant is observed in the permanent construction impact area during the pre-construction sensitive plant survey (Mitigation Measure BIO-5) or cannot be avoided during construction, individuals will be counted and permanent impacts shall be mitigated at a 1:1 ratio in suitable habitat outside of the permanent impact areas on the project site. If impacts occur to San Diego marsh elder, south coast saltscale, or Otay tarplant, revegetation shall follow the methods and requirements included in the City of Chula Vista-approved Revegetation Plan.

**BIO-4: Stormwater Pollution Prevention Plan.** Prior to issuance of any land development permits, including clearing or grubbing and grading permits, the Applicant shall prepare a Stormwater Pollution Prevention Plan pursuant to National Pollution Discharge Elimination System General Construction Permit (Water Quality Order 99-08-DWQ). The Stormwater Pollution Prevention Plan shall address the potential sources and locations of stormwater contamination, characteristics and impacts of specific contaminants, and temporary and permanent erosion-control practices and include water sampling data, construction practices that minimize stormwater contamination, coordination of best management practices with planned construction activities, and compliance with City of Chula Vista, City of San Diego, state, and federal regulations. The Stormwater Pollution Prevention Plan shall include, at a minimum, the best management practices listed below. The combined implementation of these requirements shall protect adjacent habitats and sensitive species during construction to the maximum extent practicable with the goal of providing multiple beneficial uses. At a minimum, the following measures and/or restrictions shall be incorporated into the Stormwater Pollution Prevention Plan and noted on construction plans, where appropriate, to avoid impacts on sensitive species, sensitive vegetation communities, and/or aquatic resources during construction. The approved biologist (Mitigation Measure BIO-5) shall verify the implementation of the following design requirements:

1. Littering shall be prohibited, and trash shall be removed from construction areas daily. All food-related trash and garbage shall be removed from the construction sites daily.
2. Any equipment or vehicles driven and/or operated shall abide by a speed limit of 15 miles per hour during daylight hours and 10 miles per hour during dark hours.
3. Construction activity shall not be permitted in aquatic resources.
4. Temporary structures and storage of construction materials shall not be in aquatic resources.

5. Staging/storage areas for construction equipment and materials shall not be in aquatic resources.
6. Any equipment or vehicles driven and/or operated in jurisdictional aquatic resources, as authorized by applicable law and permits, shall be checked and maintained by the Operator daily to prevent leaks of oil or other petroleum products that could be deleterious to aquatic life if introduced to the watercourse.
7. No stationary equipment, such as motors, pumps, generators, and welders, or fuel storage tanks, shall be located within aquatic resources.
8. No debris, bark, slash sawdust, rubbish, cement, or concrete, or washing thereof, oil, or petroleum products shall occur where it may be washed by rainfall or runoff into aquatic resources.
9. When construction operations are completed, any excess materials or debris shall be removed from the work area according to the conditions outlined in the permits.
10. No equipment maintenance shall be performed within or near aquatic resources, where petroleum products or other pollutants from the equipment may enter these areas.

**BIO-5: Approved Biologist.** To prevent inadvertent disturbance to areas outside the limits of grading, all grading locations shall be monitored by an approved biologist. Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits, the Applicant shall provide written confirmation that a City of Chula Vista-approved biological monitor has been retained and shall be on site during clearing, grubbing, and/or grading activities. The biologist shall attend all pre-construction meetings and monitor all clearing, grubbing, and/or grading activities on the project site. The biologist shall monitor these activities to ensure that the Applicant complies with the appropriate standard conditions and mitigation measures, including the following:

1. Prior to clearing and grading operations or other activities involving significant soil disturbance, the Applicant shall install fencing in accordance with Chula Vista Municipal Code, Section 17.35.030. Prominently colored, well-installed fencing and signage shall be in place wherever the limits of grading are adjacent to sensitive vegetation communities or other biological resources, as identified by the qualified monitoring biologist. Fencing shall remain in place during all construction activities. All temporary fencing shall be shown on grading plans for areas adjacent to the Otay Ranch Preserve and for all off-site facilities constructed within the Otay Ranch Preserve. Prior to release of grading and/or improvement bonds, a qualified biologist shall provide evidence that work was conducted as authorized under the approved land development permit and associated plans.
2. Prior to the start of construction activities, including clearing, grubbing, and grading, the Applicant shall retain a City of Chula Vista-approved biologist to conduct pre-construction surveys for San Diego barrel cactus, San Diego marsh

elder, south coast saltscale, Otay tarplant, and coastal cholla patches, which are species determined to be present or to have a high potential to occur and that require additional measures for unavoidable impacts (Mitigation Measures BIO-2, BIO-3, and BIO-8).

3. A contractor education program shall be implemented for all workers and subcontractors and shall include a description of environmental restrictions relevant to construction and the penalties for violations. A chain of command and protocol for communicating problems or potential construction changes that may affect biological resources shall be established with the contractor and the City of Chula Vista. Workers shall be made aware of what resources require protection using photographs or on-the-ground demonstrations.
4. A monitoring biologist acceptable to the City of Chula Vista shall be on site during any clearing of natural vegetation (i.e., annual ground cover or shrubs). The monitoring biologist shall flush sensitive species (i.e., avian or other mobile species) from occupied habitat areas immediately before brush clearing and earthmoving activities. The biological monitor shall be authorized to halt all associated project activities that may be in violation of the City of Chula Vista Multiple Species Conservation Program Subarea Plan.
5. Following the completion of initial clearing/grading/earthmoving activities, the open space areas surrounding the project site to be avoided by construction equipment and personnel shall be marked with temporary fencing and other appropriate markers clearly visible to construction personnel. No construction access, parking, or storage of equipment or materials shall be permitted within such marked areas.
6. Vehicle transportation routes between cut-and-fill locations shall be restricted to a minimal number consistent with project construction requirements. Waste dirt or rubble shall not be deposited outside of the project site. Regular pre-construction meetings involving the monitoring biologist, construction supervisors, and equipment operators shall be conducted and documented to ensure maximum practicable adherence to these measures.
7. The monitoring biologist shall verify that the construction site is implementing the following Stormwater Pollution Prevention Plan best management practices:
  - a. Dust-control fencing
  - b. Removal of construction debris and a clean work area
  - c. Covered trash receptacles that are wildlife-proof and weather-proof
  - d. Prohibition of pets on the construction site
  - e. A speed limit of 15 miles per hour during the daylight hours and 10 miles per hour during nighttime hours

8. Open space areas in the likely dust drift radius of construction areas shall be periodically sprayed with water to reduce accumulated dust on the leaves, as recommended by the monitoring biologist.
9. Oversee the construction site so that cover and/or escape routes for wildlife from excavated areas shall be provided daily. All steep trenches, holes, and excavations during construction shall be covered at night with backfill, plywood, metal plates, or other means, and the edges covered with soils and plastic sheeting such that small wildlife cannot access them. Soil piles shall be covered at night to prevent wildlife from burrowing in. The edges of the sheeting shall be weighed down by sandbags. These areas may also be fenced to prevent wildlife from gaining access. Exposed trenches, holes, and excavations shall be inspected twice daily (i.e., each morning and before sealing the exposed area) by an approved biologist to monitor for wildlife entrapment. Excavations shall provide an earthen ramp to allow for a wildlife escape route.

### ***Sensitive Wildlife Species***

The project would result in temporary direct and indirect impacts to sensitive wildlife species that use Diegan coastal sage scrub and non-native grassland habitats on the project site, including Bell's sparrow, coastal California gnatcatcher, Cooper's hawk, northern harrier, Southern California rufous-crowned sparrow, western bluebird, San Diego black-tailed jackrabbit, southern mule deer, orange-throated whiptail, red diamond rattlesnake, and Blainville's horned lizard during construction activities. Implementation of MMs BIO-1, BIO-4, and BIO-5 would reduce temporary direct and indirect impacts to these sensitive wildlife species on the project site to less than significant through upland habitat restoration and conformance with the SWPPP and biological monitoring.

If constructed during the nesting bird season, the project would potentially result in temporary direct and indirect impacts to sensitive nesting birds, including Bell's sparrow, coastal cactus wren, coastal California gnatcatcher, least Bell's vireo, Southern California rufous-crowned sparrow, western bluebird, and yellow-breasted chat. Impacts to these sensitive nesting birds would be reduced to less than significant through implementation of MM BIO-6, Migratory Bird Treaty Act Compliance.

The project would result in temporary direct and indirect impacts to coastal cactus wren, coastal California gnatcatcher, and least Bell's vireo. Impacts to coastal cactus wren, coastal California gnatcatcher, and least Bell's vireo would be reduced to less than significant through implementation of MM BIO-7, focused coastal cactus wren, coastal California gnatcatcher, and least Bell's vireo surveys prior to construction, to reaffirm the presence and extent of occupied habitat and the presence of a qualified monitor on site during the breeding season when work is being conducted in suitable habitat.

The project would result in temporary direct and indirect impacts to coastal cactus wren through potential destruction of coastal cholla patches. Impacts to coastal cactus wren would be reduced to less than significant through implementation of MM BIO-8, avoidance and salvage and translocation of impacted coastal cholla patches.

The project is designed to avoid impacts to the significant Quino checkerspot butterfly habitat patches mapped on the project site to the maximum extent practicable, consistent with the Chula Vista MSCP Subarea Plan, Section 5.2.8.1. In the event significant Quino checkerspot butterfly habitat patches cannot be avoided during project construction, temporary direct and indirect impacts to Quino checkerspot butterfly would result. Impacts to significant Quino checkerspot butterfly habitat patches would be reduced to less than significant through implementation of MM BIO-9, Quino checkerspot butterfly suitable habitat avoidance and restoration.

Implementation of MMs BIO-1 and BIO-4 through BIO-9 would reduce potentially significant direct and indirect impacts to sensitive wildlife species to less than significant. MMs BIO-6 through BIO-9 are as follows:

**BIO-6: Migratory Bird Treaty Act Compliance.** To avoid any direct impacts to raptors and/or any migratory birds protected under the Migratory Bird Treaty Act, removal of habitat that supports active nests on the proposed area of disturbance should occur outside of the breeding season for these species (January 15 to August 31). If removal of habitat on the proposed area of disturbance must occur during the breeding season, the Applicant shall retain a City of Chula Vista-approved biologist to conduct a pre-construction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The pre-construction survey must be conducted within 10 calendar days prior to the start of construction, the results of which must be submitted to the City of Chula Vista for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report or mitigation plan as deemed appropriate by the City of Chula Vista, shall be prepared and include proposed measures to be implemented to ensure that disturbance of breeding activities are avoided. The report or mitigation plan shall be submitted to the City of Chula Vista for review and approval and implemented to the satisfaction of the City of Chula Vista. The City of Chula Vista-approved mitigation monitor shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

**BIO-7: Coastal Cactus Wren, Coastal California Gnatcatcher, and Least Bell's Vireo Pre-Construction Surveys.** For any work proposed between February 15 and August 15 (March 15 and September 15 for least Bell's vireo), a pre-construction survey for the coastal cactus wren, coastal California gnatcatcher, and least Bell's vireo shall be performed in order to reaffirm the presence and extent of occupied habitat. The pre-construction survey area for the species shall encompass all potentially suitable habitat

within the project work zone, as well as a 300-foot survey buffer. The pre-construction survey shall be performed to the satisfaction of the City of Chula Vista Development Services Director (or their designee) by a qualified biologist familiar with the Chula Vista Multiple Species Conservation Program Subarea Plan. The results of the pre-construction survey shall be submitted in a report to the Development Services Director (or their designee) for review and approval prior to initiating any construction activities. If California gnatcatcher, cactus wren, or least Bell's vireo is detected, a minimum 300-foot buffer delineated by orange biological fencing shall be established around the detected species. In addition, on-site noise reduction/attenuation techniques shall be incorporated, as appropriate, to avoid impacts to breeding gnatcatcher, cactus wren, and least Bell's vireo from elevated construction noise levels during the breeding season. The Development Services Director (or their designee) shall have the discretion to modify the buffer width depending on site-specific conditions. In addition, noise monitoring may be required to ensure that the elevated construction noise levels are appropriately attenuated at the edge of occupied habitat to a level that is not expected to adversely affect nesting bird behavior (i.e., not to exceed an hourly average of 60 A-weighted decibels or ambient whichever is greater, at the edge of occupied habitat).

**BIO-8: Coastal Cactus Wren Habitat Management.** Coastal cactus wren is a covered species under the City of Chula Vista and City of San Diego Multiple Species Conservation Program Subarea Plans. Because suitable and occupied habitat for this species, primarily coastal cholla patches, would be impacted by grading and construction of the project, avoidance and habitat restoration of coastal cactus wren habitat shall occur.

Prior to construction activities, including clearing, grubbing, and grading, the qualified biologist (Mitigation Measure BIO-5) shall flag and fence the coastal cholla patches on the project site for avoidance. If a coastal cholla patch cannot be avoided by construction activities, the qualified biologist shall count coastal cholla individuals and map the acreage of the patch. Impacted coastal cholla shall be mitigated by salvaging and transplanting the individuals or patch in a suitable area on the project site or planting new coastal cholla individuals at a 1:1 ratio in suitable habitat on the project site after project completion. Salvage and translocation or new plantings of the coastal cholla individuals or patches shall follow the methods and requirements included in the City of Chula Vista Development Services Director (or their designee)-approved Salvage and Translocation Plan and Revegetation Plan (Appendix G, San Diego Barrel Cactus and Coastal Cholla Salvage and Translocation Plan [of the Biological Resources Technical Report prepared for the project]).

**BIO-9: Quino Checkerspot Butterfly.** Mitigation for impacts to suitable habitat for Quino checkerspot butterfly shall implement the following avoidance and minimization

measures in compliance with the Chula Vista Multiple Species Conservation Program Subarea Plan, Section 5.2.8.1, Infrastructure, in the Otay Ranch Preserve:

- Prior to construction activities, including clearing, grubbing, and grading, the qualified biologist (Mitigation Measure BIO-5) shall flag and fence significant patches of dot-seed plantain and other Quino checkerspot butterfly host plants where observed on the project site for avoidance. As defined in the Chula Vista Multiple Species Conservation Program Subarea Plan, Section 5.2.8.1, single patches of dot-seed plantain equal to or greater than 538 square feet (50 square meters), or if less than 538 square feet (50 square meters) any combination of patches within 656 feet (200 meters) of each other that are equal to or greater than 538 square feet (50 square meters), will be considered “significant Quino checkerspot butterfly habitat patches.”
- If a significant Quino checkerspot butterfly habitat patch cannot be avoided by construction activities, the qualified biologist shall notify the City of Chula Vista Development Services Director (or their designee) and count the individuals and map the acreage of the impacted patch. Following methods and requirements included in the City of Chula Vista-approved Revegetation Plan, the qualified biologist shall oversee the planting of new dot-seed plantain, Coulter’s snapdragon, rigid bird’s beak, owl’s clover, Chinese houses, and purple Chinese houses at a 2:1 ratio for acreage impacts in the on- and off-site revegetation areas as designated by the Revegetation Plan (Appendix F, Revegetation Plan [of the Biological Resources Technical Report prepared for the project]).
- In compliance with the Chula Vista Multiple Species Conservation Program Subarea Plan, Section 5.2.8.1, the City of Chula Vista-approved Stormwater Pollution Prevention Plan (Mitigation Measure BIO-4) shall include dust control measures, including but not limited to watering, and implemented during construction activities, including clearing, grubbing, and grading.
- In compliance with the Chula Vista Multiple Species Conservation Program Subarea Plan, Section 5.2.8.1, the City of Chula Vista-approved grading plans and design specifications for construction of the internal access roads shall include the use of concrete-treated base material with aggregate rock to prevent weeds and vegetation growth on the road surface while allowing sufficient percolation to minimize stormwater flows.

**b. Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

**Less than Significant Impact with Mitigation Incorporated.**

**Direct Impacts.** Implementation of the project would result in permanent impacts to approximately 0.99 acre of sensitive and non-sensitive vegetation communities and land cover types and temporary impacts to approximately 8.59 acres on the project site that occur in the temporary construction area, pipeline alignment, and on-site maintenance access road permanent impact area (Table 5; Figures 10 and 10a through 10d, Vegetation Community Impacts). These permanent impacts would result from the construction and associated grading of the on-site maintenance access roads. The temporary impacts would result from construction activities associated with the pipeline replacement, including staging areas. The freshwater marsh and non-vegetated channels on the project site would be avoided and no permanent or temporary impacts would occur. As discussed in Appendix B, Section 1, the project would use existing access roads that were field-verified as suitable for construction access and City of San Diego maintenance vehicles access to the pipeline alignment during construction and operation, and no impacts would occur outside of the 100-foot corridor owned in fee by the City of San Diego, encompassing the approximately 10-acre project site. All temporary impact areas would be revegetated to pre-existing conditions following construction.

Sensitive vegetation communities that would be permanently and temporarily impacted on the project site include Diegan coastal sage scrub (including disturbed) and non-native grassland (Table 5; Figures 10 and 10a through 10d). All direct permanent and temporary impacts to sensitive vegetation communities are considered significant.

**Table 5. Impacts to Vegetation Communities and Land Cover Types**

Vegetation Community	Impacts (acres)	
	Permanent	Temporary
<b>Upland</b>		
Diegan Coastal Sage Scrub (including disturbed) <sup>1</sup> (32500)	0.75	6.13
Non-Native Grassland <sup>1</sup> (42200)	0.06	0.35
<b>Riparian</b>		
Coastal and Valley Freshwater Marsh <sup>1</sup> (52410)	0.00 <sup>2</sup>	0.00 <sup>2</sup>
Non-Vegetated Channel <sup>1</sup> (64200)	0.00 <sup>2</sup>	0.00 <sup>2</sup>
<b>Developed/Disturbed</b>		
Disturbed Habitat (11300)	0.08	1.01
Urban/Developed Land (12000)	0.10	1.10
<b>Total</b>	<b>0.99</b>	<b>8.59</b>

**Source:** Oberbauer et al. 2008.

**Notes:**

<sup>1</sup> Sensitive vegetation community

<sup>2</sup> Aquatic resources impacts avoidance

**Indirect Impacts.** Most of the indirect impacts to sensitive plant species described in Section 3.4.4(a) also result in potentially significant indirect impacts to riparian habitats and other sensitive natural communities. Indirect impacts to sensitive vegetation communities can result from invasion by exotic species, exposure to construction-related pollutant discharges, and trampling

by humans. Permanent indirect impacts to riparian habitats and other sensitive natural communities from development of the project are potentially significant.

Implementation of MMs BIO-1, BIO-4, and BIO-5 listed in Section 3.4.4(a) would mitigate all direct and indirect permanent and temporary impacts to riparian habitats and other sensitive natural communities to below a level of significance.

Permanent impacts to sensitive upland vegetation communities, including 0.75 acre of Diegan coastal sage scrub (including disturbed) and 0.06 acre of non-native grassland, are anticipated with project implementation. Temporary impacts to 6.13 acres of Diegan coastal sage scrub (including disturbed) and 0.35 acre of non-native grassland would also result. Direct permanent and temporary impacts to sensitive upland communities would be reduced to less than significant with implementation of MM BIO-1, which would restore temporary impacts to sensitive upland communities and provide off-site restoration for permanent impacts.

Implementation of MMs BIO-4 and BIO-5 would reduce indirect impacts to sensitive upland vegetation communities through preparing a SWPPP, an approved biologist conducting pre-construction surveys, and implementing standard BMPs and requirements that address erosion and runoff, including the construction-related minimization measures required by the Chula Vista MSCP Subarea Plan, CWA, and NPDES.

**c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?**

**Less than Significant Impact with Mitigation Incorporated.**

**Direct Impacts.** As discussed in Section 2.4, Project Description, the project has been designed to avoid impacting on-site jurisdictional aquatic resources, including Salt Creek and the four non-vegetated channels (Figures 11 and 11a through 11d, Aquatic Resources Impacts Avoidance).

Salt Creek would be avoided by using the jack-and-bore horizontal boring method during pipeline replacement activities (Figures 11 and 11a). The replacement pipeline would be tunneled via the jack-and-bore method parallel to the existing pipeline with a 60-foot avoidance buffer on either side of the creek. Upon completed installation of the replacement pipeline, the existing pipeline underneath Salt Creek would be filled with an approved concrete slurry mixture, capped, and would remain in place to avoid disturbance to Salt Creek. The jack-and-bore method has been chosen for its ability to replace the stretch of pipe running underneath Salt Creek without disturbing the surface. Temporary construction activities, including vehicle entry and construction personnel access, would be prohibited within the Salt Creek corridor.

The four non-vegetated channels would also be avoided by spanning the replacement pipeline over the channels and providing a 10-foot avoidance buffer from the edge of the channels on either side

(Figures 11 and 11b through 11d). The existing pipeline spans over the four channels and would be replaced by the new pipe in the same locations, avoiding disturbance of the four non-vegetated channels. Temporary construction activities, including vehicle entry and construction personnel access, would be prohibited within the four non-vegetated channels.

Therefore, direct impacts to jurisdictional aquatic resources are less than significant.

**Indirect Impacts.** Most of the indirect impacts to sensitive plant species and sensitive upland vegetation communities described under Sections 3.4.4(a) and 3.4.4(b) also result in potentially significant indirect impacts to jurisdictional aquatic resources. Indirect impacts to jurisdictional aquatic resources can result from generation of fugitive dust, changes in hydrology resulting from construction (including sedimentation and erosion), and exposure to construction-related pollutant discharges. Permanent indirect impacts to jurisdictional aquatic resources from development of the project are potentially significant.

Implementation of MMs BIO-4 and BIO-5 would reduce indirect temporary impacts to jurisdictional aquatic resources through preparing a SWPPP, an approved biologist conducting pre-construction surveys, and implementing standard BMPs and requirements that address erosion and runoff, including the construction-related minimization measures required by the Chula Vista MSCP Subarea Plan, CWA, and NPDES.

**d. Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

**Less than Significant Impact with Mitigation Incorporated.**

**Direct Impacts.** The project site is likely to be used as a wildlife movement corridor because it is surrounded by open space within the Otay Ranch Preserve to the north and south; its proximity to the Otay River corridor approximately 0.25 mile to the south; and the presence of native vegetation communities. The presence of the Otay Water Treatment Plant directly to the east, the Otay Ranch residential development to the north and west, and the South Bay Expressway to the west of the project site are likely to somewhat impede movement for large mammals. However, the open space surrounding the project site has been designated as important habitat connectivity areas within the Otay River Valley and Chula Vista MSCP Subarea Plan and these areas allow for opportunities of significant movement.

As previously discussed, temporary project construction activities would remain within the 100-foot fee ownership corridor that has been previously disturbed by past construction and maintenance of the pipeline. Direct impacts to sensitive wildlife species and the vegetation communities that these species could be occupying while moving through the project site are potentially significant. Upon completion of project construction, the pipeline would be operating passively underground with

periodic, temporary maintenance activity and would not result in potential impacts to wildlife corridors or habitat linkages.

No evidence that the project site functions as a nursery for native species including fish, bats or other mammals was observed during the biological resource surveys. Therefore, direct impacts on native wildlife nursery sites are less than significant.

**Indirect Impacts.** Wildlife movement would be impacted by many of the other indirect effects discussed in Section 3.4.4(a) for impacts to sensitive wildlife species. Temporary construction-related indirect impacts include noise, vibration, lighting, increased human activity, hydrologic and water quality (e.g., chemical pollution, increased turbidity, excessive sedimentation, flow interruptions, and changes in water temperature), and trash and garbage, which can attract predators, such as American crows, common ravens, and coyotes, as well as raccoons and striped skunks. These temporary construction-related impacts would have a potentially significant impact to wildlife movement within regional corridors and habitat linkages during construction.

Implementation of MM BIO-1 would restore temporary impacts to sensitive upland communities and provide off-site restoration for permanent impacts. Restoring these upland vegetation communities that function as habitat and potential wildlife movement corridors and linkages from the project site to off-site habitat areas within the surrounding Otay Ranch Preserve would reduce temporary project construction impacts to less than significant.

Implementation of MMs BIO-4 and BIO-5 would reduce indirect impacts to habitats that function as potential wildlife movement corridors and linkages through preparing a SWPPP, an approved biologist conducting pre-construction surveys and implementing standard BMPs and requirements that address erosion and runoff, including the construction-related minimization measures required by the Chula Vista MSCP Subarea Plan, CWA, and NPDES.

Implementation of MMs BIO-6, Migratory Bird Treaty Act Compliance; BIO-7, Coastal Cactus Wren, Coastal California Gnatcatcher, and Least Bell's Vireo Pre-Construction Surveys; BIO-8, Coastal Cactus Wren Habitat Management; and BIO-9, Quino Checkerspot Butterfly, would reduce impacts to habitats that function as potential wildlife movement corridors and linkages from the project site to off-site habitat areas within the surrounding Otay Ranch Preserve and would reduce direct temporary project construction impacts to less than significant.

**e. Would the project conflict with any applicable policies protecting biological resources?**

**Less than Significant Impact with Mitigation Incorporated.** The project would comply with local policies and ordinances protecting biological resources in the Chula Vista General Plan. Appendix B, Section 3.3, Local, outlines the Chula Vista General Plan goals and policies related to biological resources and implementation of the projects.

As discussed in Section 3.4.4(d), the project would avoid impacts to jurisdictional aquatic resources, thereby complying with the Chula Vista General Plan Objective E1, Policy E1.1, Policy E11.9, and Policy E11.10, regarding protection of aquatic resources in the City of Chula Vista.

As discussed in Sections 3.4.4(a) through 3.4.4(c), the project's potential impacts to sensitive plant and wildlife species and sensitive upland vegetation communities are potentially significant before implementation of MMs. Therefore, with implementation of MMs BIO-1 through BIO-9, impacts to sensitive plant and wildlife species and sensitive vegetation communities would be fully mitigated to less than significant. Implementation of MMs BIO-1 through BIO-9, the project would not conflict with the Chula Vista General Plan Objective E1, Policy E1.1, Objective E11, Policy E11.1, Policy E11.2, Policy E11.6, Policy E11.9, and Policy E11.10, regarding protection of plant and wildlife species and sensitive vegetation communities in the City of Chula Vista.

The projects would be consistent with the conservation goals and objectives outlined in the Chula Vista MSCP Subarea Plan. The project would result in less than significant impacts to biological resources with mitigation incorporated and is therefore compliant with the Chula Vista MSCP Subarea Plan conservation planning goals and policies.

