# ADDENDUM TO THE TIJUANA RIVER VALLEY REGIONAL PARK TRAILS AND HABITAT ENHANCEMENT PROJECT

# **ENVIRONMENTAL IMPACT REPORT**

(SCH NO. 2004091159)

Prepared For:



# County of San Diego

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# ACRONYMS AND ABBREVIATIONS

| BMPs            | best management practices                               |
|-----------------|---|
| CDFW            | California Department of Fish and Wildlife              |
| CEQA            | California Environmental Quality Act                    |
| CO              | carbon monoxide   |
| County          | County of San Diego                                     |
| CY              | cubic yard  |
| dB              | decibels  |
| dBA             | A-weighted decibels                                     |
| DOC             | Department of Conservation                              |
| DPR             | County of San Diego, Department of Parks and Recreation |
| DTSC            | Department of Toxic Substances Control                  |
| EDC             | Environmental Design Considerations                     |
| EIR             | Environmental Impact Report                             |
| ft              | feet  |
| HELIX           | HELIX Environmental Planning, Inc.                      |
| 1-5             | Interstate 5  |
| JRMP            | Jurisdictional Runoff Management Plan                   |
| L <sub>EQ</sub> | dBA hourly equivalent                                   |
| MBTA            | Migratory Bird Treaty Act                               |
| MHPA            | Multiple Habitat Planning Area                          |
| MSCP            | Multiple Species Conservation Program                   |
| NAHC            | Native American Heritage Commission                     |
| NOLF IB         | Naval Outlying Landing Field Imperial Beach             |
| NO <sub>x</sub> | oxides of nitrogen                                      |
| NPDES           | National Pollution Discharge Elimination System         |
| PDF             | Project Design Feature                                  |
| PM              | particulate matter                                      |
| PRC             | Public Resources Code                                   |
| RAQS            | Regional Air Quality Strategy                           |
| RWQCB           | Regional Water Quality Control Board                    |

| SCH             | State Clearinghouse                   |  |
|-----------------|---------------------------------------|--|
| SCIC            | South Coastal Information Centers     |  |
| SO <sub>x</sub> | sulfur dioxides                       |  |
| SWPPP           | Storm Water Pollution Prevention Plan |  |
| SWRCB           | State Water Resources Control Board   |  |
| TRVRP           | Tijuana River Valley Regional Park    |  |
| U.S.            | United States                         |  |
| USACE           | U.S. Army Corps of Engineers          |  |
| USFWS           | U.S. Fish and Wildlife Service        |  |

# 1.0 INTRODUCTION

## 1.1 Introduction

The Tijuana River Valley Regional Park (TRVRP) comprises approximately 1,800 acres (2.8 square miles) within the lower Tijuana River Valley in southwestern San Diego County. The Tijuana River Valley is a unique area containing large, contiguous blocks of high-quality habitat that support numerous sensitive plant and animal species. The TRVRP is critical to wildlife because it is a part of the Pacific Flyway, which provides foraging and breeding habitat for many migrating bird species. Because of its importance to wildlife, the area has been designated as a biological core area in the City of San Diego's Multiple Species Conservation Program (MSCP) and lies almost entirely within the Multiple Habitat Planning Area (MHPA). Designated federal and state open space located adjacent to the TRVRP include: the Tijuana Slough National Wildlife Refuge and Border Field State Park. However, the Tijuana River Valley also supports areas that have been subjected to human disturbance for decades. These disturbances have resulted in the loss of native habitat, degradation of water quality, compaction of native soils, and accumulation of trash, erosion, and sedimentation. The quality of water in the Tijuana River, particularly water from Mexico, is often heavily impacted by sediments, pollution, trash, and debris. Poor water quality has resulted in numerous beach closures just west of the TRVRP.

Spooner's Mesa in the southwestern portion of the TRVRP consists of poorly draining soils and dirt roads directing all stormwater runoff towards the outer edges of the roadways until gathering at the designed low point necessitating a drainage infrastructure crossing. A 3-foot diameter corrugated metal pipe culvert was installed many years ago and has been serving as the primary concentration point of moving water from the top of the mesa down to the Tijuana River Valley floor. Flow is conveyed from the southside of the access road/hiking trail that ascends to the peak of the mesa to the northside where it enters a deep gully canyon with very steep slopes. Several years ago, a section of the culvert disconnected and fell into the canyon leaving an exposed opening near the roadway from which runoff freely falls onto the bare earth below. The area surrounding the exposed culvert has also eroded over time. This failure combined with a significant wet year during Water Year 2023 has caused severe erosion immediately downstream of the culvert and throughout the canyon, forming a gully that is slowly migrating towards the roadway threatening to disrupt a critical point of access to the top of the mesa for the County. The threat to the stability of the road has necessitated evaluating potential alternatives to repair the culvert crossing and help to stop or slow the erosion occurring.

The proposed Spooner's Mesa Stormwater Improvements Project (proposed project) includes four alternatives and is evaluated in this Addendum to the Tijuana River Valley Regional Park Trails and Habitat Enhancement Project (approved project) Environmental Impact Report (approved project EIR; State Clearing House [SCH] Number 2004091159), certified by the Board of Supervisors on December 13, 2006. The proposed project has also been formerly referred to as the Spooner's Mesa Culvert Project.

The approved project entailed establishing a formal trail network, revegetation, and habitat restoration within the TRVRP. The access road threatened by the culvert failure serves a dual purpose as (1) an emergency access road out of the Tijuana River Valley when primary access through Monument Road is not feasible during storm events and (2) a trail to access the top of Spooner's Mesa as part of the approved project's trail network. The approved project EIR found significant impacts to biological resources, cultural resources and land use and planning. The significant effects were determined to be mitigated or avoided to a level below significance.

The activities addressed in this document are proposed to achieve the ultimate objective of ensuring the stability of roadways, trails, and access through the rehabilitation of the existing drainage structure and are consistent with the types of activities envisioned in the approved project EIR. Additionally, there are no substantial changes regarding circumstances or new information of substantial importance such that the specific activities now proposed would result in new significant impacts or impacts of substantially increased severity. This Addendum was prepared per Section 15162 and 15164 of the California Environmental Quality Act (CEQA) Guidelines to analyze whether the changes to the approved project would result in new or substantially more severe significant environmental impacts, as compared to what was analyzed and proposed in the approved project EIR. This Addendum supports the conclusion that none of the conditions described in State CEQA Guidelines Section 15162 calling for preparation of a subsequent or supplemental environmental document has occurred and thus, an Addendum is the appropriate document for this analysis. Additional CEQA documentation is not required.

The individual analysis of each CEQA impact is discussed in Section 3.0, *Environmental Impact Analysis*, of this Addendum. This analysis concludes that the alternatives discussed below in Section 2.0, *Project Description*, would not alter the conclusions reached in the impact analysis in the approved project EIR. In summary, the proposed project, with the proposed changes, would result in the following impacts, which are the same as those that would occur under the approved project analyzed in the approved project EIR:

- No significant impacts on aesthetics, agricultural and forestry resources, air quality, geology and soils, hazards and hazardous materials, hydrology and water quality, noise, public services and utilities, recreation, and transportation.
- Less-than-significant impacts with mitigation incorporated, on biological resources, cultural and paleontological resources, and land use and planning.