Implementation of the project would not result in conflicts with any local policies or ordinances protecting biological resources, and impacts are less than significant.

**f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

**Less than Significant Impact with Mitigation Incorporated.** As discussed in Appendix B, Section 3.3, the Chula Vista and City of San Diego MSCP Subarea Plans function as comprehensive plans that address biological and ecological diversity by conserving species and associated habitats while allowing approval of development within the City of Chula Vista and City of San Diego. It is the City of Chula Vista's and City of San Diego's policies to comply with the applicable MSCP Subarea Plan in its consideration and approval of development projects. Further, the Chula Vista and City of San Diego General Plans incorporate compliance with the applicable MSCP Subarea Plan in the goals and policies used to guide development in each of the cities (City of Chula Vista 2005a; City of San Diego 2008). The projects' compliance with the Chula Vista and City of San Diego General Plans natural resources goals and policies was previously discussed in Section 3.4.4(e).

The avoidance, minimization, and MMs BIO-1 through BIO-9 proposed in Sections 3.4.4(a) through 3.4.4(d) would reduce potentially significant impacts to sensitive plant and wildlife species, sensitive vegetation communities, and jurisdictional aquatic resources to a less than significant level. Because the projects would not contribute to the loss of sensitive vegetation or sensitive species, the project would comply with the Chula Vista and City of San Diego MSCP Subarea Plans. Therefore, with implementation of project MMs, potentially significant impacts would not occur from conflicts with regional conservation plans.

### 3.4.5 Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Disturb any human remains, including those interred outside of dedicated cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following discussion is based on the Cultural Resources Survey Report prepared by ECORP Consulting, Inc. (ECORP), in October 2018 for the project (Appendix C).

### Impact Analysis

**a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?**

**Less than Significant Impact.** A California Historical Resources Information System records search was requested from the South Coastal Information Center at San Diego State University. The California Historical Resources Information System records search results indicate that 67 cultural resources have been previously recorded within 0.5 mile of the project site. These resources include 55 pre-contact (prehistoric) sites, eight historic-era sites, and four multi-component sites. Two pre-contact archaeological sites and one historic-era site were determined to overlap the pipeline corridor that comprises the project site. The records search indicates that approximately 100 percent of the project site has been previously surveyed for cultural resources at some time in the past (Appendix C).

A review of historic-period maps for the project site and surrounding area was conducted (Appendix C). According to official San Diego County maps spanning from 1872 to 1955, as well as 1903 and 1996 U.S. Geological Survey maps, the project site has remained largely undeveloped since the historic period. Besides ranching and agriculture, known pipeline-related construction activity, and periodic development of the Otay Water Treatment Plant, the project site landscape has remained consistent with minimal disturbance from urban sprawl.

Historical aerial photographs from 1953 to the present were also reviewed (Appendix C). The pipeline tract in which the project is located is visible in all images reviewed. Landscapes surrounding the project site, particularly substantial portions of the Otay River Valley to the south

and the Otay Ranch Preserve surrounding the project site, have remained undeveloped due to protections by the City of San Diego, City of Chula Vista, and County of San Diego.

During field surveys of the project site, the one historic-era site previously recorded in the area was not relocated, and no other evidence of the site was found (Appendix C). Due to the highly disturbed condition of the project site and lack of historic development within the pipeline corridor, historical resources were determined unlikely to occur on the project site. Therefore, impacts to historical resources would be less than significant.

**b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?**

**Less than Significant Impact with Mitigation Incorporated.** Archaeological resources have been documented in the area in and around the project site (Appendix C). Early Holocene archaeological sites in the County occur around bays, sloughs, and coastal valleys that allowed early peoples continued access to aquatic resources. Numerous archaeological deposits dating from the Late Period (Kumeyaay) have been documented along the Otay River Valley, offering evidence of continuous occupation between 1,530 years before present to 300 years before present (Appendix C). The cultural materials found in the Kumeyaay village on a low terrace on the northern shore of Otay River supports the wide-ranging influence and cultural sophistication of the dense populations existing along the beaches, bays, and inland waterways of the County at the time of European contact.

During the field survey conducted by ECORP archaeologists in May 2018, three previously recorded sites overlapped the project site. Two previously recorded pre-contact lithic scatters, P-37-014580 and P-37-014581, were located during the field survey. One newly identified pre-contact lithic flake isolate, OTP-001-I, was documented as well. A total of five artifacts at four points were documented throughout the survey, although previously recorded historic-era trash scatter P-37-013460 was not detected on the project site.

Based on the May 2018 archaeological survey, three pre-contact cultural resources and one historic-era cultural resource were identified on the project site. All resources have been evaluated by the City of San Diego as not eligible for inclusion in the California Register of Historical Resources or the National Register of Historic Places. Therefore, the project is not expected to have an effect on archaeological resources. Although the project site has been thoroughly surveyed, the archaeological resource sensitivity of the project site is high, and there is still a potential for encountering archaeological resources during ground-disturbing activities, which would result in a potentially significant impact. Implementation of MM CR-1 would reduce potential impacts to archaeological resources to a less than significant level.

## Mitigation Measures

**CR-1: Cultural Resources Monitoring.** Due to the potential for uncovering unknown subsurface archaeological resources, including Native American cultural material, cultural resource mitigation monitoring shall be conducted to provide for the identification, evaluation, treatment, and protection of any cultural resources that are affected by or may be discovered during the construction of the project. Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits, the Applicant shall provide written confirmation that a City of Chula Vista-approved cultural monitor has been retained for cultural resource mitigation monitoring. The cultural monitor shall attend all pre-construction meetings. The monitoring shall consist of the full-time presence of a qualified archaeologist and a traditionally and culturally affiliated Native American monitor for all ground-disturbing activities. If subsurface deposits believed to be cultural or human in origin are discovered during construction, all work must halt within a 100-foot radius of the discovery. Using professional judgment, a qualified professional archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for prehistoric and historic archaeologist shall be retained to evaluate the significance of the find and shall have the authority to modify the no-work radius as appropriate. The following notifications shall apply, depending on the nature of the find:

- If the qualified professional archaeologist determines that the find does not represent a cultural resource, work may resume immediately, and no agency notifications are required.
- If the qualified professional archaeologist determines that the find does represent a cultural resource from any time period or cultural affiliation, they shall immediately notify the City of Chula Vista and City of San Diego. The City of Chula Vista shall consult with the City of San Diego and other parties, as deemed appropriate, on a finding of eligibility and implement appropriate treatment measures if the find is determined to be eligible for inclusion in the National Register of Historic Places or California Register of Historical Resources. Work may not resume within the no-work radius until the City of Chula Vista, through consultation as appropriate, determines that the site either (1) is not eligible for the National Register of Historic Places or California Register of Historical Resources or (2) that the treatment measures have been completed to its satisfaction.
- If the find includes human remains or remains that are potentially human, the qualified professional archaeologist shall ensure reasonable protection measures are taken to protect the discovery from disturbance (Assembly Bill 2641). The qualified professional archaeologist shall notify the San Diego County Medical Examiner (per Section 7050.5 of the California Health and Safety Code). The

provisions of Section 7050.5 of the California Health and Safety Code, Section 5097.98 of the California Public Resources Code, and Assembly Bill 2641 shall be implemented. If the San Diego County Medical Examiner determines the remains are Native American and not the result of a crime scene, the San Diego County Medical Examiner shall notify the Native American Heritage Commission, which then shall designate a Native American most likely descendant for the project (Section 5097.98 of the California Public Resources Code). The designated most likely descendant shall have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. If the landowner does not agree with the recommendations of the most likely descendant, the Native American Heritage Commission can mediate (Section 5097.94 of the California Public Resources Code). If no agreement is reached, the landowner must rebury the remains where they will not be further disturbed (Section 5097.98 of the California Public Resources Code). This will also include either recording the site with the Native American Heritage Commission or the appropriate information center, using an open space or conservation zoning designation or easement, or recording a reinternment document with the county in which the property is located (Assembly Bill 2641). Work may not resume within the no-work radius until the lead agency, through consultation as appropriate, determines that the treatment measures have been completed to its satisfaction.

**c. Would the project disturb any human remains, including those interred outside of dedicated cemeteries?**

**Less than Significant Impact with Mitigation Incorporated.** No records indicate that the project site has been used as a formal cemetery; therefore, it is unlikely to contain any known human remains (Appendix C). Due to the previous site disturbance, it is unlikely that unknown human remains would be discovered during project construction; however, it is possible that construction activity could unearth previously unknown vestiges, which would be considered a potentially significant impact. Implementation of MM CR-1 would ensure that human remains are treated with dignity and as specified by law and would reduce significant adverse impacts to less than significant levels.

### 3.4.6 Energy

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Impact Analysis

- a. **Would the project result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?**

**Less than Significant Impact.**

#### Construction Energy Usage

During construction, the project would result in a short-term, temporary increase in energy consumption through the combustion of fossil fuels in construction vehicles, worker commute vehicles, and construction equipment and the use of electricity for temporary buildings, lighting, and other sources. Fossil fuels used for construction vehicles and other energy-consuming equipment would be used during site clearing, grading, trenching, pipe removal and replacement, and on-site restoration. The types of equipment could include gasoline and diesel-powered construction and transportation equipment, including trucks, bulldozers, front-end loaders, and excavation equipment. Other equipment could include construction lighting; field services (office trailers); and electrically driven equipment, such as pumps and other tools.

Limitations on idling of vehicles and equipment and requirements that equipment be properly maintained would result in fuel savings. California regulations (13 CCR 2449[d][3], 2485) limit idling from both on-road and off-road diesel-powered equipment and are enforced by the California Air Resources Board. Also, given the high cost of fuel, contractors and owners have a strong financial incentive to avoid wasteful, inefficient, and unnecessary consumption of energy during construction. Therefore, construction of the project would not result in a significant impact associated with the wasteful, inefficient, and unnecessary consumption of energy.

#### Operational Energy Usage

Operation of the pipeline would not require the use of energy. The pipeline would be a passive, gravity-fed pipeline. Future maintenance operations would be like existing conditions in the area

and would not result in the need for additional maintenance trips. Operational use of energy resources would be less than significant.

**b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?**

**Less than Significant Impact.** As discussed in Section 3.4.6(a), energy consumption during construction of the project would result in a short-term, temporary increase in consumption of fossil fuels from construction-related equipment. The pipeline would be a passive, gravity-fed pipeline, with the only operational emissions related to ongoing maintenance that would be like existing conditions in the area. Adherence to reductions of fossil-fuel use and energy efficiency regulations during both construction and operation, as noted above, would ensure the project would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Therefore, the project would not result in a policy conflict that would result in a significant impact on the environment.

### 3.4.7 Geology and Soils

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Impact Analysis

- a. **Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:**
- i. **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.**

**No Impact.** The purpose of the Alquist-Priolo Earthquake Fault Zoning Act is to mitigate the hazard of surface faulting by preventing the construction of buildings used for human occupancy over an area with known faults. Unlike damage from ground shaking, which can occur at great distances from the fault, impacts from fault rupture are limited to the immediate area of the fault zone where the fault breaks along the ground surface. The project site does not contain, nor is it adjacent to, an Alquist-Priolo Earthquake Fault Zone (DOC 2015). Therefore, impacts from fault rupture are not expected to occur on the project site, and no impacts would arise from implementing the project.

#### **ii. Strong seismic ground shaking?**

**Less than Significant Impact.** The project site, like most of Southern California, is subject to strong ground shaking from seismic events. Consequently, the project site would expose people and/or structures to potential impacts associated with seismic ground shaking. The ground motion characteristics of any future earthquakes in the region would depend on the characteristics of the generating fault, the distance to the epicenter, the magnitude of the earthquake, and the site-specific geologic conditions. Major faults in the region could be a source of a strong seismic-related movement at the project site. The nearest known active fault is the La Nacion fault zone, approximately 5.5 miles west of the project site (DOC 2022b). While the project site could be subjected to severe ground shaking in the event of an earthquake, the site does not have a greater risk than that of surrounding properties. Impacts resulting from seismic ground shaking would be less than significant.

#### **iii. Seismic-related ground failure, including liquefaction?**

**Less than Significant Impact.** Liquefaction is a phenomenon in which a saturated cohesionless soil causes a temporary transformation of the soil to a fluid mass, resulting in a loss of support. Ground failure associated with liquefaction can result in severe damage to structures. The geologic conditions for increased susceptibility to liquefaction are shallow groundwater (less than 50 feet in depth), the presence of unconsolidated sandy alluvium, and strong ground shaking. All three of these conditions must be present for liquefaction to occur. As indicated on Figure 12, Geologic Hazards, from the Chula Vista General Plan, the project site is not within an area of high liquefaction potential (City of Chula Vista 2005a). Additionally, no residential development is proposed; therefore, impacts to people or structures would not occur. Impacts resulting from seismic-related ground failure, including liquefaction, would be less than significant.

#### **iv. Landslides?**

**Less than Significant Impact.** A landslide is defined as the movement of a mass of rock, debris, or earth down a slope (USGS 2008). Landslides are a type of “mass wasting,” which denotes any downslope movement of soil and rock under the direct influence of gravity. The term “landslide” encompasses five modes of slope movement: falls, topples, slides, spreads, and flows. These are further subdivided by the type of geologic material (bedrock, debris, or earth). Debris flows

(commonly referred to as “mudflows” or “mudslides”) and rock falls are examples of common landslide types (USGS 2008). As indicated on Figure 12, the project site is not within an area of high landslide potential (City of Chula Vista 2005a). Additionally, no residential or commercial development is proposed by the project. Therefore, impacts to people or structures involving landslides would not result. Impacts resulting from landslides would be less than significant.

**b. Would the project result in substantial soil erosion or the loss of topsoil?**

**Less than Significant Impact.** Construction of the project would not cause substantial on-site or off-site soil erosion. Before construction begins, the Applicant or contractor would be required to implement standard erosion-control measures and stormwater construction BMPs (through the grading permit process), which would reduce impacts from soil erosion during construction to below a level of significance. Refer to Section 3.4.10, Hydrology and Water Quality, for an additional discussion of potential impacts from erosion. Upon completion of project construction, the operation of the underground pipeline would be passive and not result in soil erosion or loss of topsoil.

**c. Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?**

**Less than Significant Impact.** As discussed previously in Section 3.4.7(a)(iii) and (a)(iv), no active earthquake faults are identified as occurring on or directly adjacent to the project site. The nearest known active fault is the La Nacion fault zone, approximately 5.5 miles west of the project site (DOC 2022b). Additionally, the project does not propose the development of buildings or structures and, therefore, would not expose people or structures to impacts related to seismic ground shaking or be located on an unstable geologic unit. As indicated on Figure 12, the project site is not within an area of high liquefaction potential or within a landslide hazard area (City of Chula Vista 2005a). Therefore, impacts related to on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse would be less than significant.

**d. Would the project be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?**

**Less than Significant Impact.** As indicated in Table 18-1-B of the Uniform Building Code, soils with an expansion potential of 50 or less represent a low expansion potential. Soils documented on the project site contain little or no swelling clay and, therefore, have a low expansion potential (USGS 1989). As such, the project would not be on expansive soils that would create a substantial risk to life or property (USDA 2022). Therefore, impacts related to expansive soil creating substantial direct or indirect risks to life or property would be less than significant.

- e. **Would the project have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?**

**No Impact.** The project involves the replacement of an existing pipeline on the project site. The project does not propose the use of septic tanks or alternative wastewater disposal systems. Therefore, impacts related to soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems would not result from implementation of the project, and no impact would occur.

- f. **Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

**Less than Significant Impact with Mitigation Incorporated.** Paleontological resources are the evidence of once-living organisms as preserved in the rock record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., trackways, imprints, burrows). In general, fossils are greater than 5,000 years old (older than Middle Holocene) and are typically preserved in sedimentary rocks. The probability of discovering paleontological resources depends on the geologic formation being excavated and the depth and volume of the excavation. Sedimentary rocks, such as those found in coastal areas, usually contain fossils. Granite rocks, such as those found in inland areas, usually would not contain fossils. The project site is underlain primarily by middle Eocene Friars Formation (Tf), with a narrow strip of Holocene alluvial deposits (Qya) running north/south underneath Salt Creek (Figure 13, USGS Geologic Map) (USGS 2004). The U.S. Geological Survey describes Eocene Friars Formation (Tf) as nonmarine claystone and sandstone with cobble conglomerate. Holocene alluvial deposits (Qya) are described as unconsolidated to poorly consolidated silt, clay, sand, and gravel generally found along small, active drainage channels (USGS 2004).

Holocene alluvial deposits are generally younger than 10,000 years old. Fossils are usually not found in these deposits in the Coastal Plain Province; however, there is one notable exception in the County of San Diego. Teeth and limb bones of a mammoth were found in floodplain deposits of the Tijuana River Valley. The floors of Otay Valley, Mission Valley, Rose Canyon, Sorrento Valley, and San Dieguito Valley are the sites where later Quaternary alluvial deposits are found. Because of their young age, they are assigned low paleontological resource sensitivity (City of San Diego 2008).

The Friars Formation is rich in vertebrate fossils, especially terrestrial mammals such as primates and rodents. Well-preserved remains of marine microfossils and macroinvertebrates and remains of fossil leaves have been recovered from the Friars Formation. The formation crops out from Mission Valley north to Rancho Bernardo to the east and Rancho Santa Fe to the west. To the south, the formation extends from Tecolote Canyon east to Santee and Lakeside. This formation is given high paleontological resource sensitivity (City of San Diego 2008).

As further discussed in Section 4.5.4.4.3 of the Chula Vista General Plan Program EIR, substantial trenching or grading at depths greater than 10 feet and a total cut amount of more than 1,000 cubic yards within areas of high paleontological sensitivity could result in a significant impact on paleontological resources (City of Chula Vista 2005b). Trenching, grading, and approximately 5,000 cubic yards of cut required for project construction would have the potential to impact the Friars Formation, which could have a significant adverse effect on paleontological resources. However, the project involves the replacement of an existing pipeline within the City of San Diego utility right-of-way area previously disturbed by the construction of the original pipeline. During implementation of the jack-and-bore construction methods used to tunnel under and avoid Salt Creek, there is a potential for disturbance of previously undiscovered paleontological or geological resources. With implementation of MM GEO-1, this potentially significant impact would be reduced to a less than significant level.

### **Mitigation Measures**

**GEO-1: Qualified Paleontologist.** Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits, the Applicant shall provide written evidence that a qualified paleontologist has been retained to monitor all earth-disturbing activities related to the implementation of the jack-and-bore construction methods under Salt Creek. Before the release of the grading bond, a Post-Construction Monitoring Report shall be prepared and submitted to the Development Services Director (or their designee). All fossil materials recovered during mitigation monitoring shall be cleaned, identified, cataloged, and analyzed in accordance with standard professional practices. The results of the fieldwork and laboratory analysis shall be included in the Post-Construction Monitoring Report, and the entire collection shall be transferred to an approved facility.

### 3.4.8 Greenhouse Gas Emissions

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The following discussion is based on the Air Quality and GHG Emissions Analysis prepared by Harris & Associates in November 2018 and updated in December 2020 for the project (Appendix A).

### Impact Analysis

- a. **Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**

**Less than Significant Impact.**

#### Existing Conditions at Project Site

The project site currently consists of the existing pipeline corridor within an open space area (City of Chula Vista 2005a). As it currently exists, the project is a passive, gravity-fed water line and is not a source of GHG emissions. GHG emissions from the existing pipeline were not calculated.

#### Threshold of Significance

The City of Chula Vista and City of San Diego have both adopted a Climate Action Plan (CAP), which are the applicable plans adopted for reducing GHG emissions. The City of San Diego CAP was revised in June 2016 and meets the requirements under Section 15183.5 of the CEQA Guidelines as a qualified plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects. Consistency with the City of San Diego CAP is determined through the CAP Consistency Checklist, the first step of which is to assess a project’s consistency with the growth projections in the CAP. If a project is consistent, it can move forward to Step 2 of the CAP Consistency Checklist, which involves determining consistency with individual CAP GHG reduction strategies. The Chula Vista CAP was adopted in September 2017 and does not meet the requirements of a qualified CAP. Both CAPs focus on ongoing annual operational GHG emissions rather than short-term construction emissions and do not include requirements for reducing construction emissions. In accordance with the City of San Diego CAP requirements, the project would result in a significant impact if it would exceed growth projections

in either city or result in annual operation GHG emissions that would be inconsistent with either CAP emissions projections or GHG reduction goals.

### **Greenhouse Gas Emissions Impacts**

Project construction emissions were estimated using CalEEMod, Version 2016.3.2, using the same construction assumptions outlined in Section 3.4.3, Air Quality. Construction GHG emissions include emissions from site preparation, heavy construction equipment, and worker trips. Estimated GHG emissions from construction of the project were estimated to be 416 metric tons of carbon dioxide equivalent (CO<sub>2</sub>e). Project construction would occur over approximately one year and would cease following construction. Thus, construction of the project would not result in ongoing annual GHG emissions. Following construction, the project pipeline would be passive and no new operational GHG emissions would be generated by the project. The replacement pipeline would serve, and would not support growth beyond, planned development. The project does not propose changes to the existing land use (open space). As a result, the project would not exceed growth projections in the Chula Vista CAP or City of San Diego CAP and would not result in annual GHG emissions that would interfere with the cities' ability to achieve GHG reduction targets. Additional steps in the City of San Diego CAP Consistency Checklist are not applicable to the project because no new structures or ongoing sources of GHG emissions are proposed. The project would not result in a cumulatively considerable global climate change impact.

**b. Would the project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?**

**Less than Significant Impact.** See discussion in Section 3.4.8(a).

### 3.4.9 Hazards and Hazardous Materials

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. For a project located within an airport land-use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### Impact Analysis

**a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

**No Impact.** The project involves replacing the existing underground water pipeline on the project site. The project would not routinely transport, use, or dispose of hazardous substances. Therefore, implementation of the project would not expose on-site users or the surrounding community to any health hazards from hazardous materials, and no impact would occur.

**b. Would the project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?**

**Less than Significant Impact.** As discussed previously in Section 3.4.9(a), operation of the project would not result in the generation, storage, disposal, or transport of hazardous materials; however, equipment used during construction of the project has the potential to release oils, greases, solvents, and other finishing materials through accidental spills. Spill or upset of these materials could have the potential to impact surrounding land uses; however, federal, state, and local regulations are in place to reduce the effects of such potential hazardous materials spills. The Chula Vista Fire Department enforces city, state, and federal hazardous materials regulations for the City of Chula Vista (City of Chula Vista 2022). City of Chula Vista regulations include securing of hazardous materials containers to prevent spills, and spill containment and mitigation. In addition, the State Fire Marshal enforces oil and gas pipeline safety regulations, and the federal government enforces hazardous materials transport pursuant to its interstate commerce regulation authority (State Fire Marshal 2022). As standard permitting conditions, compliance with these requirements is mandatory and would minimize the potential for the accidental release or upset of hazardous materials, ensuring public safety. Therefore, the project would comply with the previously referenced requirements and would not result in the creation of significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Therefore, impacts would be less than significant.

**c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?**

**No Impact.** There are no existing or proposed schools within 0.25 mile of the project site. As noted in Section 3.4.9(a), the project would not generate, store, dispose of, or transport quantities of hazardous substances during operation. As discussed in Section 3.4.9(b), the project would comply with the applicable City of Chula Vista and State Fire Marshal hazardous materials storage and transport requirements during construction. Therefore, no impacts to an existing or proposed school would result from implementation of the project.

**d. Would the project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?**

**No Impact.** California Government Code, Section 65962.5, details the requirements of the California Department of Toxic Substances Control to compile and maintain a list of hazardous waste facilities, lands designated as hazardous, underground storage tanks, and all others subject to corrective action pursuant to the California Health and Safety Code (CalEPA 2022). This list, referred to as the Cortese List, is found in a report in California Department of Toxic Substances Control's EnviroStor database (DTSC 2022). The project site is not listed on a search of the Cortese List database, and there are no active or open cases found in the database search of properties within a 0.5-mile range of the project site. Other databases were searched through the State Water Resources Control Board's GeoTracker website, such as leaking underground storage tanks, and no active or open cases were found on the GeoTracker site (SWRCB 2022). Therefore, no impact related to listed hazardous material sites would occur.

- e. Would the project for a project located within an airport land-use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard or excessive noise for people residing or working in the project area?**

**No Impact.** Brown Field Municipal Airport is approximately three miles southwest of the project site and outside of Review Area 2 of the Brown Field Municipal Airport Influence Area. Review Area 2 consists of locations within the airspace protection and/or overflight notification areas. Limits on the heights of structures, particularly in areas of high terrain, are the only restrictions on land uses within Review Area 2. Furthermore, Review Area 2 is outside of the area that encompasses locations exposed to aircraft noise levels of 60 dB s or greater (San Diego County Airport Land Use Commission 2010). As the project is outside of the Review Area 2, it would result in no impact or safety hazard for people residing or working on the project site.

As discussed further in Section 3.4.13, Noise, construction activities would be short-term in nature. Noise levels during construction are anticipated to be below noise limits established in the Chula Vista General Plan and Noise Ordinance and, therefore, would not result in safety hazards and excessive noise. Additionally, upon completion of construction activities, no new sources of project noise would occur as no operational component of the pipeline replacement would generate noise. Therefore, impacts related to safety hazards and excessive noise for people residing or working on the project site would be less than significant.

- f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

**Less than Significant Impact.** Construction of the project would not require the closure of any public streets or roadways as existing maintenance access roads would be used during construction and for scheduled maintenance activities. Therefore, implementation of the project would not impede access of emergency vehicles to the project site or any surrounding areas. Impacts to emergency response would be less than significant.

- g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildland fires?**

**Less than Significant Impact with Mitigation Incorporated.** The project site is within a Very High Fire Hazard Severity Zone (County of San Diego 2022). The project is within largely undeveloped, disturbed, and open space natural habitat areas. The project includes replacing an existing primarily underground water pipeline and does not propose to alter existing buildings or construct new buildings or roads. However, the project would be constructed in an area that is largely undeveloped, and potentially flammable materials, such as brush, grass, or trees, could pose a risk of wildland fires during construction. Construction activities associated with the project could expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires. Impacts would be potentially significant.

Once replacement of the pipeline is complete, only City of San Diego employees would be occasionally working at these facilities, so the risk of exposure to people would be low. Therefore, project operation would not expose people or structures to a significantly greater risk of loss, injury, or death involving wildland fires, and impacts would be less than significant.

## **Mitigation Measures**

Implementation of MMs HAZ-1 and HAZ-2 would reduce wildfire impacts during construction.

**HAZ-1: Maintain Construction Area Clear of Combustible Materials.** During construction, the contractor shall ensure that staging areas and areas slated for construction using spark-producing equipment shall be cleared of combustible vegetation or other materials that could serve as fire fuel. Vegetation clearing shall be coordinated with the project's qualified biologist before removal (Mitigation Measure BIO-5). The contractor shall keep these areas clear of combustible materials to maintain a firebreak. Any construction equipment that normally includes a spark arrester shall be in good working order. This includes but is not limited to vehicles, heavy equipment, and chainsaws. This requirement shall be included on individual project Construction Plans and be submitted to the City of San Diego Development Services Department for review before approval of final design.

**HAZ-2: Provide Accessible Fire Suppression Equipment.** Work crews shall be required to have sufficient fire suppression equipment readily available to ensure that any fire resulting from construction activities is immediately extinguished. Off-road equipment using internal combustion engines shall be equipped with spark arrestors. This requirement shall be included on individual project Construction Plans and be submitted to the City of San Diego Development Services Department for review before approval of final design.

### 3.4.10 Hydrology and Water Quality

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i. Result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv. Impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Impact Analysis

### a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

**Less than Significant Impact with Mitigation Incorporated.** A number of federal and state laws have been established to assure adequate planning, implementation, management, and enforcement of water quality control efforts. Federal water quality legislation includes the CWA and the National Environmental Policy Act. California statutes and administrative laws that are applicable to water quality include but are not limited to the California Water Code; CEQA; California Code of Regulations; and other codes, such as the California Health and Safety Code, California Fish and Game Code, and California Public Resources Code. The U.S. Army Corps of Engineers and the

San Diego Regional Water Quality Control Board implement federal and state laws pertaining to water quality in the area. The primary issues addressed by the San Diego Regional Water Quality Control Board include leaking fuel storage tanks, illegal discharges of human or animal waste, and the dumping of waste oils and other hazardous liquids into ground and surface water.

The City of Chula Vista is required to comply with all requirements of the NPDES. The NPDES is a part of the CWA amendments of 1992 and requires local government agencies and major private industries to take practical measures in reducing pollution discharges into water bodies. Compliance with the requirements of the NPDES would ensure that water quality would not be degraded by the project.

The project proposes the replacement of 4,000 linear feet of existing 40-inch steel pipe with 54-inch steel pipe in the same underground location. The project alignment passes entirely within the 100-foot corridor owned in fee by the City of San Diego. Construction of the project would involve excavation of a temporary trench and the placement of approximately 3,700 cubic yards of fill for pipe bedding and backfill of the trench. Proposed work at the Salt Creek crossing would be directed under the creek using trenchless, tunneling methods to avoid all impacts to Salt Creek. To support the new pipeline, remedial grading or compacting may be necessary to compress loose soils where they exist on the project site. Approximately 5,000 cubic yards of material would be exported from the site. Upon completion of the project, the replacement pipe would be buried within the same trench with soil and fill material consistent with the existing conditions.

Construction activities associated with the project are not expected to violate any water quality standards or waste discharge requirements. During construction, gasoline, diesel fuel, lubricating oil, grease, and solvents may be used on the project site. Although only small amounts necessary to maintain the construction equipment would be on site at any one time, accidental spills of these materials during construction could potentially result in surface water and groundwater quality impacts. In addition, soil loosened during trenching or miscellaneous construction materials or debris could also degrade water quality if mobilized and transported off site by water flow. Because construction activities may occur during the rainy season or during a storm event, construction of the project could result in impacts to water quality without implementation of appropriate BMPs. Due to the potential for impacts to water quality during construction, MMs BIO-4, Stormwater Pollution Prevention Plan, and HYDRO-1, Best Management Practices, would be implemented to reduce impacts related to construction activities to less than significant levels.

## Mitigation Measures

**HYDRO-1: Best Management Practices.** Best management practices shall be incorporated into the final construction and design plans and shall include but not be limited to the following:

- Construction vehicles shall be adequately maintained and equipped to minimize or eliminate fuel spillage. Equipment maintenance work shall occur off site or within the designated construction staging area.
- Any construction materials that need to be temporarily stockpiled or equipment or supplies that need to be stored on site shall be kept within the construction staging areas and shall be covered when not in use.

**b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?**

**Less than Significant Impact.** Construction activities associated with the project would not require dewatering or use of well or groundwater sources. Therefore, construction activities are not expected to affect groundwater supplies. Additionally, the project is not expected to encounter groundwater during trenching activities and would not involve permanent pumping of groundwater because no construction or operational phase of the project would require the direct use of groundwater supplies. Therefore, the project would not substantially deplete groundwater supplies or directly result in a net deficit in aquifer volume. Should groundwater be encountered during construction, further environmental review would be required to assess potential impacts. Impacts to groundwater supplies as a result of project implementation would be less than significant.

**c. Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:**

**i. Result in substantial erosion or siltation on- or off-site?**

**Less than Significant Impact with Mitigation Incorporated.** The project proposes the replacement of a pipeline that passes entirely within the 100-foot corridor owned in fee by the City of San Diego. However, as discussed in Section 3.4.4(c), the pipeline replacement would require crossing Salt Creek and the four non-vegetated channels. The project has been designed to avoid impacting on-site jurisdictional aquatic resources, including Salt Creek and the four non-vegetated channels (Figures 11 and 11a through 11d). Salt Creek would be avoided by using the jack-and-bore horizontal boring method during pipeline replacement activities (Figures 11 and 11a). The replacement pipeline would be tunneled via the jack-and-bore method parallel to the existing pipeline with a 60-foot avoidance buffer on either side of the creek. Upon completed installation of the replacement pipeline, the existing pipeline underneath Salt Creek would be filled with an approved concrete slurry mixture, capped, and remain in place to avoid disturbance of Salt Creek.

The entrance pits for the jack-and-bore would be dug within the 100-foot corridor. No fill or rock material would be placed into the bed of Salt Creek; therefore, no alterations to the existing stream would occur. The four non-vegetated channels would also be avoided by spanning the replacement pipeline over the channels and providing a 10-foot avoidance buffer from the edge of the channels on either side (Figures 11 and 11b through 11d). The existing pipeline spans over the four channels and would be replaced by the new pipe in the same locations, avoiding disturbance of the four non-vegetated channels. Furthermore, there would be no change in the on-site drainage patterns following construction. Temporary erosion impacts during construction of the project would be prevented through implementation of MMs BIO-4 and HYDRO-1. Fill material would be used to backfill trenched areas (see Section 3.4.10[a]). Fill material would be used to backfill any areas that required trenching. The soil would then be hydro-seeded with a native plant seed mix. Therefore, the project would result in less than significant impacts related to on- or off-site erosion or siltation.

**ii. Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite?**

**Less than Significant Impact with Mitigation Incorporated.** As discussed in Section 3.4.10(c)(i), implementation of MM BIO-4 would prevent erosion and surface runoff during construction. Once project construction is complete, ground surface areas disturbed during construction would be restored to their previous condition and function, avoiding any increases in surface runoff that may result in on- or off-site flooding. Additionally, as discussed in Section 3.4.4(b), impacts to sensitive Diegan coastal sage scrub and non-native grassland vegetation communities would be reduced to less than significant with implementation of MM BIO-1, which would restore temporary impacts to sensitive upland communities through on-site revegetation and provide off-site restoration for permanent impacts. Therefore, project impacts related to increases in surface runoff and on- and off-site flooding risk would be less than significant.

**iii. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

**Less than Significant Impact with Mitigation Incorporated.** As discussed in Sections 3.4.10(c)(i) and 3.4.10(c)(ii), the project would not result in significant impacts related to runoff or the discharge of polluted runoff with implementation of MMs HYDRO-1 and BIO-1. Therefore, impacts related to runoff exceeding the stormwater drainage capacity or discharging polluted runoff as a result of project implementation would be less than significant.

**iv. Impede or redirect flood flows?**

**No Impact.** The project includes replacement of an existing underground pipeline and does not propose the construction of any aboveground structures that would impede or redirect flood flows.

Therefore, no impact related to impeding or redirecting flood flows would result from implementation of the project.

**d. Would the project, in flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?**

**No Impact.** The project site is approximately 0.5 mile from the Lower Otay Lake, which would have a potential to fail and flood the project site in an extreme seismic event. However, as indicated on Figure 14, Flood and Dam Inundation Hazards, in the Chula Vista General Plan, the project site is not within an area of high flood hazard or dam inundation potential (City of Chula Vista 2005a). As previously mentioned, the project would not include the construction of housing or other structures; therefore, it would not place housing or structures within a 100-year flood hazard area. No impacts related to flood hazard and resulting release of pollutants would occur.

Given the distance between the project site and the coast (approximately 10 miles) and the site's elevation above sea level (approximately 265 feet to approximately 600 feet above mean sea level), the potential for damage due to tsunamis (seismically induced waves) is considered remote. According to the Tsunami Inundation Map (DOC 2022c), the site is not within a tsunami inundation area. Although the site is near the Lower Otay Lake, as discussed previously, the project site is not within an area of high flood hazard. Therefore, the possibility of earthquake-induced flooding due to seiches is also negligible. For these reasons, no impacts related to tsunami or seiche and resulting release of pollutants would occur.

**e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?**

**Less than Significant Impact with Mitigation Incorporated.** As discussed previously in Section 3.4.10(a), implementation of MM HYDRO-1 would reduce any potential impacts related to water quality from project construction activities to less than significant levels and, therefore, would not conflict with or obstruct implementation of a Water Quality Control Plan. As discussed in Section 3.4.10(b), the project would not result in significant impacts to groundwater or groundwater recharge, and therefore, the project would not conflict or obstruct with a sustainable groundwater management plan. Impacts related to conflict or obstruction with a Water Quality Control Plan or Sustainable Groundwater Management Plan as a result of project implementation would be less than significant.

### 3.4.11 Land Use and Planning

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Impact Analysis

### a. Would the project physically divide an established community?

**No Impact.** The project proposes the replacement of an existing underground pipeline. The project lies within a 100-foot corridor owned in fee by the City of San Diego. The pipeline replacement has been proposed within predominantly undeveloped, disturbed and open space natural habitat areas. The project site is between the Otay Water Treatment Plant and the Salt Creek/Village 10 parcel boundary, 4,000 feet to the west, and no residential communities occur within one mile of the project site.

The project would not introduce new permanent aboveground structures or roadways that would act as barriers to an established community. Temporary work areas would be restored to pre-construction conditions. The project would not introduce aboveground features that are not already present on the project site. As a result, construction of the project would not physically divide an established community, and no impacts would result.

### b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

**Less than Significant Impact.** As discussed in Section 3.4.11(a), the project proposes the replacement of an existing underground pipeline and would not introduce new permanent aboveground structures that would change or conflict with the current land use or zoning designation. The project is considered a high-priority capital improvement project because it is currently not in service and needs replacement. Segment A6 of Otay Pipeline 2 was originally constructed in 1958 to convey water from the Otay Water Treatment Plant to the users west and north of the treatment plant. The project would replace and upsize this pipeline to handle anticipated future water flows from the treatment plant to the east. Additionally, the project would not conflict with the intended use of the properties or surrounding land uses. The project would comply with the Chula Vista General Plan and the Chula Vista MSCP Subarea Plan, which are discussed in detail in the following subsections.

## Chula Vista General Plan

The Chula Vista General Plan Land Use and Transportation Element Policy 13.2 is to “continue to implement the City’s planned open space network.” The project would cross under Salt Creek and would be located within the Otay Ranch Preserve in the Salt Creek parcel of the Chula Vista MSCP Subarea Plan. However, as described in Sections 3.4.4(b) and 3.4.4(c), the project has been designed to avoid impacts to Salt Creek, and all construction activity would be limited to the 100-foot City of San Diego pipeline corridor.

The project site has an Open Space designation in the Chula Vista General Plan. Zoning for the project site is defined in the Chula Vista General Plan as Open Space (O) (City of Chula Vista 2005a). Project implementation would not conflict with existing land use and zoning designations for the site, and impacts would be less than significant.

The surrounding land uses include open space, light industrial, and residential. The project is located within the Otay Ranch Preserve. The Otay Ranch Preserve is managed by the County and the City of Chula Vista. The parcel immediately west of the site, Village 10, is planned for residential development. East of the site lies the Otay Water Treatment Plant and Lower Otay Lake. Otay River is south of the project site and functions as the outlet for Salt Creek to the north. Southeast of the project site are the East Mesa Juvenile Detention Facility and Richard J. Donovan Correctional Facility, which are the nearest full-scale developments. Residential land uses are to the far north with the nearest housing development approximately one mile away. Land uses surrounding the project site, including their respective Chula Vista General Plan land use and zoning designations, are shown in Table 6 (City of Chula Vista 2005a).

**Table 6. Surrounding Land Uses**

Direction	Land Use	Chula Vista General Plan Land Use Designation	Zoning Designation
North	Open Space/Preserve	Open Space	O (Open Space)
East	Public and Quasi-Public	Public and Quasi-Public	PQ (Public and Quasi-Public)
South	Open Space/Preserve	Open Space	O (Open Space)
West	Open Space/Preserve	Open Space	O (Open Space)

**Sources:** City of Chula Vista 2005a; City of Chula Vista 2020.

As shown in Table 6, the project would be consistent with the existing land use designations and zoning surrounding the project site. The project would not alter the existing use of the project site, which currently has a pipeline. With compliance with the applicable standards, policies, and designations in Chula Vista General Plan and the Zoning Ordinance, the project would be compatible with the existing uses in the vicinity, and impacts would be less than significant.

## **Habitat Conservation Plan or Natural Community Preservation Plan**

The Chula Vista MSCP Subarea Plan was approved on May 13, 2003 (City of Chula Vista 2003). The Chula Vista MSCP Subarea Plan is a policy document through which the MSCP Subregional Plan is implemented within the City of Chula Vista's jurisdiction. The City of Chula Vista's preserve system would eventually encompass approximately 5,000 acres of the City of Chula Vista's most sensitive open space areas. In addition, another approximately 4,200 acres outside the City of Chula Vista's jurisdiction would be preserved as a result of development occurring within the City of Chula Vista's urban boundaries.

Regarding Otay Ranch Preserve, in 1993 the County and City of Chula Vista approved the "hardline" boundary that was originally established by the Otay Ranch Resource Management Plan. This "hardline" boundary was incorporated into the South County Segment of the County Subarea Plan. The 11,375-acre Otay Ranch Preserve was then incorporated into the MSCP County Subarea Plan as reflected in, among other documents, the MSCP County Subarea Plan Implementing Agreement. The project site is located within the Otay Ranch Preserve (Figure 2); however, with mitigation for impacts on habitats and covered sensitive species to MSCP standards, the project would be in compliance with the MSCP and, as a result, would not be in conflict with the MSCP. Implementation of MMs BIO-1 through BIO-9 would adequately reduce impacts on habitats and covered species to standards consistent with the MSCP. Therefore, the project would have a less than significant impact on Habitat Conservation Plan or Natural Community Preservation Plan.

### 3.4.12 Mineral Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Impact Analysis

**a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

**No Impact.** The California Department of Conservation’s Division of Mine Reclamation and the California Geological Survey do not identify the project site as an area with high potential for aggregate or mineral resources (DOC 2022c). In addition, the project site is surrounded by the Otay Ranch Preserve in the Salt Creek parcel of the Chula Vista MSCP Subarea Plan and the Otay Water Treatment Plant and Lower Otay Lake. These land uses are not be likely to be mined for mineral resources. Therefore, the project would not result in the loss of availability of a known mineral resource valuable to the region and the state, and no impact would result.

**b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

**No Impact.** The Chula Vista General Plan does not identify the project site as a locally important mineral resource recovery site. As discussed in Section 3.4.12(a), the project site is surrounded by the Otay Ranch Preserve and Otay Water Treatment Plant, which are not identified as mineral resource recovery sites. Therefore, the project would not result in the loss of availability of a locally important mineral resource recovery site, and no impact would result.

### 3.4.13 Noise

Would the project result in:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or Noise Ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Impact Analysis

- a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or Noise Ordinance, or applicable standards of other agencies?**

**Less than Significant Impact with Mitigation Incorporated.** Noise associated with the project would include short-term construction noise and may temporarily impact nearby sensitive receptors, including sensitive wildlife that occur in the Otay Ranch Preserve. The residences north of Hunte Parkway, considered sensitive receptors, are located more than one mile north of the project site and would be unlikely to be impacted by temporary construction noise from the project. During construction, noise generated by construction equipment would occur with varying intensities and durations. All construction activity would comply with the City of Chula Vista's and City of San Diego's allowable hours for construction between the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday. Consistent with both cities' Noise Ordinances, construction would not occur on Sundays and holidays. This temporary increase in ambient noise levels in the project vicinity would have the potential to exceed the maximum acceptable noise threshold of 70 decibel (dB) for community parks as denoted in the Chula Vista General Plan (City of Chula Vista 2005a, Table 9-2) or the City of San Diego's adopted Noise Ordinance threshold of 75 A-weighted decibel (dBA) equivalent continuous sound level (Leq) (City of San Diego 2010). To ensure impacts remain at a level of less than significant, the following mitigation shall be implemented.

## Mitigation Measures

**NOI-1: Construction Noise.** Prior to construction activities, the City of Chula Vista shall ensure the following:

- Construction equipment, fixed or mobile, shall be outfitted with properly operating and maintained mufflers.
- Construction noise reduction methods such as shutting off idling equipment, installing temporary acoustic barriers around stationary construction noise sources, maximizing the distance between construction equipment staging areas and occupied residential areas, and using electric air compressors and similar power tools rather than diesel equipment, shall be used where feasible.
- During construction, stationary construction equipment shall be located such that emitted noise is directed away from or shielded from sensitive noise receivers.
- During construction, stockpiling and vehicle staging areas shall be located as far as practical from noise-sensitive receptors.
- Construction shall not occur outside the hours of 7:00 a.m. and 7:00 p.m., Monday through Saturday. Construction shall be prohibited on Sundays and federal holidays.

The existing noise environment at the project site is typical of an open space area; the only source of significant noise on the project site is the Otay Water Treatment Plant within 0.5 mile of the project site. Noise-sensitive receptors (i.e., land uses associated with indoor and/or outdoor activities that may be subject to stress and/or significant interference from noise) typically include residential uses, hotels, hospitals, nursing homes, sensitive wildlife habitat, educational facilities, and libraries. Nearby noise-sensitive receptors include sensitive wildlife species occupying habitat along Salt Creek and in the surrounding Otay Ranch Preserve. Additionally, the project site is designated as Open Space and Open Space Preserve in the Chula Vista General Plan (City of Chula Vista 2005a), which sets community noise equivalent level standards for a variety of land uses, and the Chula Vista Noise Ordinance sets exterior noise limits. Because construction activities would be short term and low intensity in nature, noise levels during construction are anticipated to be below noise limits established in the Chula Vista General Plan and Noise Ordinance. In addition, on-site noise reduction/attenuation techniques shall be incorporated, as appropriate, to avoid impacts to breeding coastal cactus wren, coastal California gnatcatcher, and least Bell's vireo from elevated construction noise levels. Moreover, upon completion of construction activities, no new sources of noise would occur as no operational component of the pipeline replacement would generate noise. Therefore, project impacts related to the generation of a temporary increase in noise levels would be less than significant with mitigation incorporated.

The project would not introduce a noise-sensitive land use into an area with excessive ambient noise levels. It would not generate new sources of operational or vehicular noise related to pipeline maintenance. The project is not anticipated to cause a significant permanent increase in ambient

noise levels because operation of the project would be identical to existing conditions and would not generate new sources of operational or vehicular noise.

## **Salt Creek**

Construction for the project would occur immediately adjacent to sensitive biological resources along Salt Creek. The City of San Diego and City of Chula Vista have significance thresholds for sensitive biological resources of 60 dBA Leq and 65 dBA Leq, respectively (City of San Diego 2008; City of Chula Vista 2005a). It is estimated that each of the construction equipment pieces alone would generate noise levels above the 60 dBA Leq significance threshold, and the total noise level from all of the pieces of equipment operating simultaneously would be above the 60 dBA Leq significance threshold. Because the sensitive biological resources are within 150 feet of the project site, it can reasonably be assumed that temporary construction noise impacts would have a significant impact on nesting birds if construction were to occur during the avian breeding season.

Implementation of MMs BIO-5 through BIO-9 would minimize impacts to sensitive biological resources from temporary construction noise to a less than significant level. In addition, implementation of MMs BIO-5 and BIO-6 would reduce potential impacts on nesting birds of temporary or periodic ambient noise levels to a less than significant level.

As further explained below, groundborne vibration levels during project construction are expected to have a less than significant impact on nearby receptors; however, temporary project construction noise could be significant. The MMs described in detail below would reduce temporary noise impacts from the project to a less than significant level.

### **b. Would the project result in the generation of excessive groundborne vibration or groundborne noise levels?**

**Less than Significant Impact.** Groundborne vibration is typically attenuated over short distances. Various types of heavy equipment would be used during the construction phase of the project. Grading and excavation could result in perceptible vibrations or groundborne noise. However, these impacts would be temporary, and no residential properties are situated adjacent to the project site. The nearest residential development is approximately 1.2 miles to the northwest along Hunte Parkway and would be unlikely to be impacted by temporary construction vibration from the project. Thus, potential vibration impacts would be less than significant.

Furthermore, the project itself would not involve activities that generally generate groundborne vibrations. Operational activities may include pipeline maintenance and monitoring. As such, the project would not generate an excessive, significant level of operational groundborne vibration or noise.

### **c. Would the project, for a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels?**

**Less than Significant Impact.** Brown Field Municipal Airport is approximately three miles southwest of the project site. The airport accommodates both general aviation aircraft and military aircraft.

The project site does not fall within the Airport Influence Area and the 60 dB Community Noise Equivalent Level noise contour, as illustrated on Figure III-1 in the Brown Field Municipal Airport Land Use Compatibility Plan (San Diego County Airport Land Use Commission 2010). Additionally, the project would not result in permanent operation-related noise sources following construction and, therefore, would not result in the exposure of people to excessive noise levels as a result of project implementation. Impacts would be less than significant. In addition, the project is not within the vicinity of a private airstrip. No impact to a private airstrip would result.

### 3.4.14 Population and Housing

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Impact Analysis

- a. Would the project induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?**

**No Impact.** The project includes the replacement of an existing underground pipeline in the same underground location. This pipeline segment was originally constructed in 1958 to convey water from the Otay Water Treatment Plant to the users west and north of the treatment plant. It is currently not in service and needs replacement. The project would replace and upsize this pipeline to handle anticipated future water flows from the treatment plant to the east. The project would accommodate existing development and would not directly generate population growth by creating new homes or businesses. Furthermore, the project would not result in indirect population growth by extending utilities or services into an undeveloped area. Therefore, the project would not directly or indirectly induce substantial unplanned population growth in the City of Chula Vista, and no impact would result.

- b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?**

**No Impact.** The project would not displace substantial numbers of existing housing or substantial numbers of people. The project site is undeveloped and would not demolish any existing housing that would require the construction of replacement housing. Therefore, no impacts related to displacing existing people or housing or the construction of replacement housing would result.

### 3.4.15 Public Services

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Impact Analysis

- a. **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:**

#### Fire protection?

**No Impact.** The project includes replacement of an existing underground pipeline. Operation of the project would be passive and would not place increasing demands on the local fire protection services. The project does not involve the construction of new homes or buildings or require new or physically altered government facilities. Therefore, no impacts to fire protection services would result from implementation of the project.

#### Police protection?

**No Impact.** The project includes replacement of an existing underground pipeline. Operation of the project would be passive and would not place increasing demands on the local police protection services. The project does not involve the construction of new homes or buildings or require new or physically altered government facilities. Therefore, no impacts to police protection services would result from implementation of the project.

**Schools?**

**No Impact.** The project includes replacement of an existing underground pipeline. Operation of the project would be passive and would not place increasing demands on the local schools or educational facilities. The project does not involve the construction of new homes or buildings or require new or physically altered government facilities. Therefore, no impacts to schools would result from implementation of the project.

**Parks?**

**No Impact.** The project includes replacement of an existing underground pipeline. Operation of the project would be passive and would not place increasing demands on the local parks or recreation facilities. The project does not involve the construction of new homes or buildings or require new or physically altered government facilities. Therefore, no impacts to parks would result from implementation of the project.

**Other public facilities?**

**No Impact.** The project includes replacement of an existing underground pipeline. Operation of the project would be passive and would not place increasing demands on the local public facilities. The project does not involve the construction of new homes or buildings or require new or physically altered government facilities. Therefore, no impacts to public facilities would result from implementation of the project.

### 3.4.16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Impact Analysis

- a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?**

**No Impact.** The project includes replacement of an existing underground pipeline. As discussed in Section 3.4.15, Public Services, operation of the project would be passive and would not place increasing demands on the existing neighborhood and regional parks or other recreational facilities. The project does not involve the construction of new homes or buildings that would introduce additional park and recreational facility users. Therefore, no impacts to existing neighborhood and regional parks or other recreational facilities would result from implementation of the project.

- b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?**

**No Impact.** The project includes replacement of an existing underground pipeline. As discussed in Section 3.4.16(a), the project would not result in an increase in population that would result in increased use of or need to expand existing recreational facilities. Furthermore, the project does not include construction or expansion of recreational facilities. Therefore, no impacts related to the use or construction of recreational facilities would result from implementation of the project.

### 3.4.17 Transportation

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

## Impact Analysis

### a. Would the project conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

**Less than Significant Impact.** The project includes replacement of an existing underground pipeline. As discussed in detail in the following subsections, construction and operation of the project would not conflict with any programs, plans, ordinances, or policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.

### Construction Impacts

Short-term construction traffic impacts would result from hauling demolition material away from the project site, exporting fill from the site, delivering construction materials and supplies to the site, and transporting construction personnel to and from the site. During construction and operation, the project would use existing access roads currently used and maintained by the City of Chula Vista and SDG&E for regular maintenance activities in the area. In addition, no lane closures on surrounding public roadways would be required during construction, resulting in no change to the level of service to the surrounding circulation system. Therefore, construction impacts to the transportation circulation system would be less than significant and would not result in a conflict with any circulation programs, plans, ordinances, or policies.