## 1.2 Background

The County of San Diego Department of Public Works prepared the approved project EIR, which was circulated for a public review period pursuant to the requirements of Section 15105 of the State CEQA Guidelines. The review period gave agencies, organizations, and members of the public the opportunity to review the approved project EIR and provide comments on the document and the environmental analysis presented therein. The County considered all relevant comments in preparation of the approved project EIR.

The approved project EIR was prepared in accordance with the requirements of CEQA (California Public Resources Code [PRC] Section 21000, et seq.) and the State CEQA Guidelines (California Administrative Code, Title 14, Section 15000, et seq.). The purpose of the approved project EIR was to provide the decision-making body (County Board of Supervisors), responsible agencies, and the public with information regarding the environmental impacts of the approved project. The approved project EIR analyzed the potential impacts of implementing the approved project, which consisted of developing a 22.5-mile formal trail network and a staging area, revegetation of existing informal trails and dirt roads, restoration of approximately 60 acres of habitat, construction of a steel semi-trestle multi-use recreational bridge crossing over the Tijuana River, and the inclusion of interpretive and directional signage, benches, bird observation blinds, and other furnishings. The approved project EIR identified that the approved project would cause potential impacts to biological resources, cultural resources, and land use and planning. However, the approved project EIR included mitigation measures that would

reduce the impacts to levels below significance, and no significant unavoidable adverse environmental impacts were identified. The County Board of Supervisors certified the approved project EIR on December 13, 2006.

Since certification of the approved project EIR, additional detailed information is available regarding implementation of the approved project within the site, including rehabilitation of the failed drainage that has resulted in severe erosion on the property and has the potential to limit access to the emergency access road/trail. This Addendum analyzes four alternatives to the rehabilitation of the failed drainage infrastructure on Spooner's Mesa in accordance with the objectives set forth in the approved project EIR; details regarding the proposed restoration are contained in Section 2.0, *Project Description*.

## 1.3 Purpose of Addendum to the Approved Project EIR

When relying on a previous CEQA document, a determination must be made by the Lead Agency as to whether an Addendum or Subsequent/Supplemental Environmental Impact Report is needed. CEQA Guidelines Section 15162 and 15164 set forth criteria to assess which environmental document is sufficient and appropriate. The criteria for determining whether an Addendum or Subsequent/ Supplemental EIR should be prepared are outlined in this section. Pursuant to CEQA Guidelines Section 15164, an addendum to an adopted EIR may be prepared if none of the conditions described in Section 15162 calling for preparation of a subsequent environmental document have occurred. If the following statements are true, then preparation of an Addendum is appropriate:

- There are no substantial changes proposed in the project that will require major revisions of the previous environmental document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
- Substantial changes have not occurred with respect to the circumstances under which the project is undertaken that will require major revisions of the previous environmental document due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
- There is no new information of substantial importance that was not known and could not have been known with the exercise of reasonable diligence at the time the previous environmental document was certified as complete or was adopted, that shows any of the following:
  - The project will have one or more significant effects not discussed in the previous environmental document;
  - Significant effects previously examined will be substantially more severe than shown in the previous environmental document;
  - Mitigation measures or alternatives previously found not to be feasible would in fact be feasible and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measures or alternatives; or
  - Mitigation measures or alternatives that are considerably different from those analyzed in the previous environmental document would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

Based upon the analysis in Section 3.0, *Environmental Impact Analysis*, of this document, the changes to the approved project analyzed in the approved project EIR would not result in new significant impacts or substantially increase the severity of significant impacts previously identified in the approved project EIR. Additionally, the mitigation measures set forth in the EIR are still applicable, and no new mitigation measures are required to mitigate the changes to the previously approved project. Therefore, the Lead Agency has determined that an Addendum to the approved project EIR is sufficient and appropriate, and this Addendum has been prepared to analyze the environmental effects of the proposed project. Public review of this Addendum is not required per CEQA Guidelines Section 15164.

# 2.0 **PROJECT DESCRIPTION**

# 2.1 Project Setting and Location

This Addendum to the approved project EIR is for the Spooner's Mesa Stormwater Improvements Project (proposed project). The proposed project is located in the County of San Diego (County) near the United States (U.S.)-Mexico border, approximately 200 feet (ft) east of 2291 Monument Road on Assessor's Parcel Number 663-010-5500 owned by the County. The study area for the proposed project is within the southwestern portion of the property and totals 77 acres. The proposed project contains steep hillsides covered with vegetation along the northern side of Spooner's Mesa. Portions of the formal trail network established in the Tijuana River Valley Regional Park Trails and Habitat Enhancement Project (approved project) are designated in the proposed project and vicinity including along the access road. The surrounding areas include Monument Road and rural lands to the north; rural lands, scattered rural residences, and the Tijuana River Valley to the east; International Park and Mexico to the south; and the Tijuana River Valley Campground to the west. The proposed project occurs within Sections 4 and 5, Township 19 South, and Range 2 West of the U.S. Geological Survey Imperial Beach topographic quadrangle map. The proposed project is located within the TRVRP, which is an approximately 1,800-acre (2.8 square mile) park consisting of preserved lands owned and managed primarily by the County. Other landowners within TRVRP include the City of San Diego, California State Parks, the California Department of Fish and Wildlife (CDFW), and some private ownership. The proposed project occurs on County-owned lands and is managed by the County's Department of Parks and Recreation (DPR). Designated federal and state open space is located next to the TRVRP and includes Border Field State Park and the Tijuana River National Estuarine Research Reserve, and the Tijuana Slough National Wildlife Refuge (Refer to Figure 1, Regional Location and Figure 2, Aerial Photograph).

Regionally, the proposed project is part of the Tijuana River Watershed, a 1,750 square mile, binational watershed that straddles the border of San Diego County, California, and northern Baja California in Mexico. Approximately three quarters of the watershed lies in Mexico and includes the cities of Tijuana and Tecate. On the U.S. side, the watershed extends into the jurisdictions of the City of San Diego, the City of Imperial Beach, and the County of San Diego. The Tijuana River flows from Mexico into the U.S. and ultimately discharges into the Pacific Ocean through the Tijuana River Estuary.

The proposed project includes failed and degraded drainage infrastructure on either side of a gravel access road on Spooner's Mesa consisting of storm drain pipe, outfalls, and inlets (refer to Figure 3, *Existing Drainage Area and Infrastructure*). Existing drainage infrastructure is located up slope, south of the access road (labeled Storm Drain, SD-1; Outfall, O-1; and Inlet I-1 on Figure 3) and down slope between the access road and Monument Road (labeled SD-2A, O-2A, O-2B, and I-2 on Figure 3). An existing degraded storm drain pipe continues north of O-2A (labeled Degraded Downstream CMP on Figure 3) where flows no longer adequately convey to a terminal outfall near Monument Road (labeled O-3 on Figure 3).