### Operational Impacts

Operation of the replacement pipeline would not generate any additional vehicular trips and, therefore, would not degrade the operation of local roadways. As it currently exists, the project is a passive water pipeline, and future operations would be identical to existing conditions. As discussed in this section, the project would use existing access roads currently used and maintained by the City

of Chula Vista and SDG&E for regular maintenance activities in the area during construction and operation of the project. In addition, no lane closures on surrounding public roadways would be required during construction, resulting in no change to the level of service to the surrounding circulation system. Therefore, operational impacts to the transportation circulation system would be less than significant and would not result in a conflict with any circulation programs, plans, ordinances, or policies or be inconsistent with CEQA Guidelines, Section 15064.3(b).

**b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?**

**No Impact.** The project includes replacement of an existing underground pipeline. As discussed in Section 3.4.17(a), the project would use existing access roads currently used and maintained by the City of Chula Vista and SDG&E for regular maintenance activities in the area during construction and operation of the project. Construction and operation of the project would not result in a permanent increase to the vehicle miles traveled in the area. Therefore, the project would be consistent with CEQA Guidelines, Section 15064.3(b). No impacts related to an increase in vehicle miles traveled or inconsistency with CEQA Guidelines, Section 15064.3(b), would result from implementation of the project.

**c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?**

**No Impact.** The project includes replacement of an existing underground pipeline and would not introduce geometric design features or incompatible uses that would increase or create traffic hazards. Therefore, no impacts related to increases in hazards due to a geometric design feature or incompatible uses would result from implementation of the project.

**d. Would the project result in inadequate emergency access?**

**No Impact.** As discussed in Section 3.4.17(a), the project would use existing access roads currently used and maintained by the City of Chula Vista and SDG&E for regular maintenance activities in the area during construction and operation of the project. Future operations would be identical to existing conditions and would not impact emergency access to surrounding areas. Further, as explained in Section 3.4.9(f), the project would avoid restricting emergency access to the site because no road closures would occur during construction. Therefore, no impact to emergency access would occur.

### 3.4.18 Tribal Cultural Resources

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

The following discussion is based on the Cultural Resources Survey Report prepared by ECORP Consulting, Inc. (ECORP), in October 2018 for the project (Appendix C).

### Impact Analysis

- a. **Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:**
- i. **Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or**

**Less than Significant Impact with Mitigation Incorporated.** Tribal cultural resources have been documented in the area on and around the project site (Appendix C). The cultural materials found within the Kumeyaay village on a low terrace on the northern shore of Otay River supports the wide-ranging influence and cultural sophistication of the dense populations existing along the beaches, bays, and inland waterways of the County at the time of European contact.

During the field survey conducted by ECORP archaeologists in May 2018, three previously recorded sites overlap the project site. Two previously recorded pre-contact lithic scatters,

P-37-014580 and P-37-014581, were located during the field survey. One newly identified pre-contact lithic flake isolate, OTP-001-I, was documented as well. A total of five artifacts at four points were documented throughout the survey, although previously recorded historic-era trash scatter P-37-013460 was not detected on the project site.

As discussed previously in Section 3.4.5(b), three pre-contact cultural resources and one historic-era cultural resource were identified on the project site during the May 2018 archaeological survey. These resources were found to be not eligible for inclusion in the California Register of Historical Resources or the National Register of Historic Places. Therefore, the project is not expected to have an effect on tribal cultural resources. Although the project site has been thoroughly surveyed, the tribal cultural resources sensitivity of the project site is high, and there is still a potential for encountering tribal cultural resources during ground-disturbing activities, which would be a significant impact. However, with the implementation of MM CR-1 (listed in full in Section 3.4.5, Cultural Resources) potential impacts to tribal cultural resources would be reduced to a less than significant level.

- ii. **A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.**

**Less than Significant Impact with Mitigation Incorporated.** The Native American Heritage Commission was contacted in May 2018 to conduct a check of its Sacred Lands File and indicated that no Native American sacred lands or cultural resources are recorded within the vicinity of the project site. The Native American Heritage Commission identified 20 Native American groups and individuals with historical and traditional ties to the project site. Native American Tribes were notified of the project, and no comment letters indicating the existence of tribal resources were received. The project site does not contain, and is not adjacent to, any known cemeteries; however, as discussed in Section 3.4.5, it is possible that construction activity could unearth previously unknown tribal cultural resources or human remains, which would be considered a potentially significant impact. Implementation of MM CR-1 (listed in full in Section 3.4.5) would ensure that previously unknown tribal cultural resources or human remains are treated with dignity and as specified by law and would reduce potentially significant impacts to less than significant levels. Therefore, impacts related to a substantial adverse change in the significance of a tribal cultural resource determined to be significant to a California Native American Tribe as a result of project implementation would be less than significant with mitigation incorporated.

### 3.4.19 Utilities and Service Systems

Would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

### Impact Analysis

- a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?**

**Less than Significant Impact with Mitigation Incorporated.** The project includes the replacement of an existing underground pipeline. The pipeline conveys water from the Otay Water Treatment Plant to the users west and north of the treatment plant. The project would replace 4,000 linear feet of 40-inch steel pipe with 54-inch steel pipe. The project would replace and upsize this pipeline to handle anticipated future water flows from the treatment plant to the east. As discussed throughout this IS/MND, temporary construction impacts related to biological resources, cultural resources, geology and soils, hydrology and water quality, noise, and tribal cultural resources have been mitigated below a level of significance by implementing MMs BIO-1 through BIO-9, CR-1, GEO-1, HYDRO-1, and NOI-1. Therefore, impacts related to construction of new or expanded wastewater infrastructure as a result of project implementation would be less than significant with mitigation incorporated.

- b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?**

**No Impact.** The project includes the replacement of an existing underground pipeline and would not require water supplies greater than what is currently being used by the existing system. Therefore, no impacts to available water supplies would result from implementation of the project.

- c. Would the project result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?**

**No Impact.** The project includes the replacement of an existing underground pipeline and would not require wastewater treatment. Therefore, the project would not result in the wastewater treatment provider having inadequate capacity for the project, and no impact would result.

- d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?**

**Less than Significant Impact.** The solid waste generated by project construction would be recycled to the extent feasible and disposed of in accordance with City of Chula Vista Construction and Demolition Waste Ordinances and requirements (City of Chula Vista 2017). Conformance with City of Chula Vista solid waste generation requirements would ensure that the project would not impair the attainment of solid waste reduction goals. Operation of the project would not result in the generation of solid waste. Therefore, impacts from generation of solid waste in excess of state or local standards as a result of project implementation would be less than significant.

- e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

**Less than Significant Impact.** As discussed in Section 3.4.19(d), the project would not generate solid waste in excess of typical construction and pipeline replacement projects. The project would comply with applicable federal, state, and local construction and demolition waste management and reduction regulations by recycling to the extent feasible and disposing of construction solid waste in approved landfills (USEPA 2022; CalRecycle 2022; City of Chula Vista 2017). Therefore, the project would comply with federal, state, and local solid waste generation and reduction requirements, and impacts would be less than significant.

### 3.4.20 Wildfire

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

## Impact Analysis

### a. Would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

**Less than Significant Impact.** The project includes the replacement of an existing underground pipeline. As discussed previously in Section 3.4.17, Transportation, the project would not result in impacts to emergency access. As it currently exists, the project is a passive water pipeline. Future operations would be identical to existing conditions and would not impact emergency access to surrounding areas. During construction, existing public roads and maintenance access roads would be used. Further, as explained in Section 3.4.9, Hazards and Hazardous Materials, the project would avoid restricting emergency access to the site because no road closures would occur during construction. Therefore, impacts to emergency access would be less than significant.

### b. Would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

**Less than Significant Impact.** The project includes the replacement of an existing underground pipeline. The project site is within a Very High Fire Hazard Severity Zone (County of San Diego 2022). The project is within largely undeveloped, disturbed, and open space natural habitat areas. Fire Hazard Severity Zone Maps are intended to be used for implementing wildland-urban interface building standards for new construction; natural hazard real estate disclosure; 100-foot

defensible space clearance requirements around buildings; property development standards, including road widths, water supply, and signage; and consideration in General Plans.

The project includes replacing an existing underground water pipeline and does not propose to alter existing buildings or construct new buildings or roads. Therefore, the project would not expose people or structures to a significantly greater risk of loss, injury, or death involving wildland fires, and impacts would be less than significant.

**c. Would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?**

**Less than Significant Impact with Mitigation Incorporated.** As discussed in Section 3.4.9(g), construction of the project could temporarily exacerbate fire risk. Implementation of MMs HAZ-1 and HAZ-2 would reduce potential temporary fire risk during construction to a less than significant level.

As discussed throughout this IS/MND, the project includes the replacement of an existing underground pipeline and would not require the installation or maintenance of associated infrastructure that would result in ongoing fire risk or environmental impacts. Temporary impacts to the environment related to construction and operation of the project have been analyzed throughout this IS/MND and determined to be less than significant or mitigated below a level of significance. Therefore, ongoing impacts related to increased fire risk or the environmental impacts from maintenance of the project would be less than significant.

**d. Would the project expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?**

**Less than Significant Impact.** As discussed in Section 3.4.10, Hydrology and Water Quality, the project would not alter existing drainage patterns or contribute to increased runoff or flooding downstream, including those in post-fire conditions. Therefore, impacts related to exposure of people or structures to significant risks from runoff, post-fire slope instability, and drainage changes as a result of project implementation would be less than significant.

### 3.4.21 Mandatory Findings of Significance

Does the project:	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Note:** Authority cited: Sections 21083 and 21083.05, Public Resources Code. Reference: Section 65088.4, Gov. Code; Sections 21080(c), 21080.1, 21080.3, 21083, 21083.05, 21083.3, 21093, 21094, 21095, and 21151, Public Resources Code; Sundstrom v. County of Mendocino, (1988) 202 Cal.App.3d 296; Leonoff v. Monterey Board of Supervisors, (1990) 222 Cal.App.3d 1337; Eureka Citizens for Responsible Govt. v. City of Eureka (2007) 147 Cal.App.4th 357; Protect the Historic Amador Waterways v. Amador Water Agency (2004) 116 Cal.App.4th at 1109; San Franciscans Upholding the Downtown Plan v. City and County of San Francisco (2002) 102 Cal.App.4th 656.

### Impact Analysis

- a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

**Less than Significant Impact with Mitigation Incorporated.** With implementation of MMs BIO-1 through BIO-9, CR-1, GEO-1, HAZ-1, HAZ-2, HYDRO-1, and NOI-1, the project would reduce its potential to degrade the quality of the environment. Project construction could result in impacts on sensitive plant and wildlife species, birds protected under the Migratory Bird Treaty Act, sensitive vegetation communities, and jurisdictional aquatic resources; however, with incorporation of MMs BIO-1 through BIO-9, these impacts would be reduced to a less than significant level. Given the cultural sensitivity of the area and proximity to an existing riparian drainage area, there is the potential for unknown, subsurface archaeological and tribal cultural resources (including human remains) to occur on site. Project construction activities could disturb

these resources, potentially resulting in a significant impact; however, with implementation of MM CR-1, potentially significant impacts to unknown archaeological and tribal cultural resources and human remains would be reduced to a less than significant level. Friars Formation underlying much of the project site has high paleontological sensitivity. Project trenching, grading and excavation may have the potential to impact the Friars Formation deposits, which would have a significant adverse effect on paleontological resources; however, implementation of MM GEO-1 would reduce this impact to a less than significant level.

- b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?**

**Less than Significant Impact.** Implementation of the project would not result in individually limited but cumulatively considerable significant impacts. Cumulative projects, including Otay Village Projects 8, 9, and 10 and the University Park & Innovation Center, are approximately 0.5 mile from the project site. However, projects in adjacent and nearby jurisdictions, including the City of San Diego and the County, would be required to comply with applicable federal and/or state regulations that provide protections for sensitive plant and wildlife species, such as the federal Endangered Species Act, California Endangered Species Act, and the California Natural Community Conservation Planning Act. All resource topics associated with the project have been analyzed in accordance with the CEQA Guidelines and were found to pose no impacts, less than significant impacts, or less than significant impacts with mitigation (Appendix D, Mitigation Monitoring and Reporting Program). In addition, taken in sum with other projects in the area, the scale of the project is small, and impacts to any environmental resource or issue areas would be temporary and not be cumulatively considerable.

- c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?**

**Less than Significant Impact with Mitigation Incorporated.** Operation of the project would not consist of any uses or activities that would negatively affect any people within the vicinity. Therefore, with the incorporation of MMs, the project would result in less than significant environmental effects that could cause substantial adverse effects on human beings directly or indirectly.

## Section 4 List of Preparers

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### 4.1 Lead Agency

#### **City of Chula Vista**

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Chula Vista, California 91910

Dai Hoang, Associate Planner

### 4.2 Consultants

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Diane Sandman, American Institute of Certified Planners (AICP), Project Director  
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Emily Mastrelli, Senior Biologist  
Katie Laybourn, Biologist and CEQA Analyst  
Kelsey Hawkins, CEQA Analyst  
Sharon Toland, Air Quality Specialist  
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Lindsey Messner, Technical Editor

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John T. O'Connor, PhD, Register of Professional Archaeologists (RPA), Cultural Resources Specialist  
Lisa D. Westwood, RPA, Director of Cultural Resources

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## Section 5 References

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Section 15150 of the CEQA Guidelines permits an environmental document to incorporate by reference other documents that provide relevant data. The documents listed below are hereby incorporated by reference. The pertinent material is summarized throughout this IS/MND where that information is relevant to the analysis of impacts of the project. Other listed documents may have direct links to websites or can usually be found through an on-line search.

CalEPA (California Environmental Protection Agency). 2022. “Cortese List Data Resources.” Accessed March 2022. <https://calepa.ca.gov/sitecleanup/corteselist/>.

CalRecycle (California Department of Resources Recycling and Recovery). 2022. “Construction and Demolition Debris Recycling.” Accessed March 2022. <https://www.calrecycle.ca.gov/condemo>.

CARB (California Air Resources Board). 2005. Air Quality and Land Use Handbook: A Community Health Perspective. April.

CARB. 2022. iADAM Air Quality Data Statistics. Accessed March 2022. <http://www.arb.ca.gov/adam/trends/trends1.php>.

City of Chula Vista. 2003. Chula Vista Multiple Species Conservation Program Subarea Plan. February.

City of Chula Vista. 2005a. Chula Vista General Plan. December 13.

City of Chula Vista. 2005b. Chula Vista General Plan Program Environmental Impact Report. Final. December.

City of Chula Vista. 2017. Construction and Demolition Debris Waste Management Report. January.

City of Chula Vista. 2020. Chula Vista Municipal Code. Last updated November 3. Accessed March 2022. <https://chulavista.municipal.codes/CVMC>.

City of Chula Vista. 2022. “City of Chula Vista Fire Department – About Us.” Accessed March 2022. <https://www.chulavistaca.gov/departments/fire-department/about-us>.

City of San Diego. 1997. Multiple Species Conservation Program Subarea Plan.

City of San Diego. 2008. City of San Diego General Plan. March 10.

City of San Diego. 2010. “Chapter 5, Public Safety, Morals, and Welfare; Article 9.5, Noise Abatement and Control; Division 4, Limits.” In San Diego Municipal Code. July. Accessed March 2022. <https://docs.sandiego.gov/municode/MuniCodeChapter05/Ch05Art09.5Division04.pdf>.

City of San Diego. 2016. City of San Diego Climate Action Plan Consistency Checklist. Prepared by Ascent Environmental. June 8.

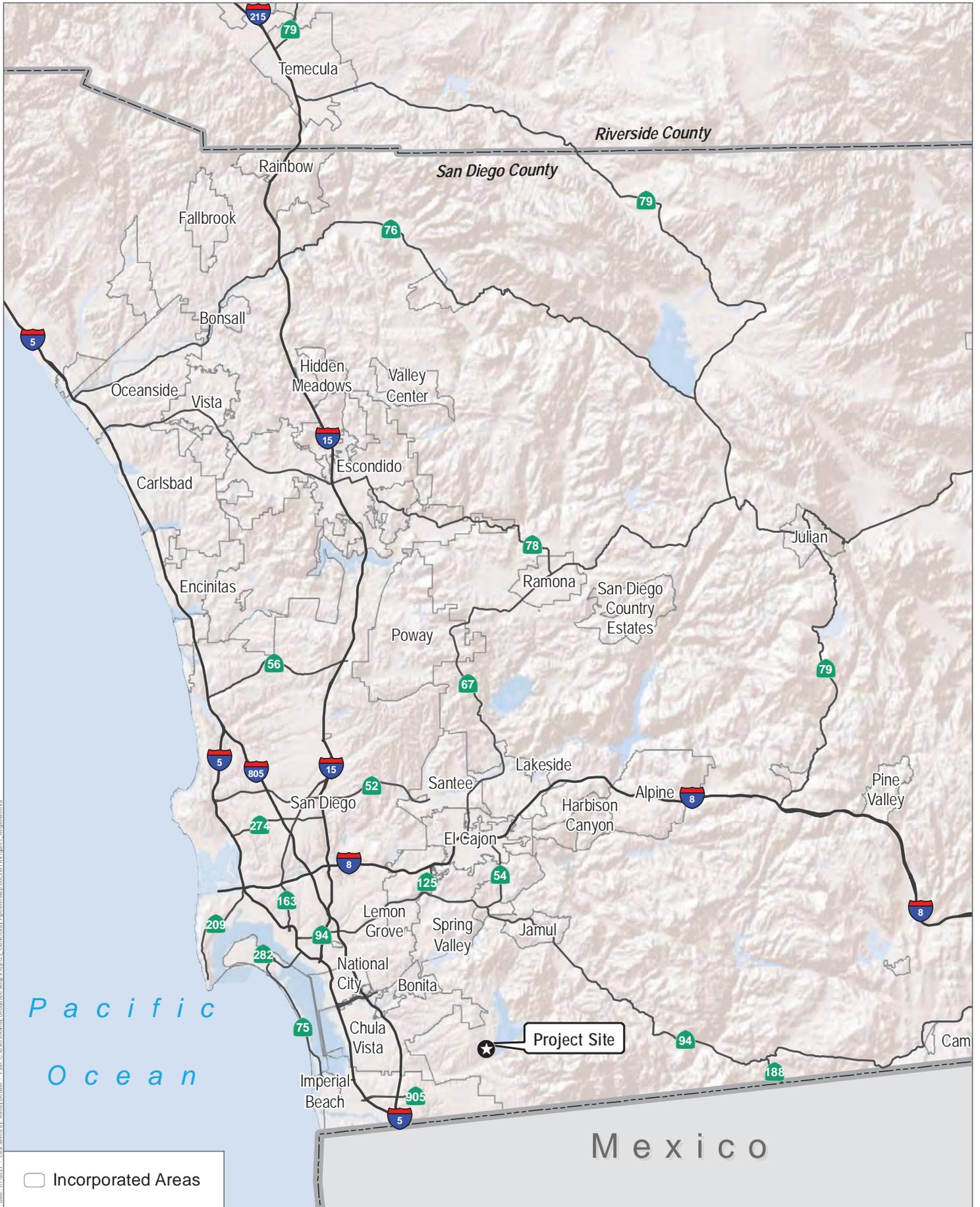
City of San Diego. 2020. California Environmental Quality Act Significance Determination Thresholds. December.

City of San Diego. 2022. City of San Diego Economic Development. Accessed March 2022. <https://www.sandiego.gov/economic-development/sandiego/population>.

- County of San Diego. 2022. County of San Diego: Ready San Diego – Wildfire Hazard Map. Accessed March 2022. <http://www.readysandiego.org/wildfire-hazard-map/>.
- DOC (California Department of Conservation). 2015. Regulatory Maps. California Geological Survey. Accessed March 2022. <http://maps.conservation.ca.gov/cgs/informationwarehouse/index.html?map=regulatorymaps>.
- DOC. 2016. San Diego County Important Farmland. California Department of Conservation Farmland Mapping and Monitoring Program. Accessed March 2022. [ftp://ftp.consrv.ca.gov/pub/dlrp/fmmp/pdf/2016/sdg16\\_w.pdf](ftp://ftp.consrv.ca.gov/pub/dlrp/fmmp/pdf/2016/sdg16_w.pdf).
- DOC. 2022a. DOC Maps: Agriculture. Accessed March 2022. <https://maps.conservation.ca.gov/agriculture/#webmaps>.
- DOC. 2022b. Fault Activity Map of California. California Geological Survey. Accessed March 2022. <http://maps.conservation.ca.gov/cgs/fam/>.
- DOC. 2022c. California Department of Conservation’s Division of Mine Reclamation. Accessed March 2022. <https://maps.conservation.ca.gov/mineralresources/>.
- DTSC (Department of Toxic Substances Control). 2022. Department of Toxic Substances Control EnviroStor. Accessed March 2022. [www.envirostor.dtsc.ca.gov](http://www.envirostor.dtsc.ca.gov).
- Oberbauer, Thomas, Meghan Kelly, and Jeremy Buegge. 2008. Draft Vegetation Communities of San Diego County. Based on “Preliminary Descriptions of the Terrestrial Natural Communities of California,” Robert F. Holland, PhD, October 1986. Codes revised by Thomas Oberbauer in February 1996, revised and expanded by Meghan Kelly in August 2006, and further revised and reorganized by Jeremy Buegge in March 2008. Accessed March 2022. [https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch9.0/rtcrefaletters/O14%202014-12-19\\_OberbauerTM2008.pdf](https://www.sandiegocounty.gov/content/dam/sdc/pds/ceqa/Soitec-Documents/Final-EIR-Files/references/rtcref/ch9.0/rtcrefaletters/O14%202014-12-19_OberbauerTM2008.pdf).
- SDAPCD (San Diego Air Pollution Control District). 2018. San Diego County Air Pollution Control District Annual Network Plan 2018. Submitted for USEPA review June 29, 2018. Accessed March 2022. [https://www.sandiegocounty.gov/content/dam/sdc/apcd/monitoring/2017\\_Network\\_Plan.pdf](https://www.sandiegocounty.gov/content/dam/sdc/apcd/monitoring/2017_Network_Plan.pdf).
- San Diego County Airport Land Use Commission. 2010. Brown Field Municipal Airport Land Use Compatibility Plan. Airport Land Use Commission, San Diego County. Accessed March 2022. <https://www.ci.oceanside.ca.us/civicax/filebank/blobdload.aspx?blobid=24640>.
- State Fire Marshal. 2022. Hazardous Materials Management Plan and Hazardous Materials Inventory Statement. Accessed March 2022. <https://osfm.fire.ca.gov/divisions/pipeline-safety-and-cupa/certified-unified-program-agency-cupa/hazardous-materials-management-plan-and-hazardous-materials-inventory-statement/>.
- SWRCB (State Water Resources Control Board). 2022. State Water Resources Control Board Geotracker. Accessed March 2022. [geotracker.waterboards.ca.gov](http://geotracker.waterboards.ca.gov).
- USDA (U.S. Department of Agriculture). 2022. USDA Web Soils Survey. Accessed March 2022. <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>.

- USEPA (U.S. Environmental Protection Agency). 2022. “Sustainable Management of Construction and Demolition Materials.” Accessed March 2022. <https://www.epa.gov/smm/sustainable-management-construction-and-demolition-materials>.
- USGS (U.S. Geological Survey). 1989. Swelling Clays Map of the Conterminous United States. Accessed March 2022. [https://ngmdb.usgs.gov/Prodesc/proddesc\\_10014.htm](https://ngmdb.usgs.gov/Prodesc/proddesc_10014.htm).
- USGS. 2004. Preliminary Geologic Map of the El Cajon 30' x 60' Quadrangle, Southern California.
- USGS. 2008. The Landslide Handbook – A Guide to Understanding Landslides. May. Accessed March 2022. [https://pubs.usgs.gov/circ/1325/pdf/C1325\\_508.pdf](https://pubs.usgs.gov/circ/1325/pdf/C1325_508.pdf).

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□ Incorporated Areas



Source: ESRI 2019.

**Figure 1**  
Regional Location  
Otay Pipeline

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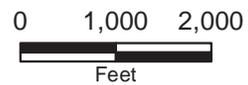


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Source: USGS 2019; SanGIS Imagery 2017.



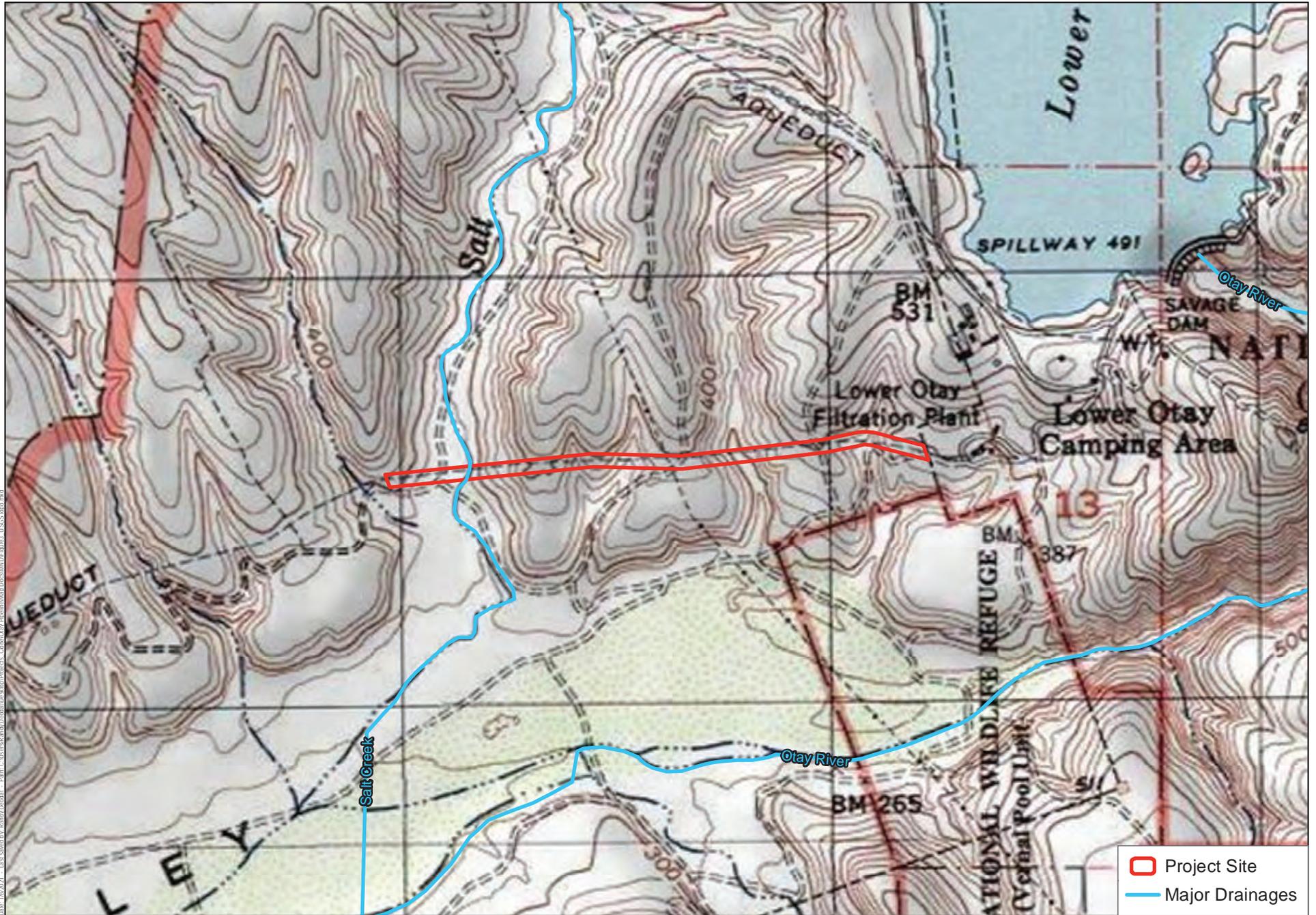
**Harris & Associates**



**Figure 2**

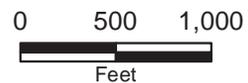
Project Site  
Otay Pipeline

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Source: USGS 24k 7.5-Minute Otay Mesa Quadrangle 1971.

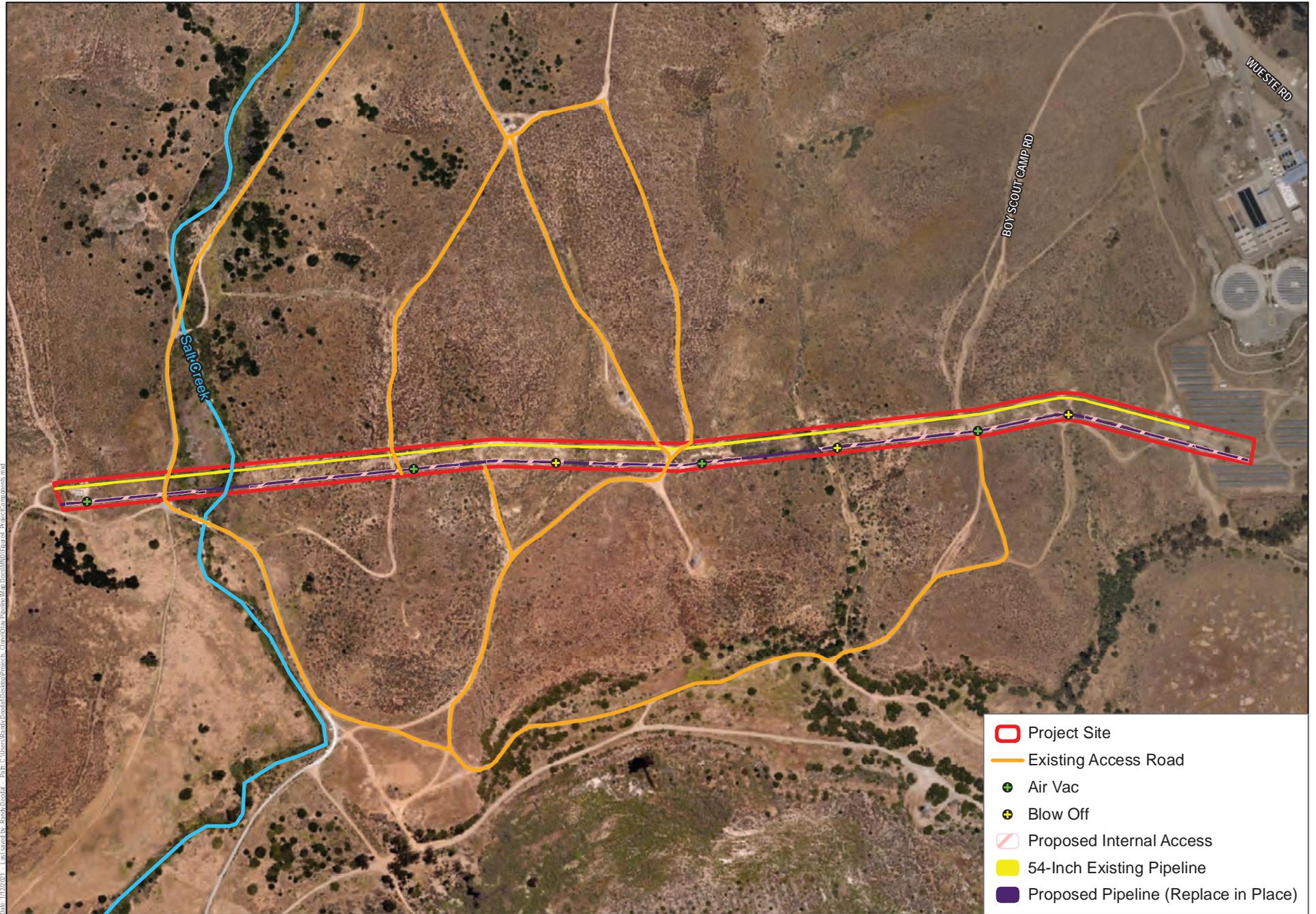


**Figure 3**

USGS Topographical Map

Otay Pipeline

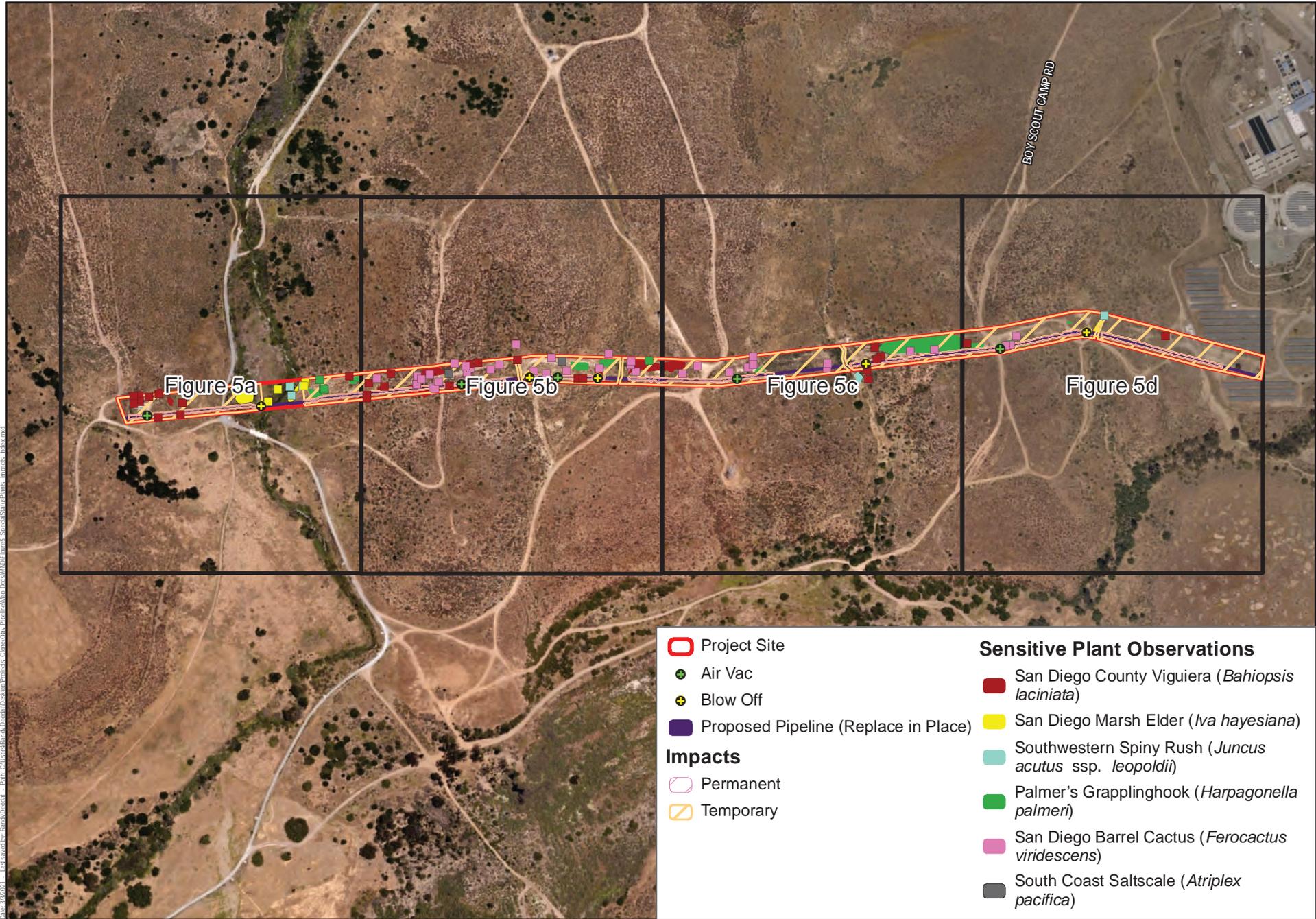
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Source: USGS 2020; SanGIS Imagery 2017.



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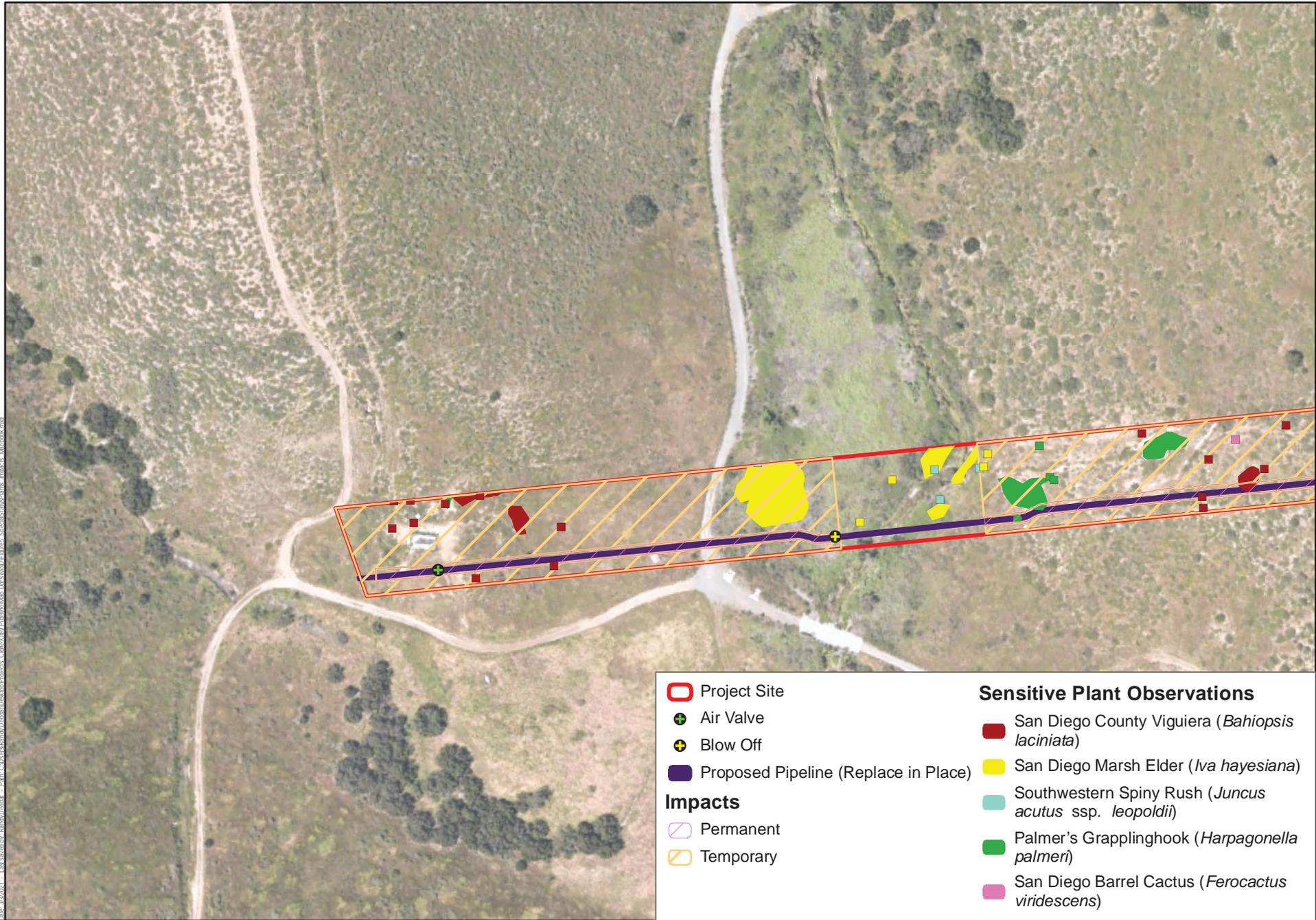


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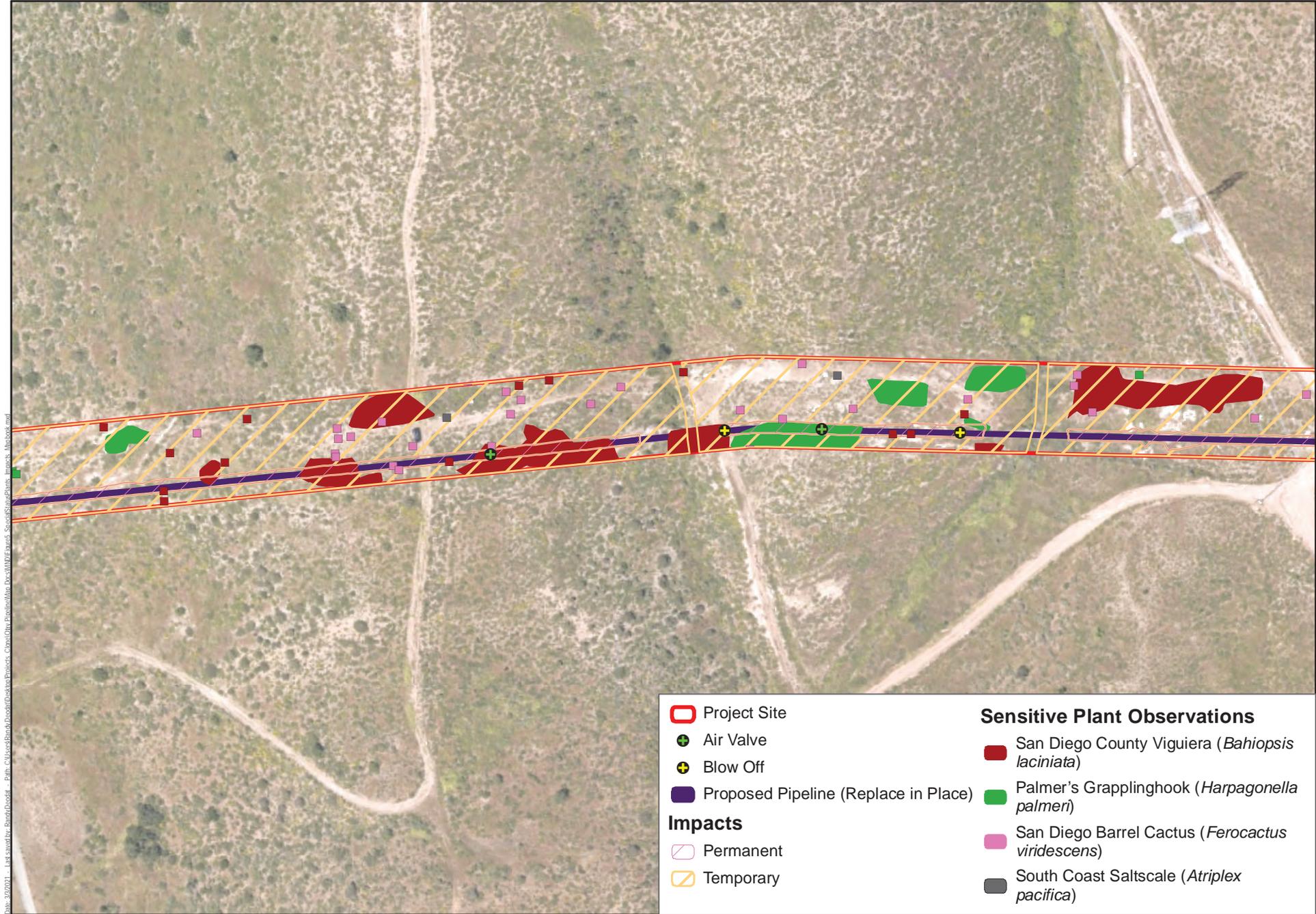
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Source: SanGIS Imagery 2017.

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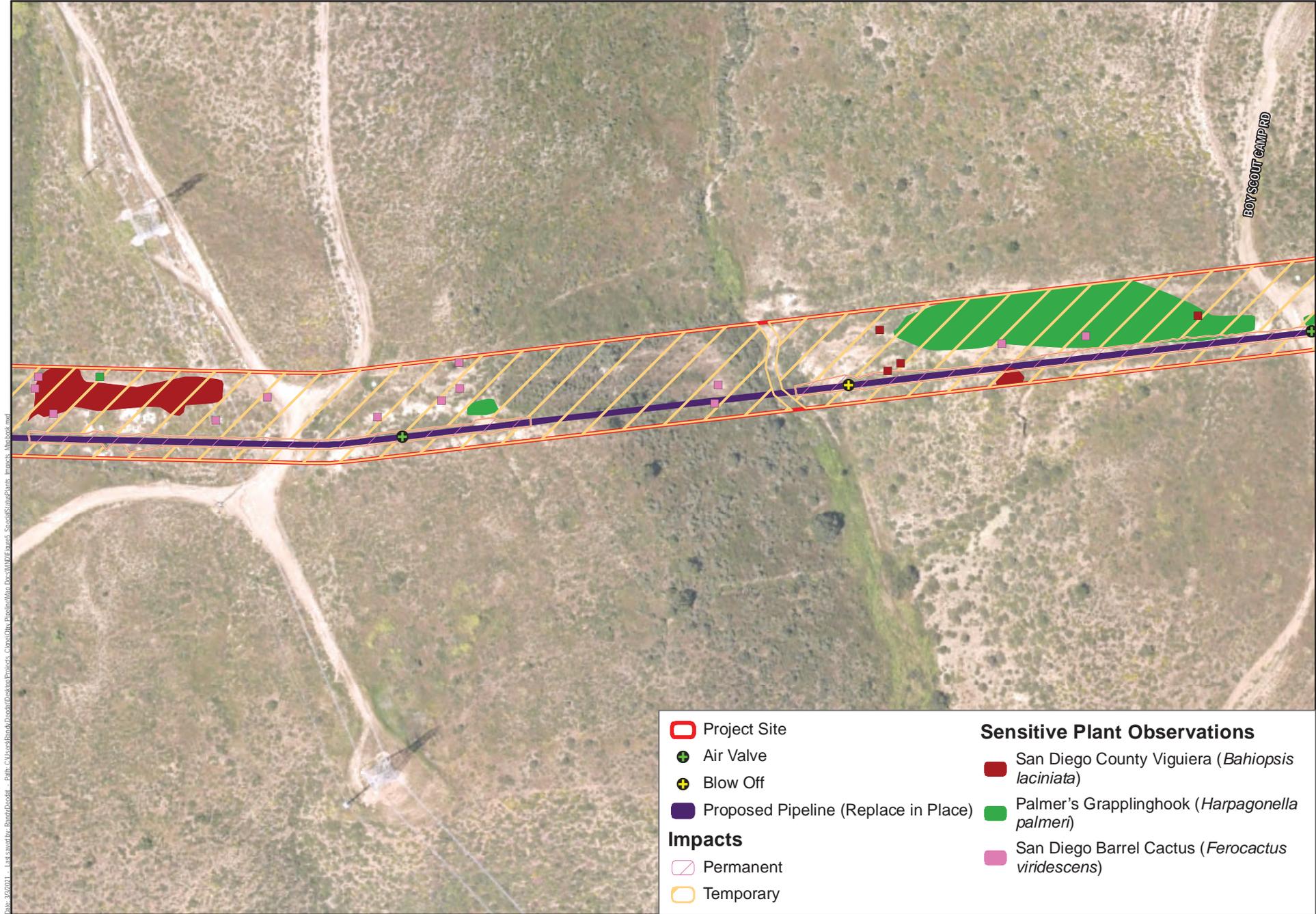


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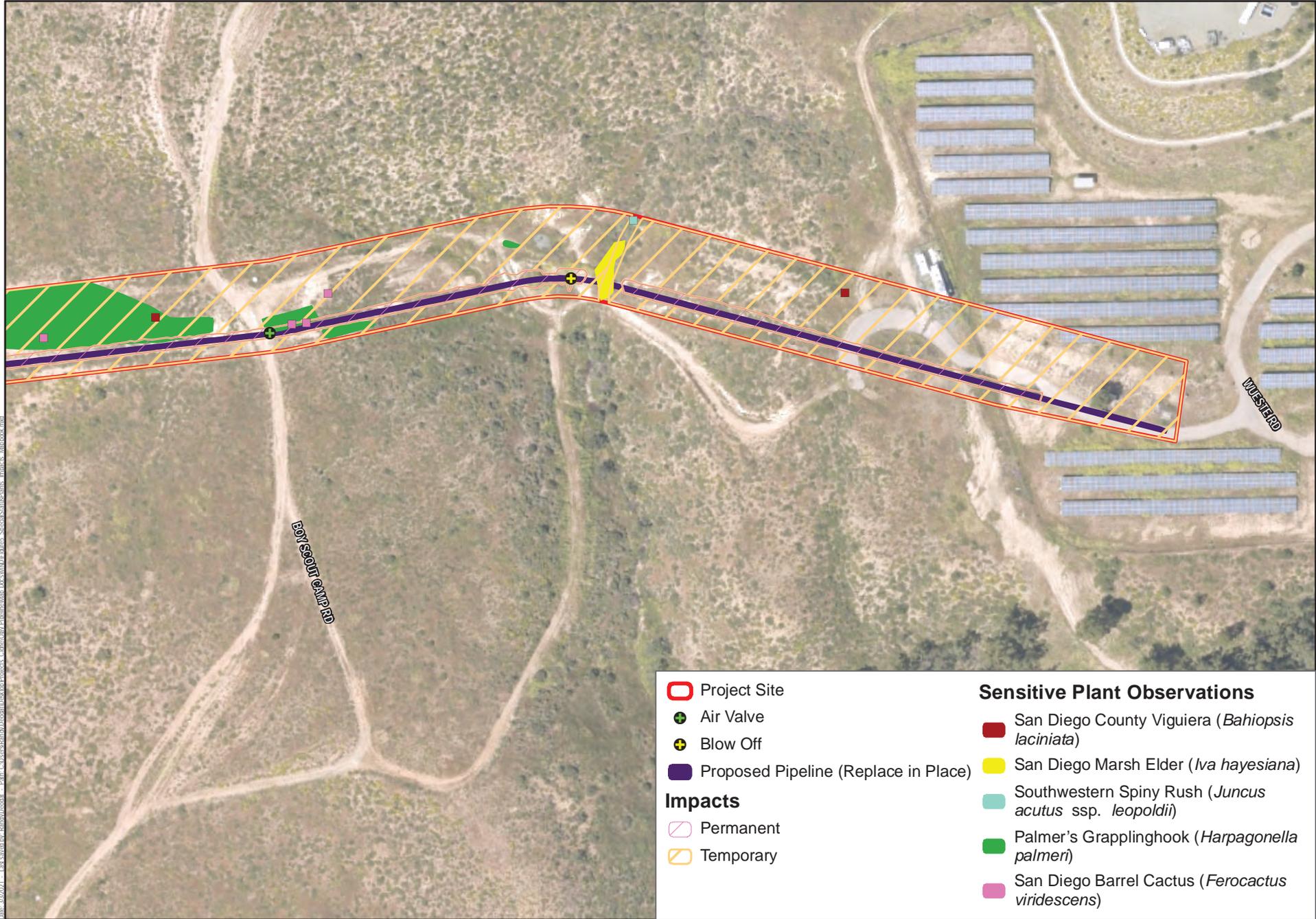
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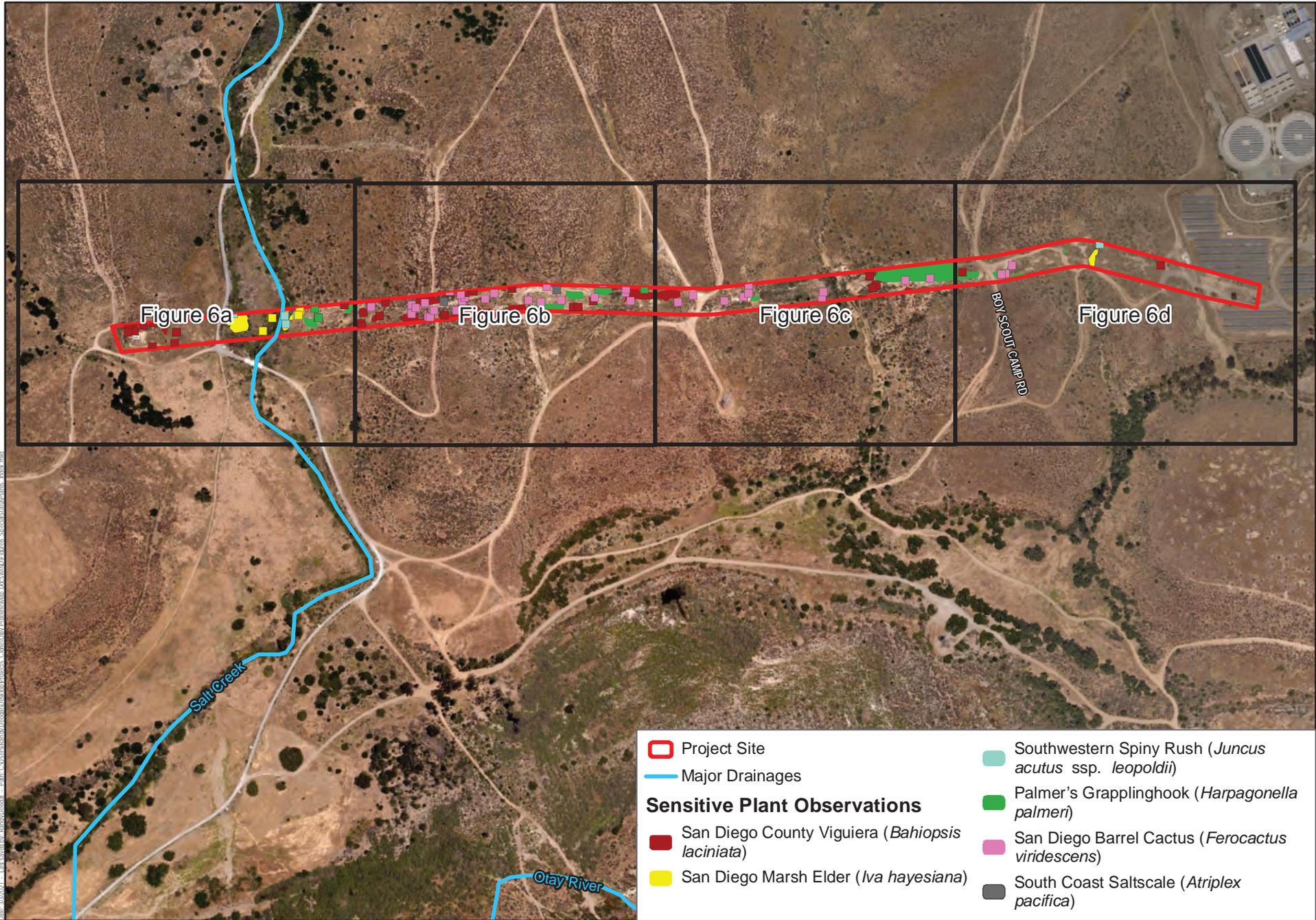
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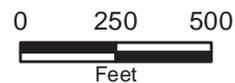
Sensitive Plant Impacts