Spooner's Mesa Culvert Project



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Figure 1

Spooner's Mesa Culvert Project



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Figure 2

**Aerial Photograph** 





# **Existing Drainage Area and Infrastructure**

Figure 3

# 2.2 Project Components

Four alternatives are identified to rehabilitate the failed drainage infrastructure on Spooner's Mesa between the inlet structure at the top of the landing and the outfall at the bottom of the slope along Monument Road. Each of the alternatives are very similar and would involve removal of degraded storm drain pipe and would similarly replace the inlet and outfall structures and associated storm drain pipe up slope and south of the access road (labeled O-1, SD-1, and I-1 on Figure 3); however, they differ in how the infrastructure down slope and north of the access road would be replaced (labeled I-2, SD-2A, O-2A, and O-2B on Figure 3). Specifically, Alternative 1 would convey storm water within a replaced storm drain pipe about halfway down the slope between the access road and Monument Road. Flows would outfall and dissipate through grouted riprap until the outfall at Monument Road. Alternative 2 would extend the storm drain pipe to connect to the outfall at Monument Road. Alternatives 1 and 2 and installing an upstream detention basin. Alternative 4 would involve creating a concrete swale along the access road before flowing to the existing outfall at Monument Road, similar to the other alternatives. While four alternatives are identified, only one will be implemented.

Each alternative would utilize open-trench construction methods and maintain the overall drainage patterns on-site by completing the proposed improvements and removing accumulated sediment and debris. Each alternative also includes construction and maintenance of permanent erosion control measures such as velocity dissipation devices (e.g., rip-rap) and installation and maintenance of permanent vegetation within the existing naturalized channel downstream of outfall locations to reduce erosion caused by discharged stormwater. Additional concrete K-rail barriers would also be installed along the existing access road as a part of the alternatives for road safety.

Alternative 1 would involve the replacement of existing drainage infrastructure between a top landing inlet structure to approximately halfway down the mesa slope toward Monument Road. Drainage would outfall just upslope of the access road before entering a second inlet where flows would continue in a storm drain pipe until surfacing at the outfall structure proposed about halfway down the slope (Figure 4, *Alternative 1 Site Plan*). Flows would then continue through a series of riprap structures before reaching the outfall at Monument Road. Two replacement inlets and outfalls and approximately 370 linear feet of above ground storm drain pipe (36-inch corrugated metal pipe [CMP]) would be installed on the project site as a part of Alternative 1.

Alternative 2 would involve the replacement of the existing drainage infrastructure between the top landing inlet structure and Monument Road (Figure 5, *Alternative 2 Site Plan*). The replacement storm drain pipe in Alternative 1 would be extended under Alternative 2 to the proposed replacement outfall at the Monument Road crossing instead of halfway down the slope. The proposed outfall locations would include grouted riprap or other velocity dissipation. Two replacement inlets and outfalls and approximately 663 linear feet of storm drain pipe (36-inch CMP) are proposed in this alternative. In addition to the construction of permanent erosion control measures such as velocity dissipation devices and installation of vegetation, fill may also be placed within the existing naturalized channel between the access road and Monument Road crossings as needed to install the storm drain culvert and replace soil previously lost to erosion.



Source: Craft Water Engineering 2024



Alternative 1 Site Plan

Figure 4



Source: Craft Water Engineering 2024



Alternative 2 Site Plan

Figure 5

Alternative 3 reduces the anticipated peak flows and volumes by providing upstream detention storage. This alternative would involve the replacement of two inlets and outfalls and approximately 278 linear feet of existing drainage infrastructure (168 linear feet of 36-inch CMP and 110 linear feet of 18-inch polyvinyl chloride) from the access road to the proposed outfall (Figure 6, *Alternative 3 Site Plan*). The storage is proposed on top of the mesa near the existing access road where grading would be performed to create a low point. The detention basin would occupy 9,850 square feet with a capacity of 0.63 acrefeet and a new inlet. Assuming the infiltration is limited within this area, a riser pipe would be installed that conveys the detained flows underneath the road (as opposed to over the road). This detention storage would lower the peak flow rate velocities that would arrive at the existing culvert thus lowering the erosive potential of the runoff. The culvert would be replaced under the road and the new outfall would be armored to prevent undercutting of the road. Additional riprap would be installed in several locations down the existing waterway to protect the embankment. This option limits the necessary construction access and activity within the steep canyon and rather puts the efforts in the open and flatter area of the mesa that is easier to access.

Alternative 4 would involve the replacement of existing drainage infrastructure between a top landing inlet structure to the access road and installation of a concrete swale along the access road. Drainage would outfall just upslope of the access road before entering a concrete swale along the southern side of the access road. Flows would continue to an existing culvert where flows would pass beneath the road into another concrete swale until an outfall about halfway down the slope towards Monument Road. The proposed concrete swale down slope and north of the access road would include boulders within two transition areas to dissipate flow velocities (Figure 7, *Alternative 4 Site Plan*). Two replacement inlets and outfalls and up to approximately 700 linear feet of concrete swale would be installed on the project site as a part of Alternative 4.

## 2.3 Applicable Mitigation Measures

The approved project EIR identified mitigation measures to reduce environmental impacts to less than significant levels. Specifically, mitigation measures were included for biological resources (24 mitigation measures), cultural resources (14 mitigation measures), land use and planning (one mitigation measure) in the approved project EIR. Several mitigation measures for biological resources from the approved project EIR (mitigation measures 1 through 9 and 20 through 24) would not apply to the proposed project because they address impacts that are not related to the project or project area, or because they pertain to the overall management of the TRVRP. The mitigation measures for land use and planning would not apply to the proposed project because it pertains to the Eastern Staging Area which is not near the project site. The following recommended mitigation measures for biological resources, cultural resources, and paleontological resources would be incorporated from the approved project EIR and apply to the proposed project. Biological Mitigation Measures 10, 11, 12, 15, 16 and 17 contain requirements that are also included or covered by Environmental Design Consideration (EDCs) or Project Design Feature (PDFs) described below in Sections 2.4 and 2.5, respectively.

**Biological Resources Mitigation Measure 10**: Prior to any on site construction work, the limits of the Project Impact Area (including access and staging) will be surveyed, staked, and fenced.



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Alternative 3 Site Plan

Figure 6





Source: County of San Diegp 2024

# Alternative 4 Site Plan

Figure 7

**Biological Resources Mitigation Measure 11**: A qualified biologist will delineate the boundaries of the project footprint with orange snow fencing, or similar delineation methods, to avoid surface disturbance to the surrounding areas. Movement of vehicles and equipment will be confined within these delineated areas. The limits of the project footprint will be clearly delineated upstream and downstream of the project footprint.

**Biological Resources Mitigation Measure 12**: Jurisdictional wetlands and sensitive habitats should be protected from construction activities using silt fencing and orange snow fencing. If trail widening and associated project components in the floodplain or in riparian wetlands require dredging or filling of wetlands or seasonal streambeds, and/or removal of riparian vegetation, permits from U.S. Army Corps of Engineers (USACE), CDFW, and Regional Water Quality Control Board (RWQCB) will be necessary.

**Biological Resources Mitigation Measure 13:** A biological monitor (qualified biologist) will be present to monitor and enforce environmental protection measures, including the installation and maintenance of best management practices (BMPs), maintenance of fences, and all construction-related provisions identified in this document to minimize and mitigate impacts.

**Biological Resources Mitigation Measure 14:** Personnel will be trained prior to the action by experienced biologists. All employees that will work on the project will be educated and instructed of the following: to limit and restrict their activities, vehicle and equipment use, and construction materials to the designated construction/staging areas and routes of travel. Impact areas will be the minimal area necessary to complete the project.

**Biological Resources Mitigation Measure 15**: To meet the protection measures of the Migratory Bird Treaty Act (MBTA), construction activities will be conducted outside of the bird breeding season (February 1 through September 15) whenever feasible. However, if such activities must occur within the breeding season, a qualified biologist will conduct a preconstruction survey of the project site and surrounding habitat within one week prior to the start of construction, to determine if there are active nests within the project area, including raptors and ground nesting birds. The survey should begin no more than three days prior to the beginning of construction activities. It is recommended that if an active nest is observed in the Project area, a 300-foot buffer will be established between the construction activities (clearing, grubbing, building, etc.) and the nest so that nesting activities are not interrupted, and the buffers should be in effect as long as construction is occurring and/or until the nest is no longer active, or until approved by the project's qualified biologist.

**Biological Resources Mitigation Measure 16**: Siltation and erosion in and around the project site will be controlled with BMPs, including silt fences, gravel bags, fiber rolls, and slope stabilization by hydroseeding with binders and tackifiers.

**Biological Resources Mitigation Measure 17**: Construction personnel will apply appropriate erosion control measures, where appropriate, and adhere to BMPs as directed by County guidelines.

**Biological Resources Mitigation Measure 18:** Construction personnel will also avoid onsite fuel changes and use appropriate facilities for equipment repair. All transport, handling, use, and disposal of substances such as petroleum products, solvents, and paints related to construction of the sewer line will comply with all Federal, State, and local laws regulating the management and use of hazardous materials.

**Biological Resources Mitigation Measure 19:** Construction traffic will be minimal and confined to the well-traveled access roads and the fenced action area.

**Cultural Resources Mitigation Measure A-2:** The County certified archaeologist/historian (and Native American Observer) shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program. The County shall approve all persons involved in the monitoring program prior to any pre-construction meetings. The consulting archaeologist shall contract with a Native American Observer to be involved with the grading monitoring program.

**Cultural Resources Mitigation Measure A-3:** During the original cutting of previously undisturbed deposits, the archaeological monitor(s) (and Native American Observer) shall be onsite full-time to perform periodic inspections of the excavations. The frequency of inspections will depend on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features.

**Cultural Resources Mitigation Measure A-4:** Isolates and clearly non-significant deposits will be minimally documented in the field and the monitored grading can proceed.

**Cultural Resources Mitigation Measure A-5:** In the event that previously unidentified potentially significant cultural resources are discovered, the archaeologist shall have the authority to divert or temporarily halt ground disturbance operation in the area of discovery to allow evaluation of potentially significant cultural resources. The archaeologist shall contact the County Archaeologist at the time of discovery. The archaeologist, in consultation with County staff archaeologist, shall determine the significance of the discovered resources. The County Archaeologist must concur with the evaluation before construction activities will be allowed to resume in the affected area. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the consulting archaeologist and approved by the County Archaeologist, then carried out using professional archaeological methods. If any human bones are discovered, the County Coroner shall be contacted. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the Native American Heritage Commission (NAHC), shall be contacted in order to determine proper treatment and disposition of the remains.

**Cultural Resources Mitigation Measure A-6:** Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The archaeological monitor(s) (and Native American Observer) shall determine the amount of material to be recovered for an adequate artifact sample for analysis.

**Cultural Resources Mitigation Measure A-7:** In the event that previously unidentified cultural resources are discovered, all cultural material collected during the grading monitoring program shall be processed and curated according to current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County, to be accompanied by payment of the fees necessary for permanent curation.

**Cultural Resources Mitigation Measure A-8:** In the event that previously unidentified cultural resources are discovered, a report documenting the field and analysis results and interpreting the artifact and research data within the research context shall be completed. The report will include Department of Parks and Recreation Primary and Archaeological Site forms.

**Cultural Resources Mitigation Measure B-1:** The County certified paleontologist shall attend the pregrading meeting with the contractors to explain and coordinate the requirements of the monitoring program to evaluate the presence of fossils. The County shall approve all persons involved in the monitoring program prior to any pre-construction meetings.

**Cultural Resources Mitigation Measure B-2:** Paleontology monitor(s) shall be onsite full-time to perform periodic inspections of the excavations. The frequency of inspections will depend on the rate of excavation, the materials excavated, and the presence and abundance of paleontological resources.

**Cultural Resources Mitigation Measure B-3:** In the event that previously unidentified potentially significant paleontological resources are discovered, the paleontologist shall have the authority to divert or temporarily halt ground disturbance operation in the area of discovery until such time that the sensitivity of the resource can be determined and the appropriate mitigation implemented.

**Cultural Resources Mitigation Measure B-4:** In the event that previously unidentified paleontological resources are discovered, a report documenting the field and analysis results and interpreting the research data within the research context shall be completed and submitted to the satisfaction of the County prior to the issuance of any building permits.

**Cultural Resources Mitigation Measure B-5:** In the event that previously unidentified paleontological resources are discovered during the grading monitoring program, fossils collected, along with copies of field notes, photos, and maps shall be deposited in a scientific institution such as the San Diego Natural History Museum.

**Cultural Resources Mitigation Measure B-6:** In the event that no paleontological resources are discovered, a brief letter to that effect shall be sent to the County by the consulting paleontologist stating that the grading monitoring activities have been completed.

## 2.4 Applicable Environmental Design Considerations

The approved project EIR identified EDCs to avoid environmental impacts. Specifically, EDCs were included for air quality (3 EDCs), geology and soils (2 EDCs), noise (3 EDCs), and traffic (one EDC) in the approved project EIR. Of these, the EDC traffic/circulation from the approved project EIR would not apply to the proposed project because it pertains to the Eastern Trailhead Staging Area that is not a part of the project. The proposed project also would incorporate the following EDCs from the approved project EIR, but are recommended to be implemented. The following recommended EDCs would be incorporated from the approved project EIR and apply to the proposed project.

**Air Quality EDC 1: Equipment Emissions.** On-road trucks and other mobile equipment should be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations.

**Air Quality EDC 2: Surface Watering.** Apply water to unstabilized disturbed areas and/or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface.

**Air Quality EDC 3: Clearing Activities.** All clearing and grading activities should cease during periods of high wind (greater than 20 mph averaged over 1 hour).

**Geology and Soils EDC 1: Stormwater Pollution Prevention Plan.** The County shall prepare a Stormwater Pollution Prevention Plan (SWPPP) for the Proposed Project. The SWPPP will establish Best

Management Practices to prevent and eliminate release of sediments (turbidity) from runoff of disturbed locations into the Tijuana River, local drains, culverts, waterways, and/or channels.