Otay Pipeline

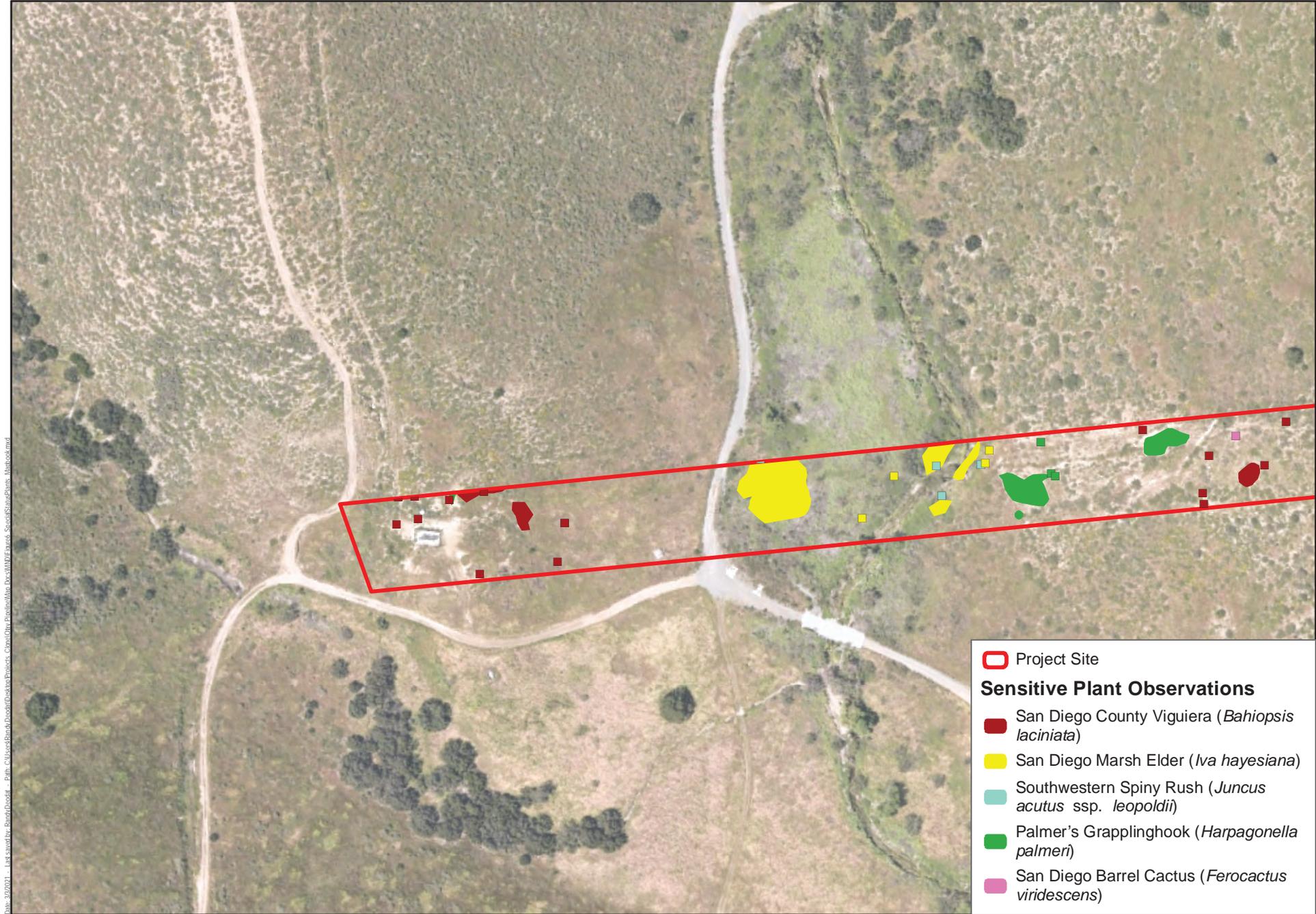
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**Project Site**

**Sensitive Plant Observations**

- San Diego County Vigiera (*Bahiopsis laciniata*)
- San Diego Marsh Elder (*Iva hayesiana*)
- Southwestern Spiny Rush (*Juncus acutus* ssp. *leopoldii*)
- Palmer's Grapplinghook (*Harpagonella palmeri*)
- San Diego Barrel Cactus (*Ferocactus viridescens*)

Source: SanGIS Imagery 2017.

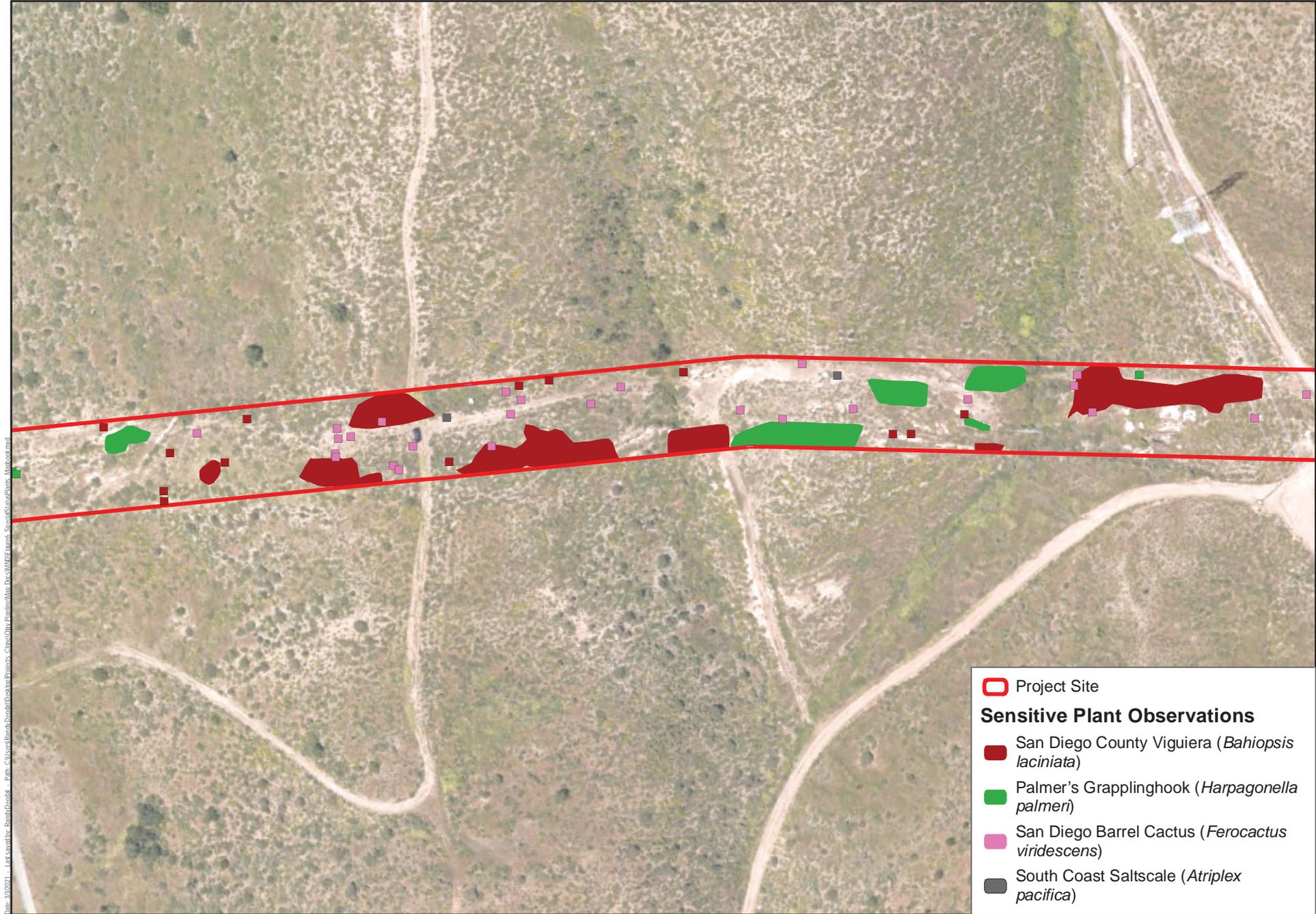
**Figure 6a**

Sensitive Plant Observations

Otay Pipeline

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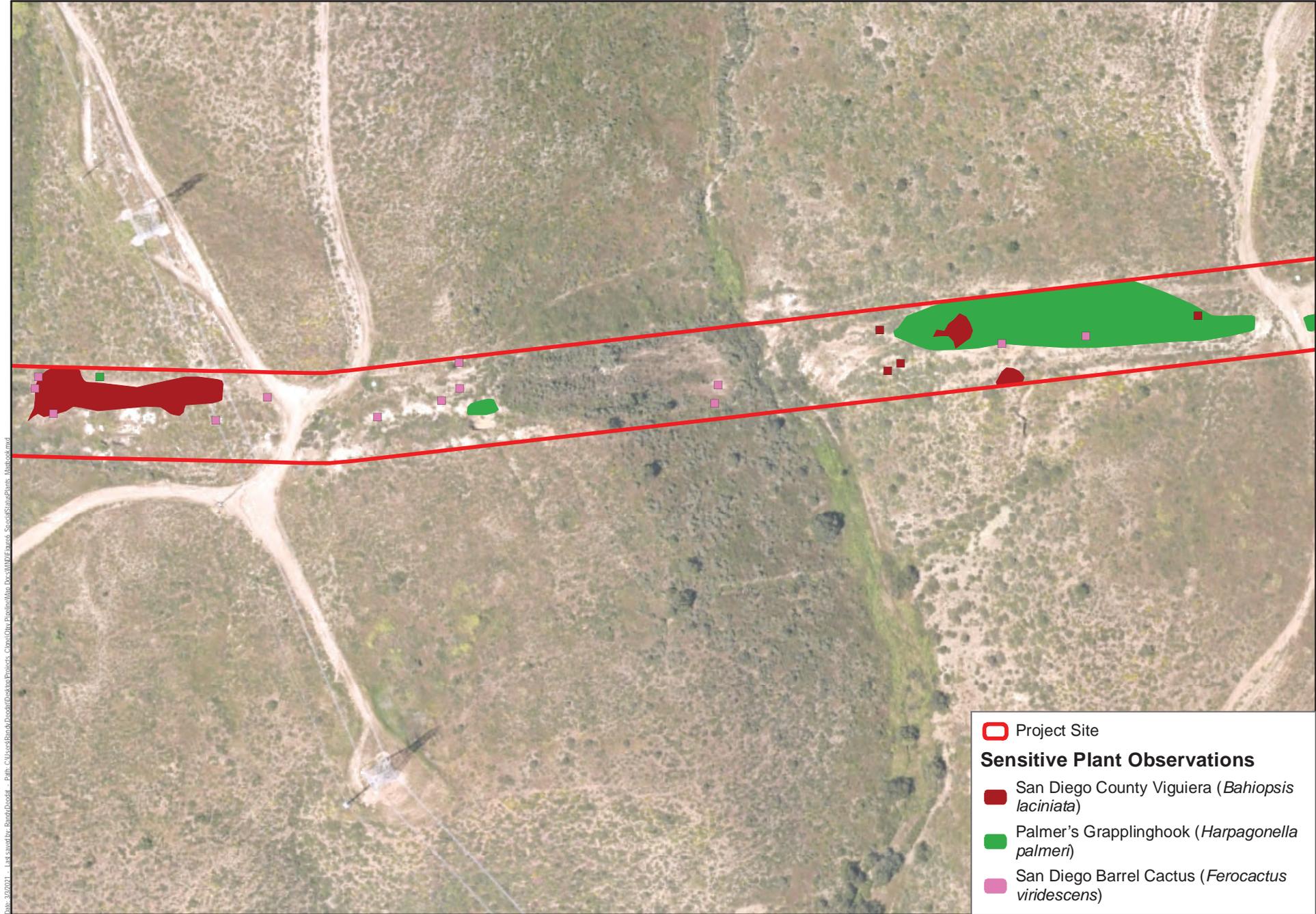
**Project Site**

**Sensitive Plant Observations**

- San Diego County Vigiera (*Bahiopsis laciniata*)
- Palmer's Grapplinghook (*Harpagonella palmeri*)
- San Diego Barrel Cactus (*Ferocactus viridescens*)
- South Coast Saltscale (*Atriplex pacifica*)

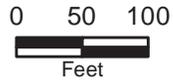
Source: SanGIS Imagery 2017.

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Source: SanGIS Imagery 2017.

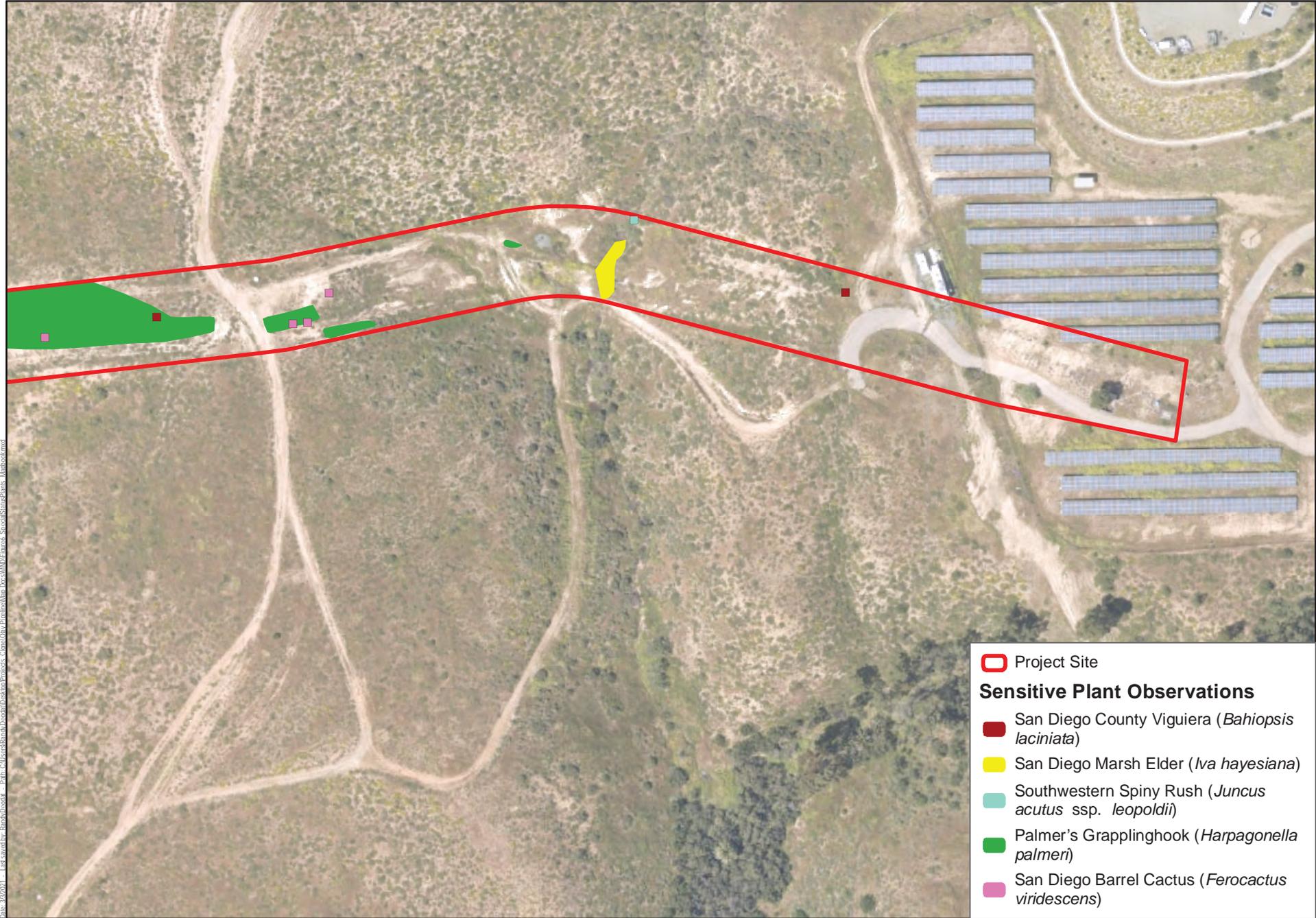


**Figure 6c**

Sensitive Plant Observations

Otay Pipeline

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- Project Site
- Sensitive Plant Observations**
- San Diego County Vigiera (*Bahiopsis laciniata*)
- San Diego Marsh Elder (*Iva hayesiana*)
- Southwestern Spiny Rush (*Juncus acutus* ssp. *leopoldii*)
- Palmer's Grapplinghook (*Harpagonella palmeri*)
- San Diego Barrel Cactus (*Ferocactus viridescens*)

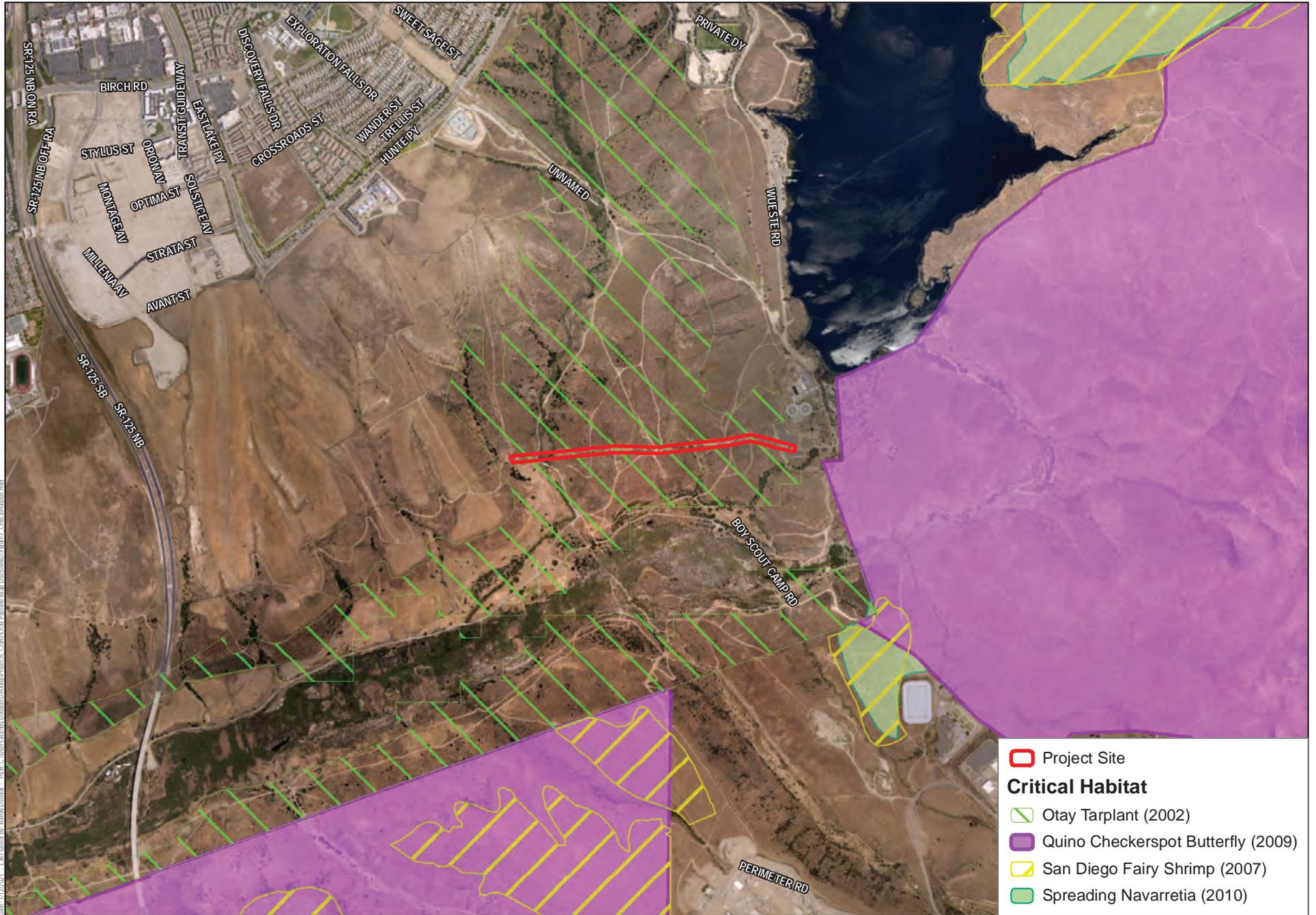
Source: SanGIS Imagery 2017.

**Figure 6d**

Sensitive Plant Observations

Otay Pipeline

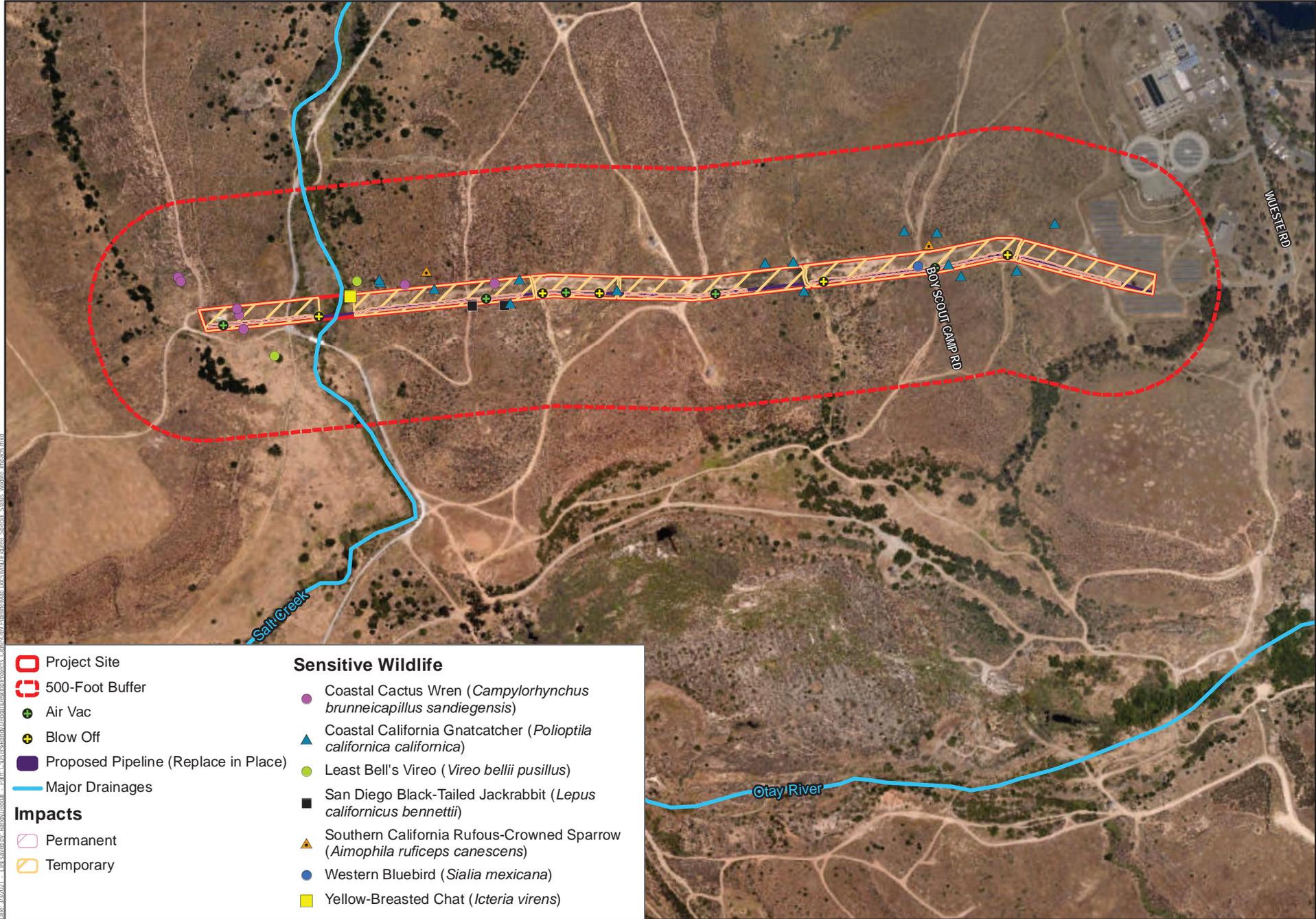
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Source: USFWS 2002, 2007, 2009, 2010; SanGIS Imagery 2017.