**Geology and Soils EDC 2: Erosion Control Plan.** An Erosion Control Plan shall be prepared to identify specific measures to be implemented to reduce soil loss and water quality impacts. The Erosion Control Plan will include, at a minimum:

- Confine all vehicular traffic associated with construction to designated rights-of-way, material yards, and access roads;
- Limit disturbance of soils and vegetation removal to the minimum area necessary for access and construction;
- Graded areas (i.e., the eastern staging area) should be sloped to sheet flow or bermed (water bars), where possible, to reduce concentrated surface water flows down roads and pathways or across the graded area to be revegetated;
- Use certified weed-free straw bales, or silt fences, where appropriate specifically in areas of passive restoration to minimize sedimentation; and
- Use drainage control structures, where necessary, to direct surface drainage away from disturbance areas and to minimize runoff and sediment deposition down-slope from all disturbed areas. These structures include culverts, ditches, water bars (berms and cross ditches), and sediment traps.

**Noise EDC 1: Conformance with Noise Requirements**. Construction activities shall conform to County of San Diego and City of San Diego requirements, which make it unlawful to operate construction equipment on Sundays or major holidays. Construction may occur Mondays through Saturdays between the hours of 7:00 a.m. and 7:00 p.m.

**Noise EDC 2: Noise Reducing Equipment.** Construction equipment shall be equipped with manufacturer's recommended mufflers or other noise-reducing equipment.

Noise EDC 3: Construction Equipment. Construction equipment shall be turned off when not in operation.

# 2.5 Project Design Features

The proposed project also would incorporate the following PDFs, which are design features specific to the proposed project. Some PDFs are like the approved project's mitigation measures and EDCs, but these PDFs have been tailored to the proposed project and are meant to further clarify the requirements identified in the approved project EIR. The following PDFs would be incorporated into the proposed project design to address site-specific conditions.

**PDF 1: Discovery of Human Remains**. In the unlikely event that human remains are discovered, the County Coroner shall be contacted. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the NAHC, shall be contacted to determine proper treatment and disposition of the remains. All requirements of Health & Safety Code §7050.5 and Public Resources Code §5097.98 shall be followed.

**PDF 2: General Nesting Season Avoidance**. Grubbing or clearing of vegetation during the general avian breeding season (February 1 to September 15), least Bell's vireo breeding season (March 15 to September 15), coastal California gnatcatcher breeding season (March 1 to August 15), or raptor breeding season (January 15 to July 15) shall be avoided to the extent feasible.

If construction activities would occur during the breeding season, a pre-construction survey shall be conducted by a qualified biologist no more than three days prior to the commencement of activities to determine if active bird nests are present in the affected areas. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within 300 feet of the survey area (500 feet for raptors), construction activities shall be allowed to proceed in that area. Furthermore, if construction activities are to resume in an area where they have not occurred for a period of seven or more days during the breeding season, an updated survey for avian nesting will be conducted by a qualified biologist within three days prior to the commencement of construction activities in that area.

If active nests or nesting birds are observed within 300 feet of the survey area (500 feet for raptors), the biologist shall flag a buffer around the active nests and construction activities shall not occur within 300 feet of active nests (500 feet for raptors) until nesting behavior has ceased, nests have failed, or young have fledged as determined by a qualified biologist. If the qualified biologist determines that the species will not be impacted with a reduced buffer (i.e., less than 300 feet for general avian species and 500 feet for raptors), potentially with implementation of avoidance measures to reduce noise, as necessary, and the qualified biologist monitors the active nest during construction to ensure no impacts to the species occur, construction may occur outside the reduced buffer during the breeding season, as long as the species is not impacted.

**PDF 3: Costal California Gnatcatcher, least Bell's vireo, and Raptor Noise Attenuation**. If preconstruction surveys determine the presence of active nests belonging to coastal California gnatcatcher, least Bell's vireo, or raptors, then the contractor will install noise attenuation materials within the work area to reduce the noise levels to below 60 A-weighted decibels averaged over a given hour (dBA  $L_{EQ}$ ) or ambient, unless a qualified biologist determines that noise attenuation is not necessary due to existing barriers, ambient noise levels, or other biological factors relevant to the species present. The type of material and location of installation will be determined prior to installation in coordination with a qualified biologist knowledgeable of that species and in coordination with a qualified acoustician. All noise attenuation materials will be installed prior to construction, and noise monitoring will be implemented to help ensure noise is below 60 dBA  $L_{EQ}$  at the edge of the species' habitat both during noise attenuation installation (if installed during the breeding season) and during construction. Prior to starting construction, the qualified acoustician will provide a written report to DPR that confirms that noise attenuation is installed and adequately reducing noise levels at the edge of the species' habitat. Noise monitoring will continue into the species' breeding season until ground disturbing activities are completed or until nestlings have fledged.

**PDF 4: Temporary Construction Fencing.** To help ensure errant impacts to sensitive vegetation communities outside of the impact footprint are avoided during construction, temporary environmental fencing (including silt fencing where determined necessary by the SWPPP), would be installed at the edges of the impact limits prior to initiation of ground disturbing activities. All construction staging shall occur within the approved limits of construction.

**PDF 5: Revegetation.** Revegetation of all temporarily impacted Tier II habitat areas shall occur. Two years of maintenance and monitoring shall be conducted to ensure the temporarily impacted area is revegetated sufficiently to avoid erosion and degradation of the City of San Diego's MHPA.

**PDF 6: Aquatic Resources Permitting.** Impacts to jurisdictional wetland and waterway resources require permits and authorizations by the USACE, RWQCB, and CDFW prior to impacts.

**PDF 7: Habitat Restoration Plan.** A Habitat Restoration Plan addressing impacts and subsequent restoration of jurisdictional waters, as well as sensitive upland habitats, shall be prepared by County prior to construction.

**PDF 8: Sea Dahlia.** Avoidance of potential impacts occurring within Alternative 4 to 24 individuals of sea dahlia, a CRPR 2B.2 and County List B plant species, would be achieved through the inclusion of this species in the project's restoration plant palette.

## 2.6 Project Modifications Since EIR Adoption

The approved project allowed the County of San Diego to establish a formal trail network and perform revegetation and habitat restoration for the TRVRP. The proposed project evaluated in this Addendum would involve rehabilitation of drainage infrastructure and installation of vegetation to improve storm water drainage conditions to support the formal trail network and revegetation activities in the TRVRP. Specifically, the proposed project would involve pipeline or swale installation and construction of catch basins, construction of permanent erosion control measures such as velocity dissipation devices (e.g., rip-rap, etc.) and permanent vegetation, and installation of concrete K-rail barriers on Spooner's Mesa within the southern part of the TRVRP. Resource permitting is not anticipated by any areas regulated by the USACE; however, a Waste Discharge Requirements permit from the RWQCB and a Streambed Alteration Agreement from the CDFW would be required because the proposed project would affect ephemeral drainages under the jurisdiction of state and local agencies.

The proposed project evaluated in this Addendum is the implementation of a combination of the elements identified in Section 2.2, *Project Components*, of this Addendum. Since the adoption of the approved project EIR, specific information has become available regarding activities to be performed under the approved project EIR. The activities addressed in this document are proposed to achieve the ultimate objective of addressing restoration of the Tijuana River Valley and are consistent with the types of activities envisioned in the approved project EIR. The environmental impacts associated with this change from the previously approved project are discussed in Section 3.0, *Environmental Impact Analysis*.

# 3.0 ENVIRONMENTAL IMPACT ANALYSIS

As described in Section 2.0, *Project Description*, the proposed project comprises a change to the previously approved project since the certification of the approved project EIR. As such, the following comparative analysis has been undertaken pursuant to the provisions of CEQA Sections 15162 and 15164 to provide the factual basis for determining whether changes in the project, change in circumstances, or new information since adoption of the approved project EIR would require additional environmental review or preparation of a subsequent EIR. This analysis focuses on whether the impact significance conclusions identified in the approved project EIR would change under the proposed project, which is described as four alternatives, as compared to the approved project. The impact analysis below includes a summary of the approved project EIR's conclusions and the proposed project conclusion for each alternative. The approved project EIR concluded that impacts to biological resources, cultural and paleontological resources, and land use and planning could be mitigated to below significance. The remaining environmental topics were dismissed and found not to be significant. The environmental analysis provided in the approved project EIR remains current and applicable to the approved project in areas unaffected by the proposed project for the environmental topics detailed in this section.

The Addendum below analyzes each issue area as required per Sections 15162 and 15164 of the CEQA Guidelines to confirm that an Addendum is the appropriate document and no additional environmental review is required. An overview of the proposed project impacts in relation to the approved project EIR is provided in Table 1, *Impact Assessment Summary*. Impacts related to wildfire, population and housing, mineral resources, energy, greenhouse gas emissions, and tribal cultural resources were not analyzed in the approved project EIR. Because an Addendum is the appropriate document, any new guidelines adopted since the approved project EIR are not included as standalone issue areas in this Addendum.

| Environmental Issue                       | Approved Project EIR                  | Proposed Project<br>(Alternatives 1, 2, 3 & 4)<br>Major Revisions, New or Increased Severity of<br>Impacts, or New Information That Shows New<br>Impacts or Changes in Feasibility of Approved<br>Project EIR Mitigation Measures or Alternatives? |
|---|---------------------------------------|--|
| 3.1 Aesthetics                            | Less than significant                 | No   |
| 3.2 Agriculture and Forestry<br>Resources | Less than significant                 | No   |
| 3.3 Air Quality                           | Less than significant                 | No   |
| 3.4 Biological Resources                  | Less than significant with mitigation | No   |
| 3.5 Cultural & Paleontological            | Less than significant with            | No   |
| Resources                                 | mitigation                            |  |
| 3.6 Geology & Soils                       | Less than significant                 | No   |
| 3.7 Public Health & Safety                | Less than significant                 | No   |
| 3.8 Hydrology & Drainage                  | Less than significant                 | No   |
| 3.9 Land Use & Planning                   | Less than significant with mitigation | No   |
| 3.10 Noise                                | Less than significant                 | No   |
| 3.11 Public Services & Utilities          | No Impact                             | No   |
| 3.12 Recreation                           | Less than significant                 | No   |
| 3.13 Traffic/Circulation                  | Less than significant                 | No   |

#### Table 1 ALTERNATIVES IMPACT ASSESSMENT SUMMARY

# 3.1 Aesthetics

#### **EIR Conclusions**

The approved project EIR states that the TRVRP area is visually characterized by its expansive, natural floodplain containing wetland and riparian areas and open viewsheds. The southern side of the TRVRP is noted as having high mesas and deep canyons covered by vegetation that consists primarily of forests of broadleaf evergreen trees and shrublands. Water features such as the Pacific Ocean and coastal lagoons were noted to contribute greatly to the visual quality of coastal areas. Scenic views were identified at the mesas along the southern border of the TRVRP.

Environmental impacts associated with aesthetics were summarized in approved project EIR Chapter 4.0 Effects Found Not to be Significant. The approved project EIR determined that impacts to aesthetics would be less than significant because it involves minimal or temporary physical alterations to the land. Vegetation removal activities were noted to be visible temporarily during construction and for a period following construction but were concluded to improve aesthetic conditions once revegetation is established.

#### **Proposed Project Conclusions**

#### Alternative 1

Alternative 1 would involve the replacement of existing storm drain pipe (370 linear feet) two catch basin inlets and outfalls, and the installation of permanent erosion control measures such as velocity dissipation devices (e.g., rip-rap, etc.) and permanent vegetation at the northern side of Spooner's Mesa. Alternative would occur from the top of the mesa half way down slope to an access road in the southern part of the TRVRP. Concrete K-rail barriers would also be installed along the existing access road. Views of the project study area are available generally from areas directly to the north within the TRVRP. Views of the project area are obscured by topography to the south, east, and west. The northern slopes of Spooner's Mesa are vegetated, and overhead powerlines occur along Monument Road.

Project activities would occur at Spooner's Mesa in the southern part of the TRVRP. During the shortterm, operating construction equipment and work crews would be visible constructing the proposed project. Some vegetation would be removed on the north side of Spooner's Mesa, leaving construction visible from recreational users as they are facing south along recreational trails designated north of the site near the Tijuana River. This type of activity would be temporary and similar to the existing activities that occur during restoration and revegetation under the approved project and as analyzed in the approved project EIR. Disturbed areas would be revegetated after construction and replaced storm drain pipe would be along the ground, similar to existing conditions. K-rail barriers would not be highly noticeable as they would be along the access road towards the top of Spooner's Mesa. The K-rail barriers would not be tall structures and would be generally hindered by vegetation and topography. Additionally, K-rail barriers already existing along the access road for safety reasons so the conditions under Alternative 1 would be substantially similar to existing conditions. As a result, impacts to scenic vistas would remain less than significant under Alternative 1.

There are no officially designated scenic highways within the vicinity of the project site or scenic resources like historic buildings, rock outcroppings, or trees. Interstate 5 (I-5), which at its nearest point is approximately 2.0 miles to the northeast, is listed as eligible, but the proposed project is not visible from I-5 due to intervening vegetation and structures. As a result, Alternative 1 would not substantially damage scenic resources within a state scenic highway.

The existing visual character of the area is defined largely by the natural features of the area, including the floodplain areas of the Tijuana River and the mesas along the southern border of the TRVRP. The proposed drainage improvements would replace existing infrastructure and would not introduce new visual elements to the area. While temporary construction activities and bare ground areas would be visible as described above, these areas would be screened during construction and revegetated afterwards. The project would not have significant impacts on the existing visual character of the area.

There are no existing light sources on the project site. The proposed project involves the replacement and improvement of drainage infrastructure on the project site, and no new light sources would be added. Therefore, the proposed project would not create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.