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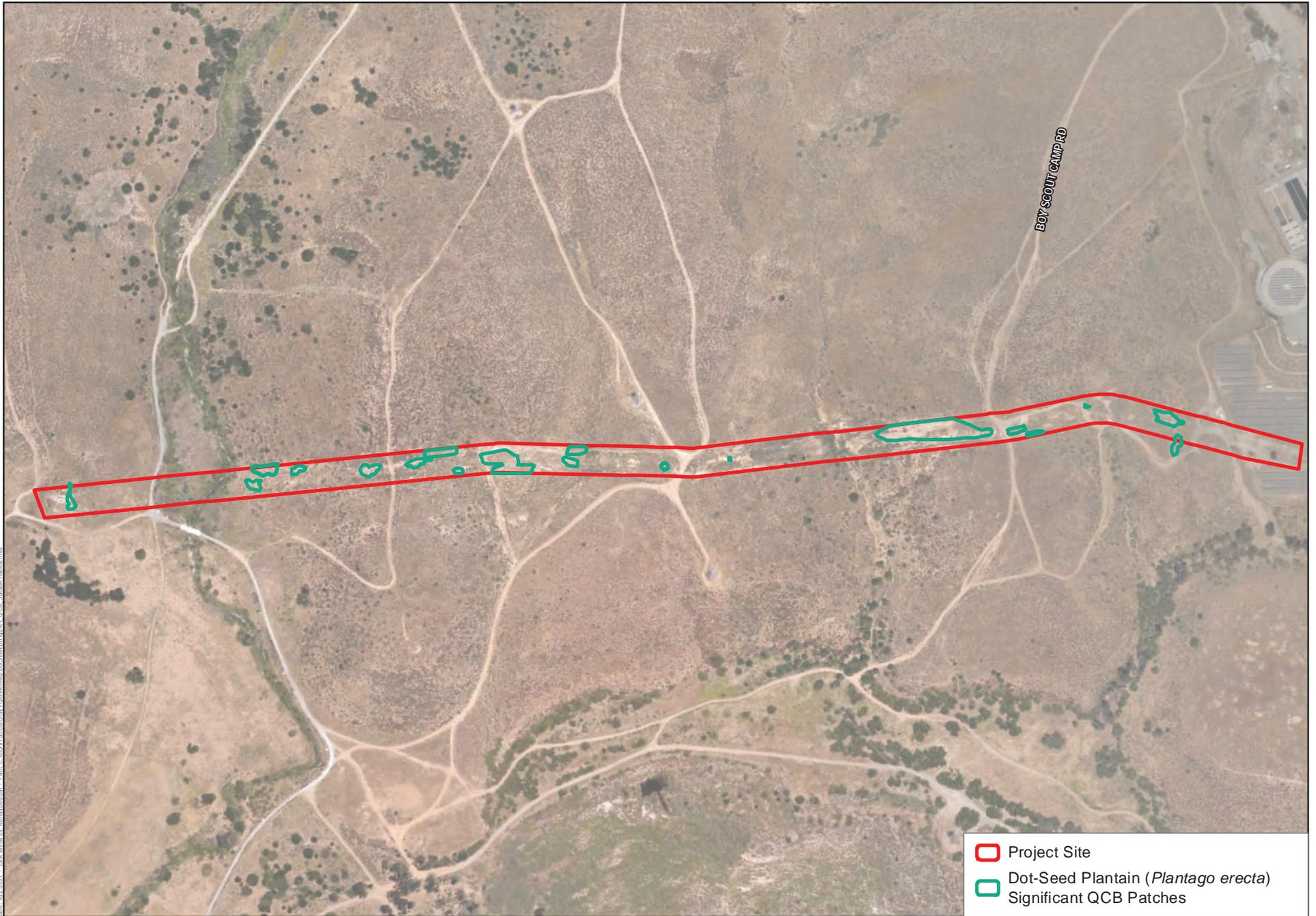


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Source: SanGIS Imagery 2017.

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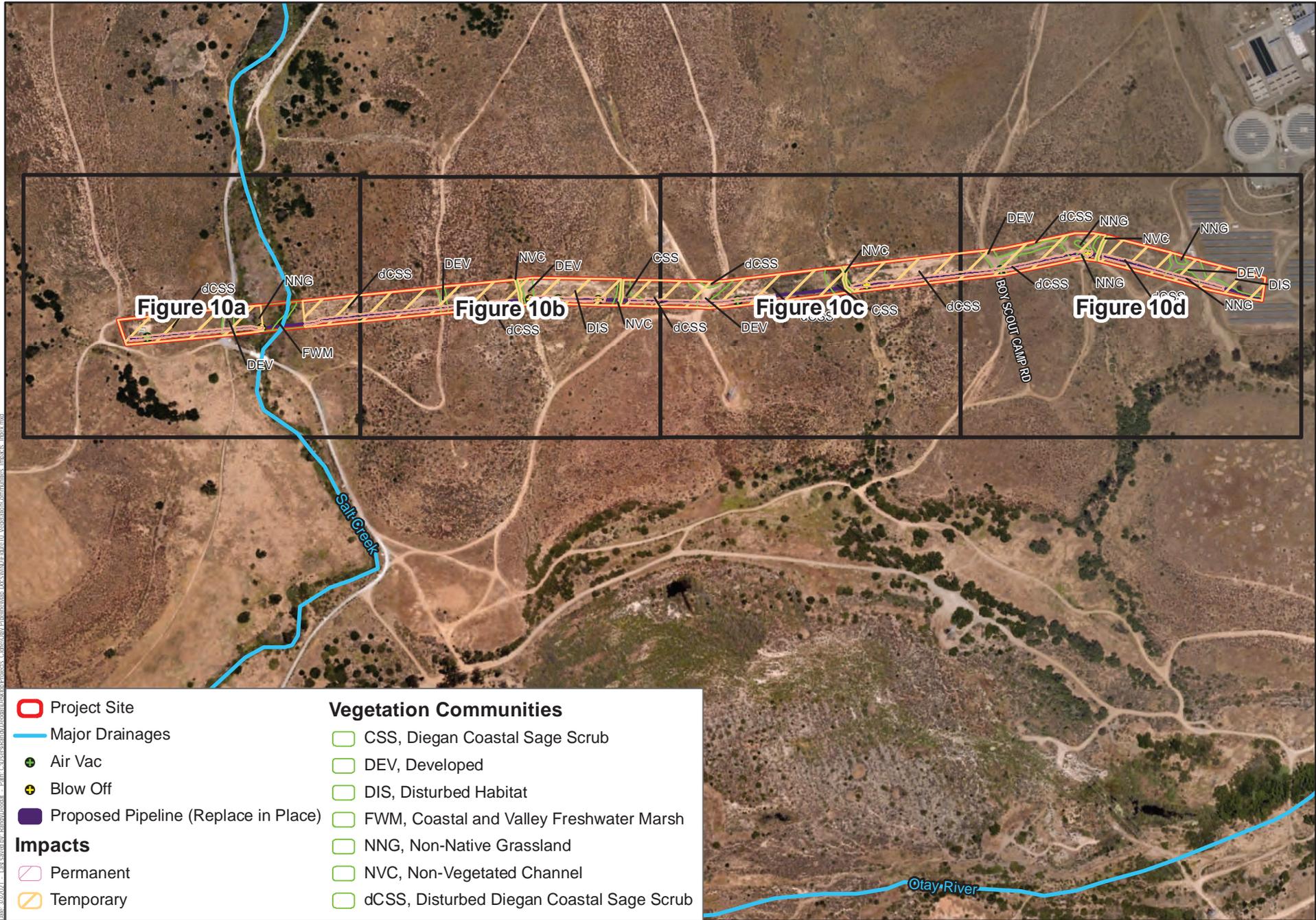


-  Project Site
-  Dot-Seed Plantain (*Plantago erecta*) Significant QCB Patches

Source: SanGIS Imagery 2017.



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**Impacts**

- Permanent
- Temporary

**Vegetation Communities**

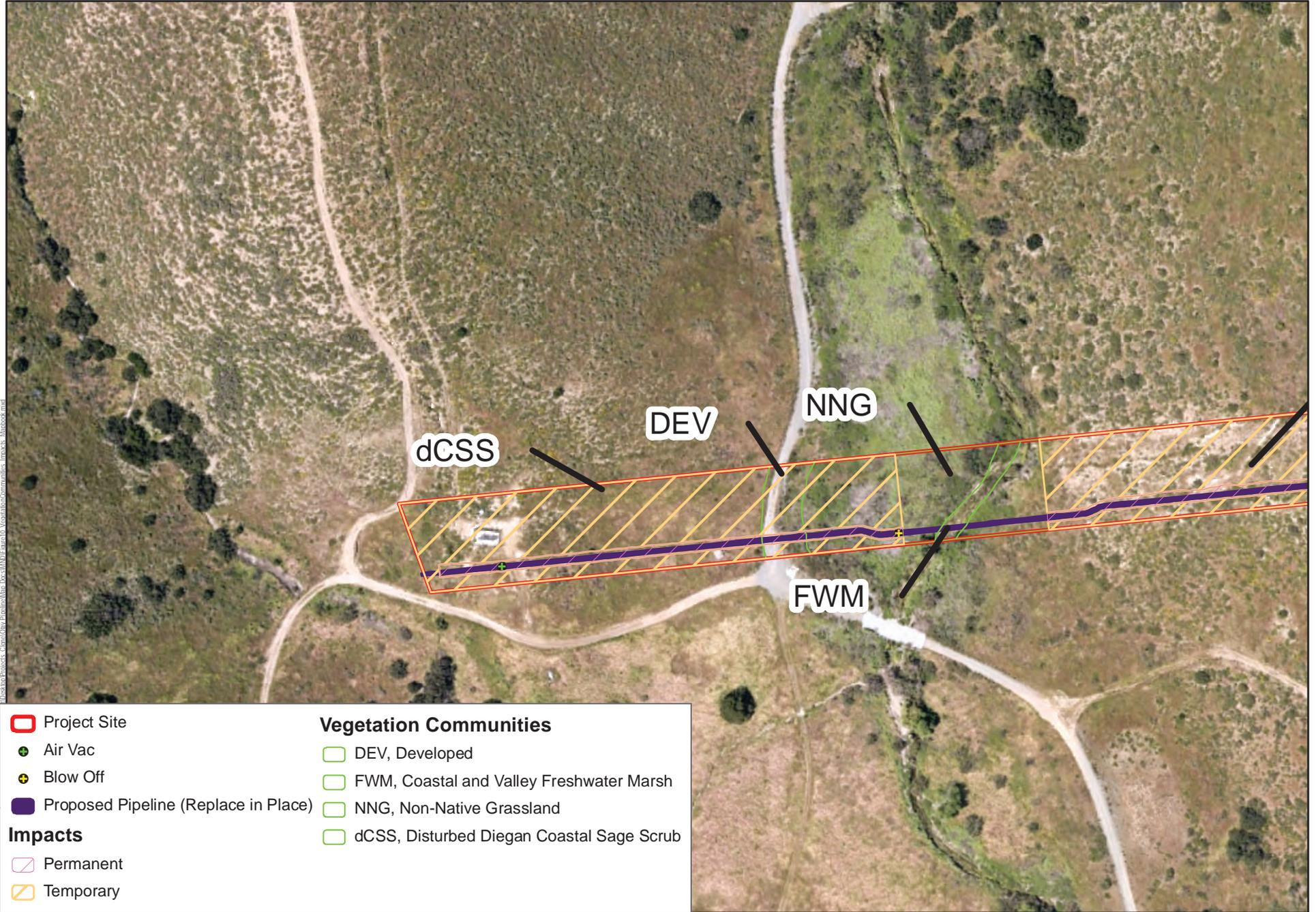
- CSS, Diegan Coastal Sage Scrub
- DEV, Developed
- DIS, Disturbed Habitat
- FWM, Coastal and Valley Freshwater Marsh
- NNG, Non-Native Grassland
- NVC, Non-Vegetated Channel
- dCSS, Disturbed Diegan Coastal Sage Scrub

**Other Symbols:**

- Project Site
- Major Drainages
- Air Vac
- Blow Off
- Proposed Pipeline (Replace in Place)

Source: SanGIS Imagery 2017.

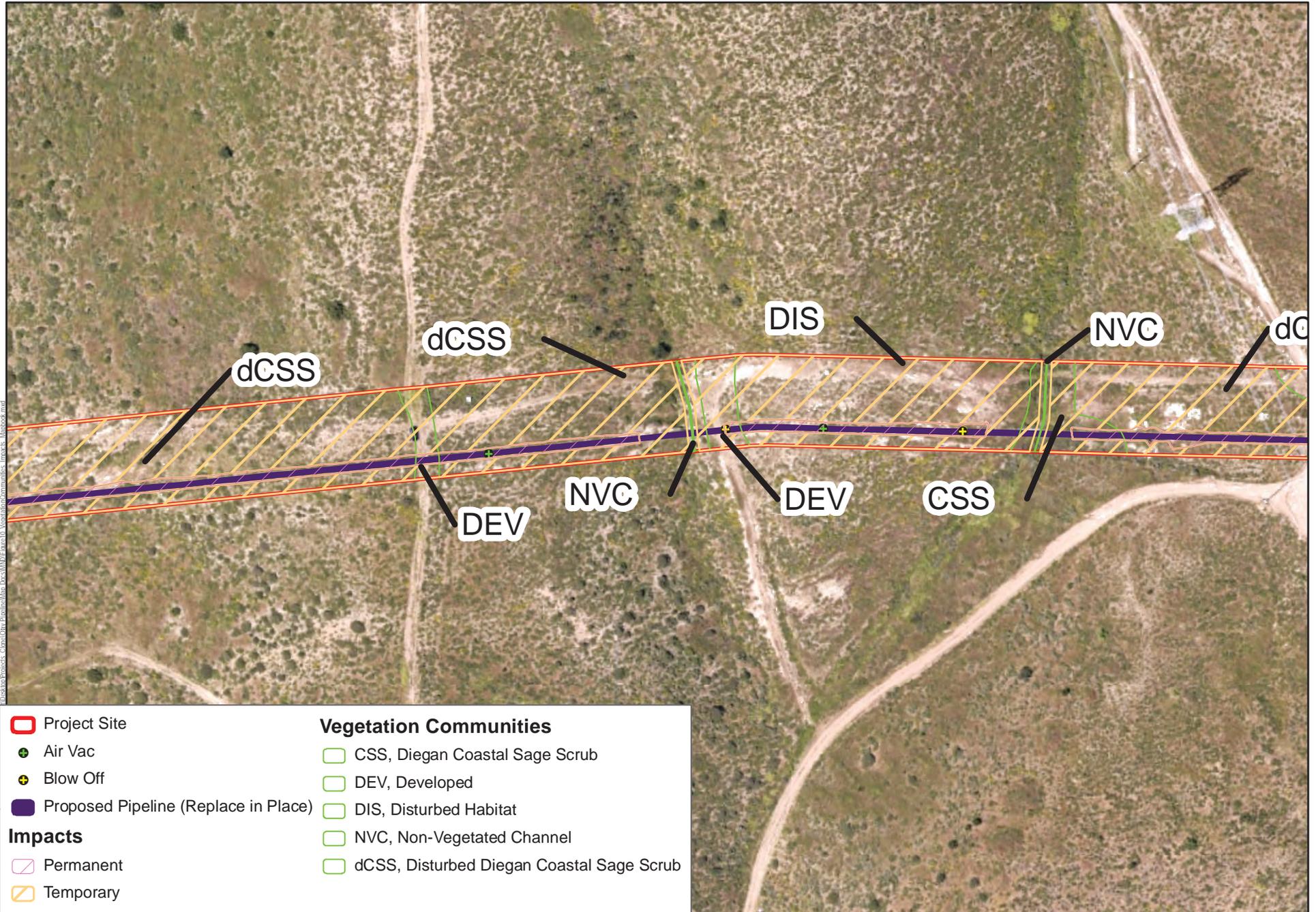
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Source: SanGIS Imagery 2017.



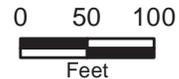
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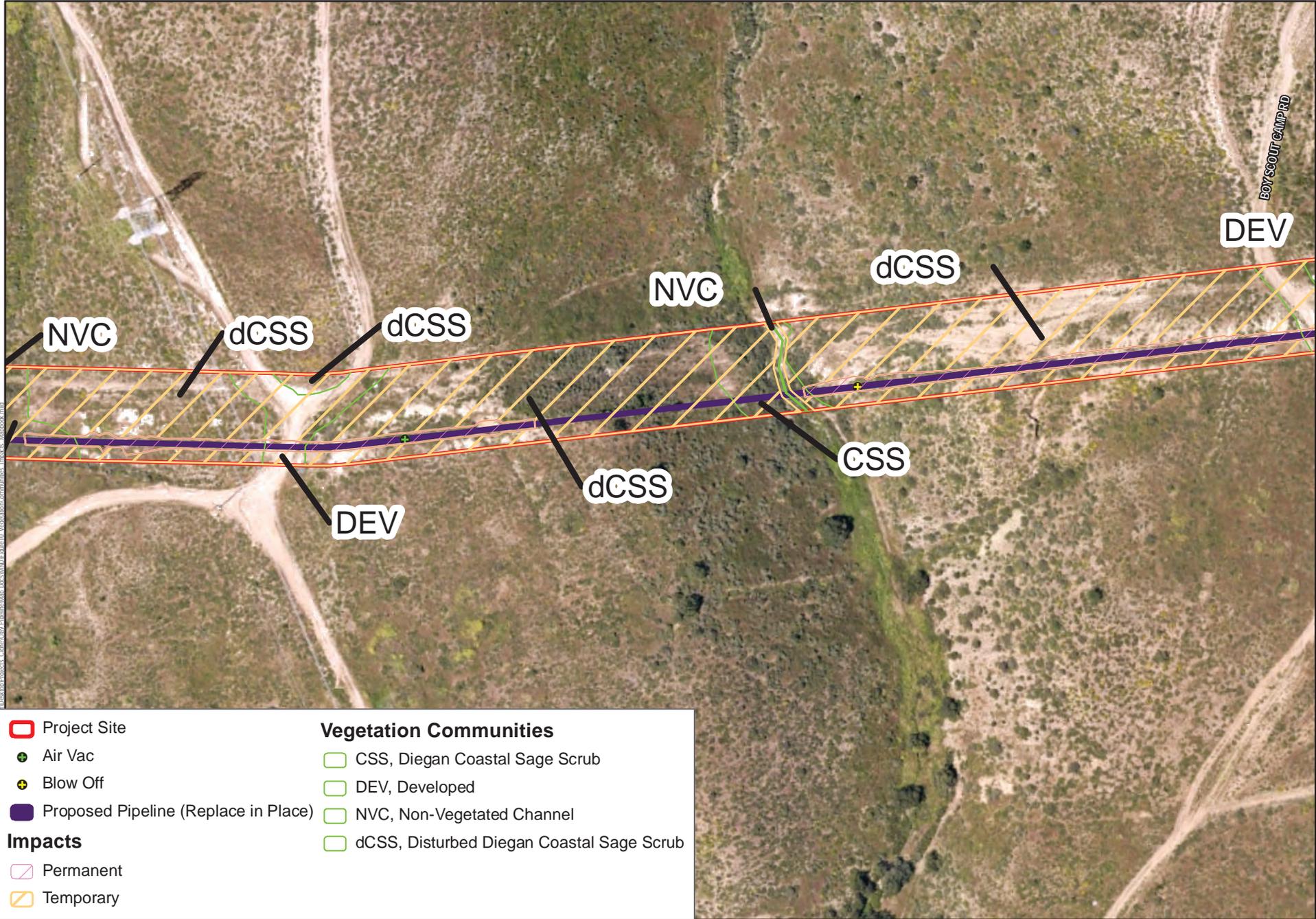
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	Project Site	<b>Vegetation Communities</b>	
	Air Vac		CSS, Diegan Coastal Sage Scrub
	Blow Off		DEV, Developed
	Proposed Pipeline (Replace in Place)		DIS, Disturbed Habitat
	Permanent		NVC, Non-Vegetated Channel
	Temporary		dCSS, Disturbed Diegan Coastal Sage Scrub

Source: SanGIS Imagery 2017.



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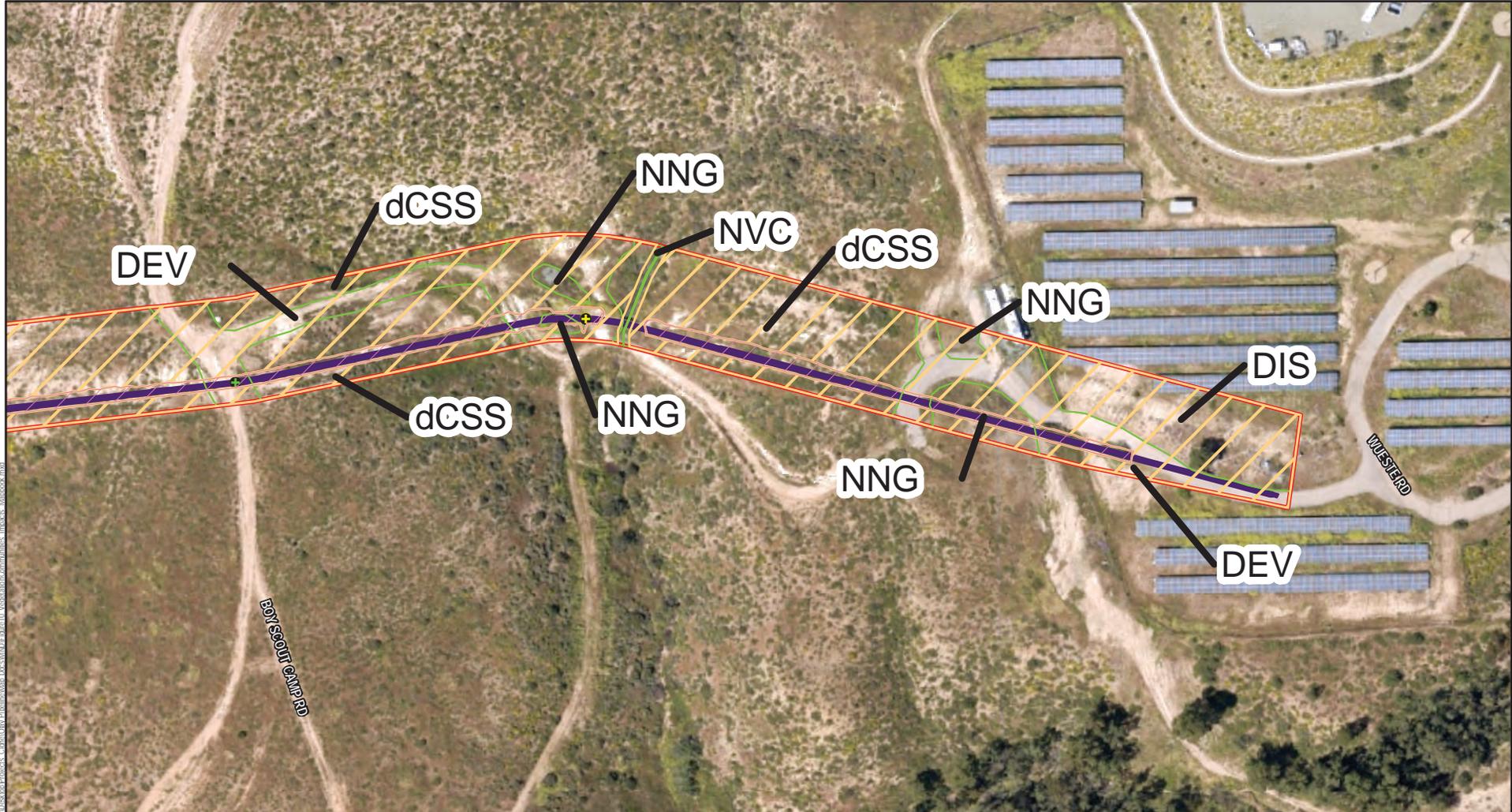


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Project Site	<b>Vegetation Communities</b>
Air Vac	CSS, Diegan Coastal Sage Scrub
Blow Off	DEV, Developed
Proposed Pipeline (Replace in Place)	NVC, Non-Vegetated Channel
<b>Impacts</b>	dCSS, Disturbed Diegan Coastal Sage Scrub
Permanent	
Temporary	

Source: SanGIS Imagery 2017.

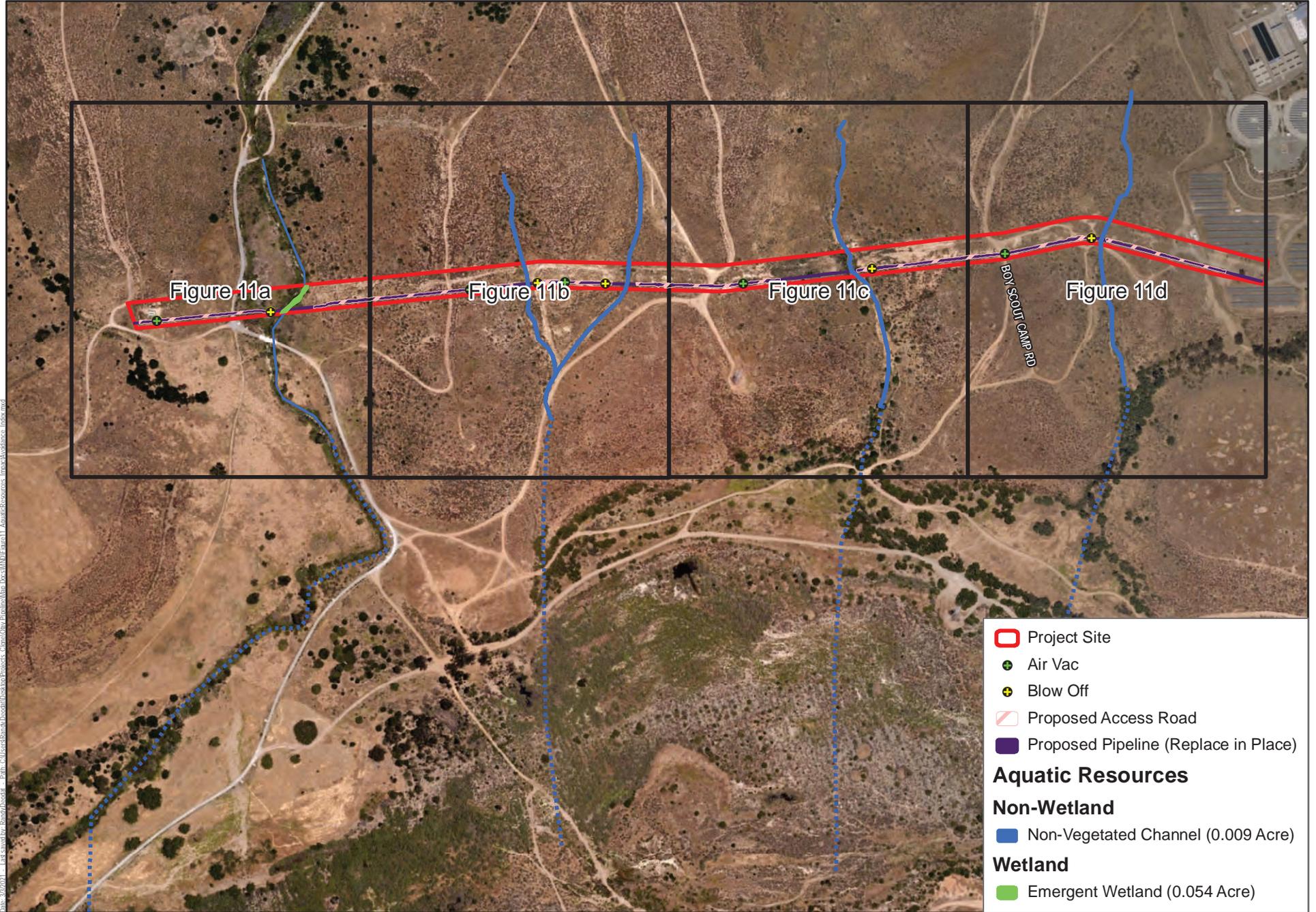
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Project Site	<b>Vegetation Communities</b>
Air Vac	DEV, Developed
Blow Off	DIS, Disturbed Habitat
Proposed Pipeline (Replace in Place)	NNG, Non-Native Grassland
<b>Impacts</b>	NVC, Non-Vegetated Channel
Permanent	dCSS, Disturbed Diegan Coastal Sage Scrub
Temporary	

Source: SanGIS Imagery 2017.