The approved project EIR concluded that impacts to aesthetics would be less than significant. Likewise, Alternative 1 of the proposed project would not change any of the approved project EIR's findings with respect to aesthetics impacts. There is no new information, change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the

severity of previously identified significant aesthetic effects. This analysis does not result in different conclusions related to aesthetics than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

#### Alternative 2

Alternative 2, which is additive to Alternative 1, includes approximately 663 linear feet of storm drain pipe and would extend the storm drain pipe northward to connect to the outfall at Monument Road. This alternative does not propose the addition of structures or sources of light that would obstruct or impede scenic vistas or daytime or nighttime views. Alternative 2 would not change any of the approved project EIR's findings with respect to visual impacts, and impacts would remain less than significant.

Likewise, Alternative 2 of the proposed project would not change any of the approved project EIR's findings with respect to aesthetics impacts. There is no new information, change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant aesthetic effects. This analysis does not result in different conclusions related to aesthetics than those reached in the approved project EIR, either on a project-related or cumulative basis.

#### Alternative 3

Alternative 3, which is similar to the improvements in Alternative 1, proposes approximately 278 linear feet of piping between the top landing inlet structure to just north of the access road and includes the construction of an upstream detention storage on top of the mesa. Like Alternative 1, no significant impacts to aesthetics are anticipated. This alternative does not propose the addition of structures or sources of light that would obstruct or impede scenic vistas or daytime or nighttime views. Therefore, Alternative 3 of the proposed project would not change any of the approved project EIR's findings with respect to aesthetics impacts. There is no new information a change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant aesthetic effects. This analysis does not result in different conclusions related to aesthetics than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

#### Alternative 4

Alternative 4 would involve the replacement of existing drainage infrastructure between a top landing inlet structure to the access road, similar to Alternative 1, and would also include the installation of up to approximately a700 linear foot concrete swale along the access road. This alternative does not propose the addition of structures or sources of light that would obstruct or impede scenic vistas or daytime or nighttime views.

Therefore, Alternative 4 of the proposed project would not change any of the approved project EIR's findings with respect to aesthetics impacts. There is no new information, a change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant aesthetic effects. This analysis does not result in different conclusions related to aesthetics than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

# 3.2 Agricultural and Forestry Resources

#### **EIR Conclusions**

The approved project EIR reported that there are approximately 480 acres of Prime Farmland within the TRVRP. No other agricultural land or zoning restrictions, including Unique Farmland or Farmland of Statewide Importance, Williamson Act lands, or forest land, was identified within the TRVRP. Environmental impacts associated with agricultural resources were summarized in approved project EIR Chapter 4.0, *Effects Found Not to be Significant*. None of the components of the approved project were determined to result in potentially significant impacts to agricultural and forestry resources because it does not involve the conversion of any active farmland to a non-agricultural use, including Prime Farmland, and the project would not result in conflicts with agricultural zoning such as a Williamson Act contract or forest land. Conversion of approximately 0.12 acre of fallow agricultural land to a recreational trail link was identified as less than significant.

The Department of Conservation (DOC) Farmland Mapping and Monitoring Program classifies the proposed project as Other Land (DOC 2016) and did not identify any other farmland mapping in the project area. Other Land is land not included in any other mapping category. Common examples include low density rural developments; brush, timber, wetland, and riparian areas not suitable for livestock grazing; confined livestock, strip mines, borrow pits; and water bodies smaller than 40 acres. Since adoption of the approved project EIR, there are still no Williamson Act lands in the TRVRP.

#### **Proposed Project Conclusions**

#### Alternative 1

Forest land was not discussed specifically in the EIR. Public Resources Code Section 12220(g) defines "forest land" as land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Vegetation, including mature trees, are sparsely dispersed throughout the proposed project. However, no mature trees are located within the small canyon where the drainage infrastructure would be replaced. Based on this definition, no forest land occurs within or adjacent to the proposed project. Moreover, there is no land zoned as forest land or timberland that exists within the proposed project or within its vicinity

Alternative 1 would involve drainage improvements at the northern side of Spooner's Mesa where there are no agricultural land or zoning restrictions related to agriculture or forestry resources. The approved project EIR concluded that impacts to agricultural resources or forestry resources would be less than significant. Alternative 1 would not change any of the approved project EIR's findings with respect to agricultural and forestry impacts. There is no new information, a change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified effects. This analysis does not result in different conclusions related to agricultural and forestry resources than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

#### Alternative 2

Alternative 2, which is additive to Alternative 1, includes approximately 663 additional linear feet of storm drain pipe for the replacement of the existing drainage infrastructure between the top landing inlet structure and Monument Road. Similar to Alternative 1, this alternative does not involve the conversion of any prime agricultural land, nor does it impact forestry resources or conflict with agricultural zoning. There is no new information, a change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified effects. This analysis does not result in different conclusions related to agricultural and forestry resources than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

#### Alternative 3

Alternative 3 proposes approximately 278 linear feet of piping for the replacement of the existing drainage infrastructure near the existing access road. Alternative 3 also proposes the construction of an upstream detention storage on top of the mesa which is not designated or used for agricultural or forestry use. Like Alternative 1, no significant impacts to agricultural resources are anticipated. This alternative does not involve the conversion of any prime agricultural land, nor does it impact forestry resources or conflict with agricultural zoning. There is no new information, a change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified effects. This analysis does not result in different conclusions related to agricultural and forestry resources than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

#### Alternative 4

Alternative 4 would involve the replacement of existing drainage infrastructure between a top landing inlet structure to the access road, similar to Alternative 1, and would proposes the installation of up to an approximately 700 linear foot concrete swale along the access road. Like Alternative 1, no significant impacts to agricultural are anticipated. This alternative does not involve the conversion of any prime agricultural land, nor does it impact forestry resources or conflict with agricultural zoning. There is no new information, a change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified effects. This analysis does not result in different conclusions related to agricultural and forestry resources than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

## 3.3 Air Quality

#### **EIR Conclusions**

The approved project EIR states that the TRVRP area is within the San Diego Air Basin managed by the San Diego County Air Pollution Control District and that air quality in the project area ranges from fair to poor according to air quality data collected at a monitoring station in Chula Vista. Environmental impacts associated with air quality were summarized in EIR Chapter 4.0, *Effects Found Not to be Significant*. The approved project EIR included a discussion of the types of construction equipment anticipated to be used to construct the trail system and other facilities identified in the approved

project. Portable gas-powered equipment, vehicles and other mobile construction equipment such as a small skid loader or brush mower pulled by a tractor, were described to generate exhaust emissions of carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), sulfur dioxides (SO<sub>x</sub>), and particulate matter 10 (PM, with a diameter of 10 microns or less); however, no violations to air quality standards were identified, including no cumulatively considerable net increase of any nonattainment criteria pollutants. Sensitive receptors were not expected to be exposed to substantial pollutant concentrations or odors associated with manure from equestrian uses in the area. Given the low level of construction proposed and the fact that the approved project would be built out over an extended period of time, construction-level air quality impacts were also concluded to be less than significant.