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Source: USGS 2020; SanGIS Imagery 2017.



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- Project Site
- + Air Vac
- + Blow Off
- Proposed Access Road
- Proposed Pipeline (Replace in Place)

**Aquatic Resources**

**Non-Wetland**

- Non-Vegetated Channel (0.009 Acre)

**Wetland**

- Emergent Wetland (0.054 Acre)

Source: SanGIS Imagery 2017.

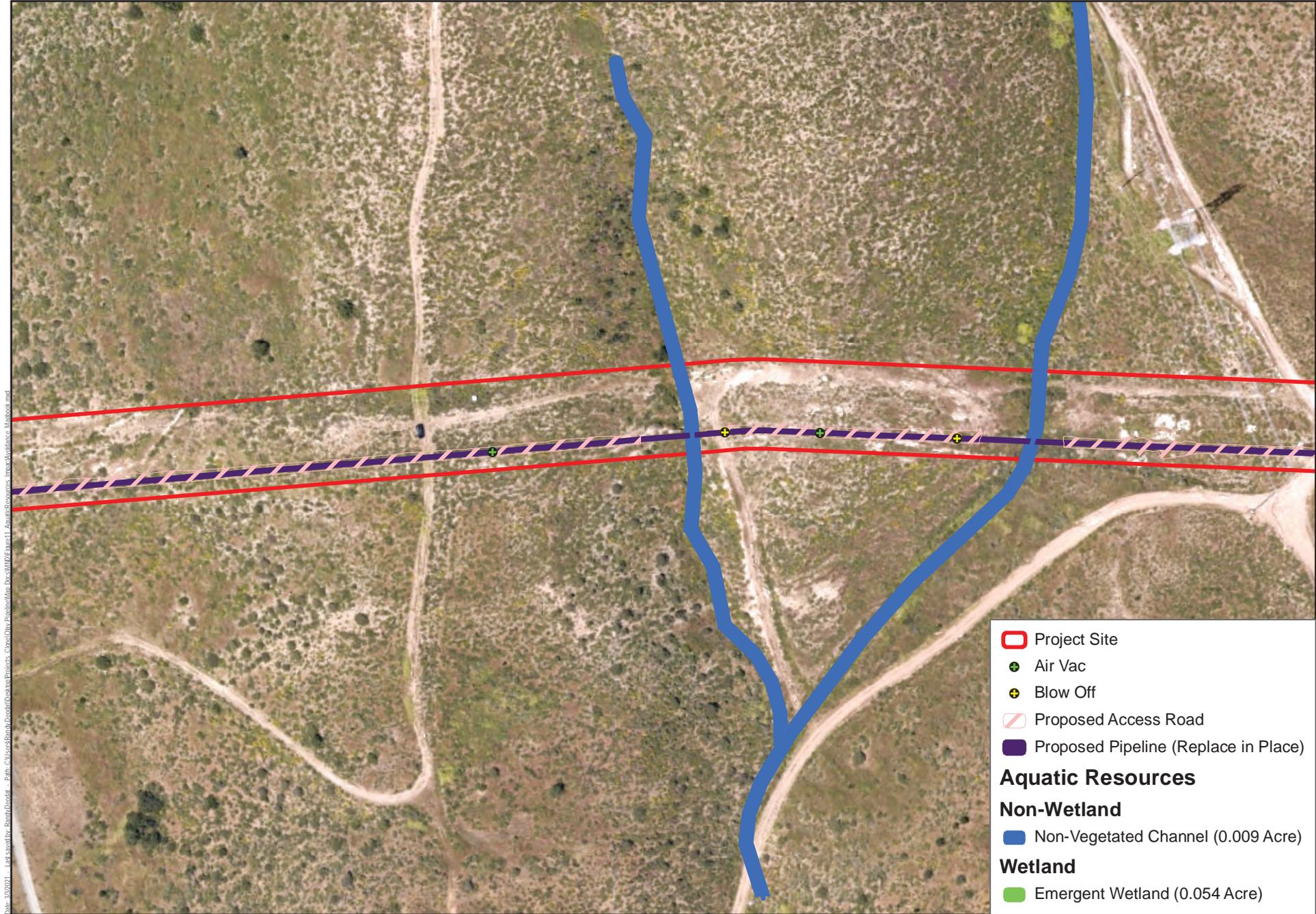
**Figure 11a**

Aquatic Resources Impacts Avoidance

Otay Pipeline

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- Project Site
- + Air Vac
- + Blow Off
- Proposed Access Road
- Proposed Pipeline (Replace in Place)

**Aquatic Resources**

**Non-Wetland**

- Non-Vegetated Channel (0.009 Acre)

**Wetland**

- Emergent Wetland (0.054 Acre)

Source: SanGIS Imagery 2017.

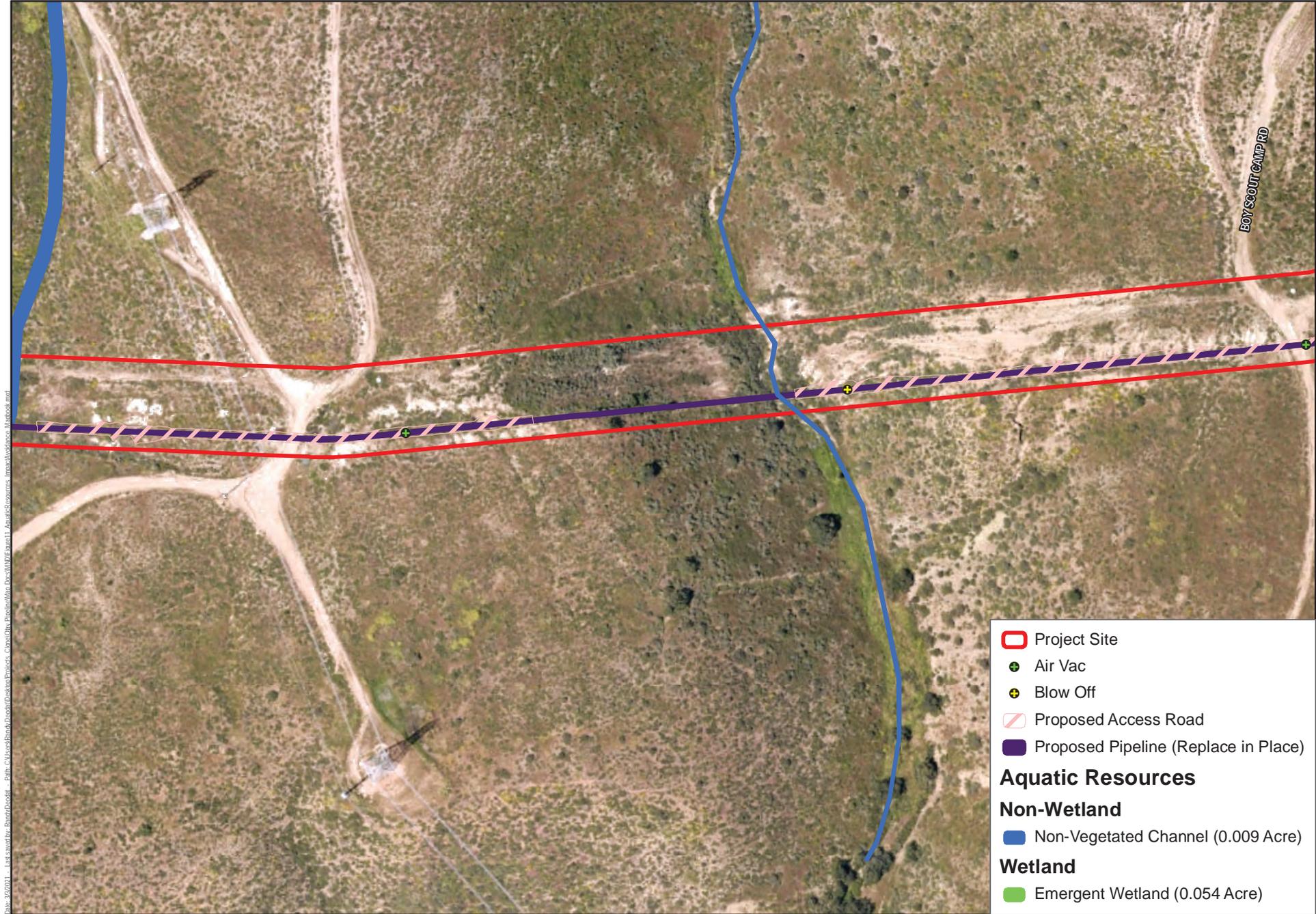
**Figure 11b**

Aquatic Resources Impacts Avoidance

Otay Pipeline

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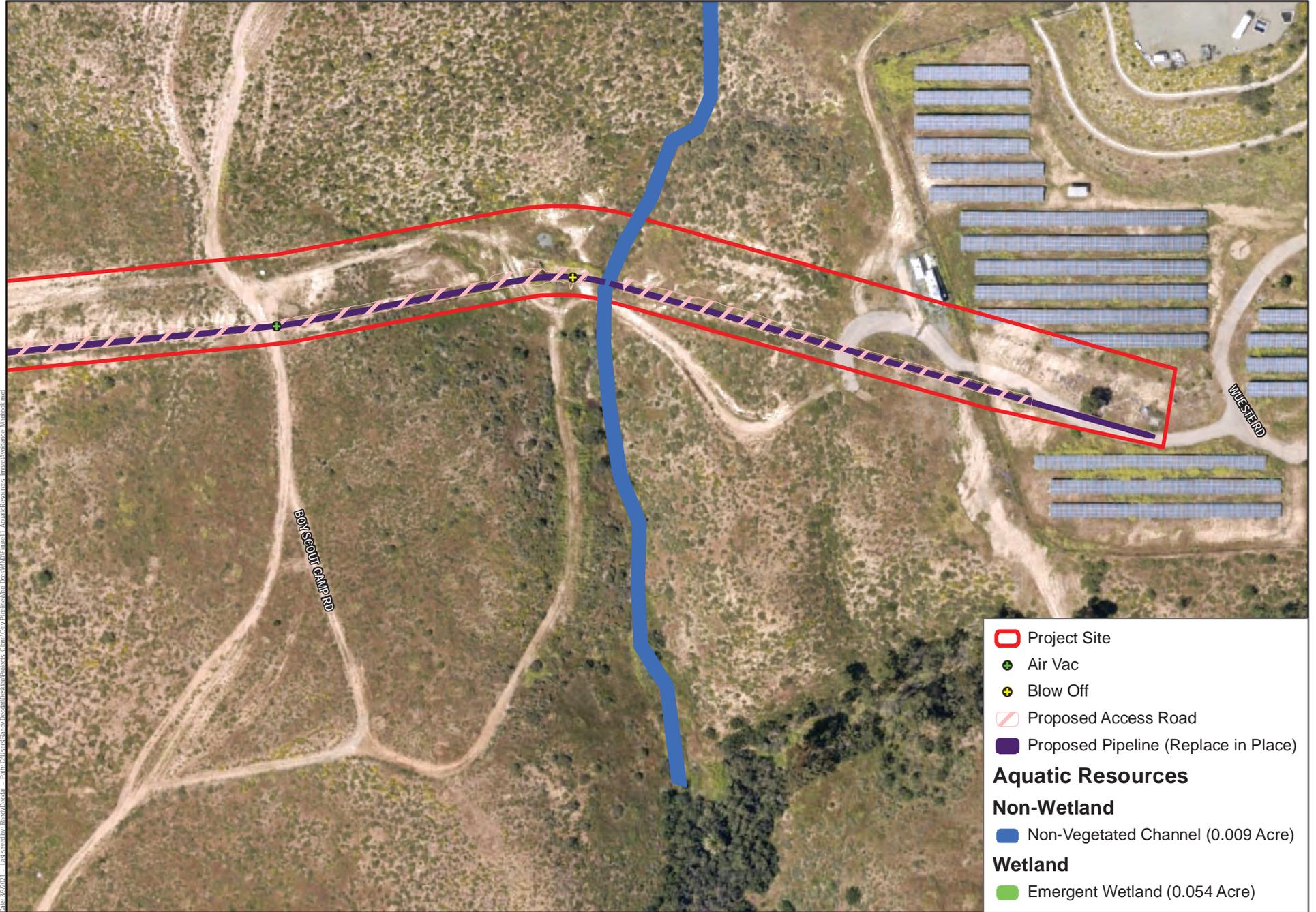
Source: SanGIS Imagery 2017.

**Figure 11c**

Aquatic Resources Impacts Avoidance

Otay Pipeline

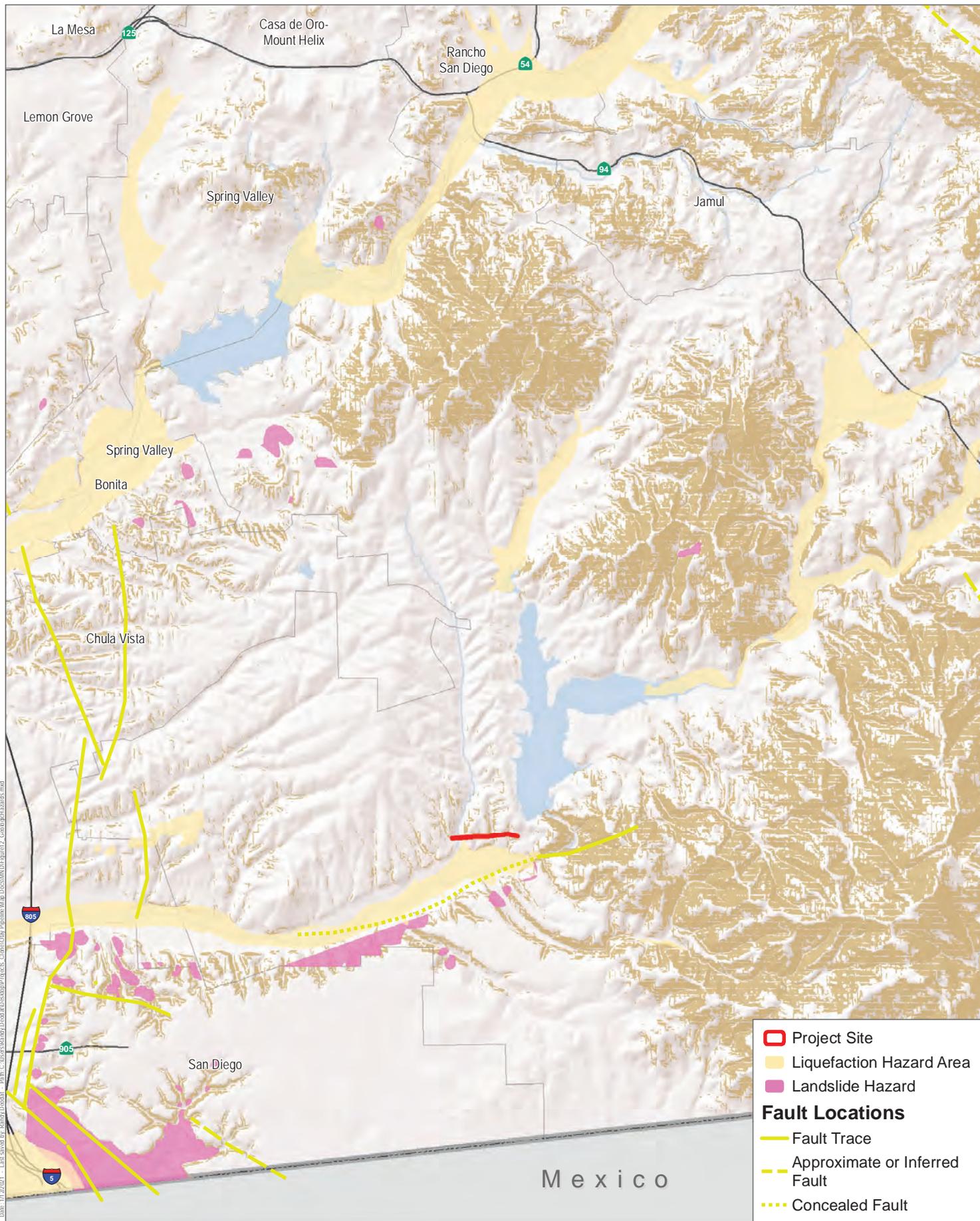
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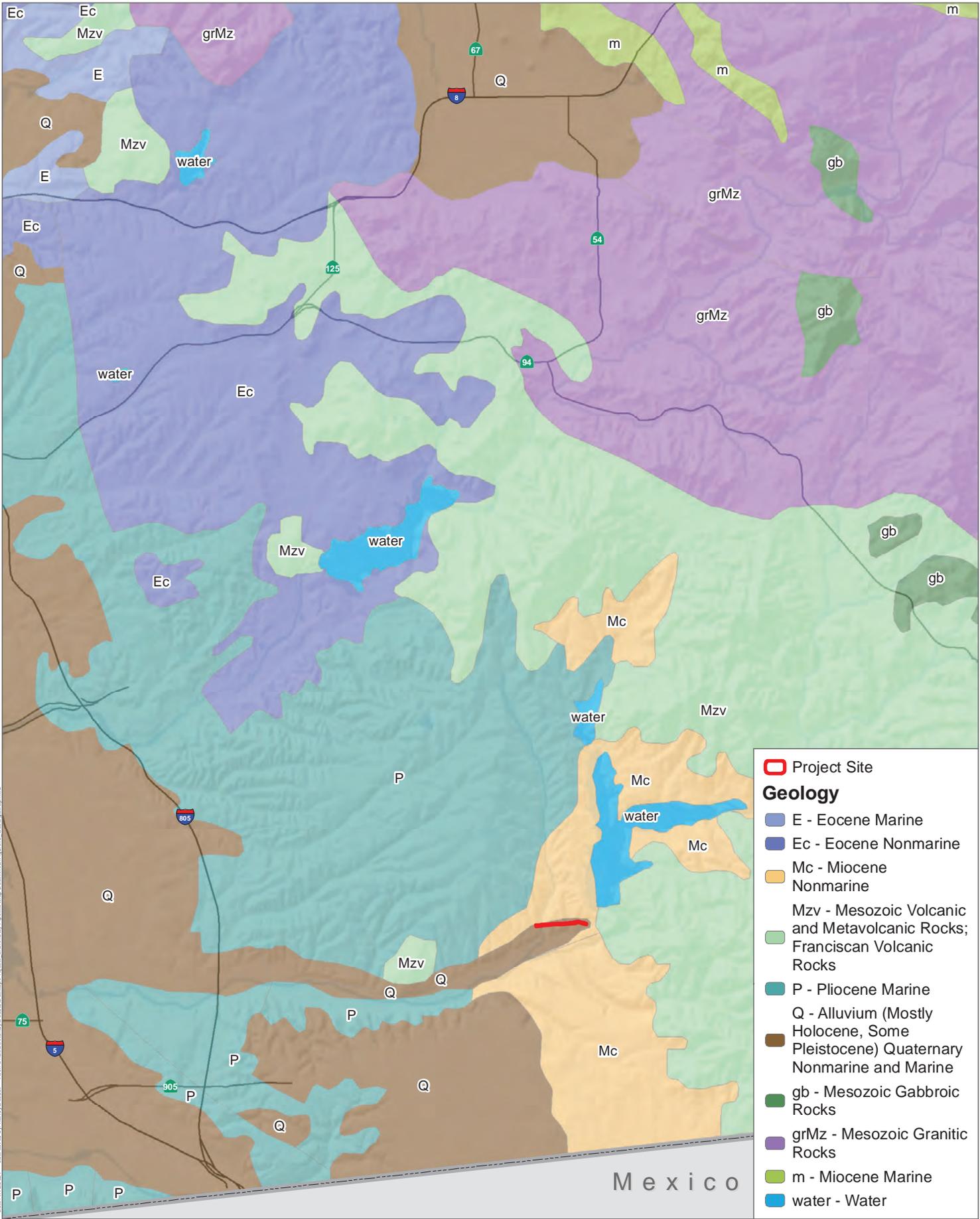
Source: SanGIS Imagery 2017.



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**Project Site**

**Geology**

- E - Eocene Marine
- Ec - Eocene Nonmarine
- Mc - Miocene Nonmarine
- Mzv - Mesozoic Volcanic and Metavolcanic Rocks; Franciscan Volcanic Rocks
- P - Pliocene Marine
- Q - Alluvium (Mostly Holocene, Some Pleistocene) Quaternary Nonmarine and Marine
- gb - Mesozoic Gabbroic Rocks
- grMz - Mesozoic Granitic Rocks
- m - Miocene Marine
- water - Water

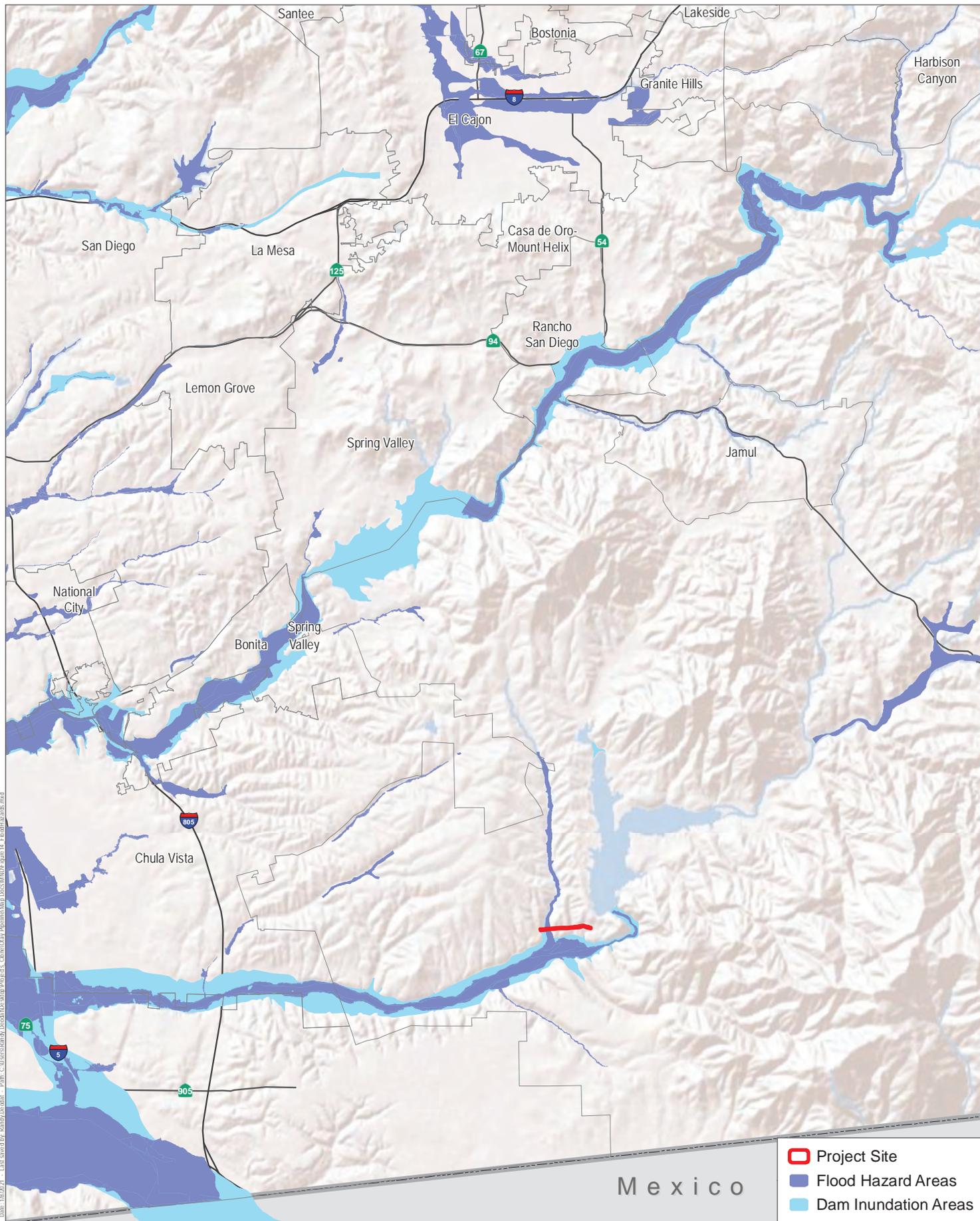
Source: USGS 2000; ESRI 2021

**Figure 13**  
 USGS Geologic Map  
 Otay Pipeline

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Source: SanGIS 2019; SanGIS Imagery 2017.

**Figure 14**  
 Flood and Dam Inundation Hazards  
 Otay Pipeline



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