#### **Proposed Project Conclusions**

#### Alternative 1

Alternative 1 would involve the replacement of 370 linear feet of storm drain pipe, creation of two catch basins, and installation of permanent erosion control measures such as velocity dissipation devices (e.g., rip-rap, etc.) and permanent vegetation in Spooner's Mesa. Construction equipment to rehabilitate the failed drainage infrastructure would involve the use of small excavators and cranes to lower equipment into the canyon during the short-term construction period and would result in the generation of exhaust emissions including CO, NO<sub>x</sub>, SO<sub>x</sub>, and PM<sub>10</sub>. PM<sub>2.5</sub>. Alternative 1 would also involve vehicle traffic on unpaved access trails. These types of activities and emissions would be similar to the existing activities and emissions that occur during enhancement of trails and habitat throughout the TRVRP under existing conditions and as analyzed in the approved project EIR. Post-construction activities involving maintenance of facilities and vegetation would also be similar to existing activities and within the scope of activities covered in the approved project.

Fugitive dust emissions generated by Alternative 1 would vary depending on the construction schedule, activities being performed at the various sites, and the site location relative to paved access roads. In addition, soil conditions and meteorological conditions, such as rain and wind, would also influence the creation and dispersion of dust. Although no impacts were identified, to reduce emissions and fugitive dust from construction activities, the approved project provided EDCs that would be incorporated into restoration projects within the TRVRP. Alternative 1 would incorporate Air Quality EDC 1 through Air Quality EDC 3.

**Air Quality EDC 1: Equipment Emissions.** On-road trucks and other mobile equipment should be properly tuned and maintained to manufacturers' specifications to ensure minimum emissions under normal operations.

**Air Quality EDC 2: Surface Watering.** Apply water to unstabilized disturbed areas and/or unpaved roadways in sufficient quantity and frequency to maintain a stabilized surface.

**Air Quality EDC 3: Clearing Activities.** All clearing and grading activities should cease during periods of high wind (greater than 20 mph averaged over 1 hour).

Post construction, Alternative 1 would not include activities that generate air emissions except for ongoing and periodic routine maintenance. This includes the ongoing maintenance of the trails and habitat areas of the TRVRP and removal of non-native species and trash. Post-construction activities would be similar to existing activities and within the scope of activities covered in the approved project.

In San Diego County, the State Implementation Plan includes strategies and tactics to be used to attain and maintain acceptable air quality in the County; this list of strategies is called the Regional Air Quality Strategy (RAQS) and is the applicable air quality plan for the proposed project.

The RAQS relies on regional planning and growth information to project future emissions and then determine the strategies necessary for the reduction of emissions through regulatory controls. Projects that propose development consistent with the growth anticipated by a general plan would be consistent with the RAQS. Alternative 1 would replace existing drainage infrastructure within the TRVRP, which is not eligible for development that would induce growth. Therefore, because Alternative 1 would not affect population growth, it would not exceed the assumptions contained in the RAQS. Additionally, Alternative 1 does not include operational sources of air pollutants. Therefore, it would not conflict with or obstruct implementation of the RAQS.

Alternative 1 would result in repairs of drainage infrastructure and would not produce objectionable odors or result in a change from the approved project. Given the location of Alternative 1, impacts related to odors are not expected to affect a substantial number of people due to the distance to the closest sensitive receptor (a residence approximately 1,800 feet to the east) and the lack of other sensitive receptors in the area.

The approved project EIR identified that there would be less than significant impacts to air quality. Likewise, Alternative 1 would not change the approved project EIR's findings with respect to air quality impacts. There is no new information, a change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in different conclusions related to air quality than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

#### Alternative 2

Alternative 2, which is additive to the improvements in Alternative 1, includes approximately 663 linear feet of storm drain pipe and would extend the storm drain pipe northward to connect to the outfall at Monument Road. Because Alternative 2 involves additional materials and time to complete, it may produce slightly higher quantities of exhaust emissions from fugitive dust emissions and vehicle traffic than Alternative 1. However, like Alternative 1, Alternative 2 would not induce growth or produce objectionable odors and would not conflict with the RAQS. Alternative 2 would not change the approved project EIR's findings with respect to air quality impacts and impacts would be less than significant. This analysis does not result in different conclusions related to air quality than those reached in the approved project EIR, either on a project-related or cumulative basis.

#### Alternative 3

Alternative 3 proposes approximately 278 linear feet of piping for the replacement of the existing drainage infrastructure near the access road. Alternative 3 also proposes the construction of an upstream detention storage on top of the mesa. Like Alternative 1, no significant impacts to air quality are anticipated. Because Alternative 3 involves additional ground disturbance associated with the detention storage, it may produce slightly more quantities of exhaust emissions from fugitive dust emissions and vehicle traffic than Alternative 1. However, like Alternative 1, Alternative 3 would not induce growth or produce objectionable odors and would not conflict with the RAQS. Alternative 3 would not change the approved project EIR's findings with respect to air quality impacts and impacts

would be less than significant. There is no new information, a change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in different conclusions related to air quality than those reached in the approved project EIR, either on a project-related or cumulative basis.

#### Alternative 4

Alternative 4 would involve the replacement of existing drainage infrastructure south of the access road, similar to the other alternatives, as well as the installation of up to an approximately 700 linear foot concrete swale along the access road. While Alternative 1 includes a new storm drain pipe and Alternative 4 includes a concrete swale, ground disturbance would be similar and no significant impacts to air quality are anticipated. Like Alternative 1, Alternative 4 would not induce growth or produce objectionable odors and would not conflict with the RAQS. Alternative 4 would not change the approved project EIR's findings with respect to air quality impacts and impacts would be less than significant. There is no new information, a change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in different conclusions related to air quality than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

## 3.4 Biological Resources

#### **EIR Conclusions**

The approved project's EIR identified 27.12 acres of significant impacts to sensitive vegetation communities for the formalization of trails and required 30.47 acres of restoration mitigation (13.01 acres upland habitat and 17.46 acres of riparian habitat). The approved project EIR additionally identified potential adverse impacts to two species on the Federal and State endangered species lists (least Bell's vireo, southwestern willow flycatcher) from impacts to riparian habitat and non-native grassland.

Through project design and management practices (including avoiding the bird breeding season during construction; a regular cowbird trapping program; a manure removal program, fencing, regular ranger patrols, and visitor education), the potentially significant effects to biological resources would result in a net benefit to biological resources within the TRVRP. It was not anticipated that hiking, equestrian, or other permitted TRVRP activities would increase over current levels or elevate existing pressures on special status species or habitats.

Impacts to aquatic resources were described in the applications for the USACE 404 Nationwide Permit 42 Pre-Construction Notification, the RWQCB Clean Water Act Section 401 Water Quality Certification, and the CDFW 1600 Streambed Alternation Agreement. As proposed in the applications, the Tijuana River Valley Regional Park Trails and Habitat Enhancement Project was anticipated to be self-mitigating. Permanent impacts to 0.49 acre of waters of the U.S. and 0.16 acre of CDFW streambed occurred because of trail stabilization and culvert installation, and these areas included existing trails that were subject to erosion. Stabilizing the trails and allowing for runoff ultimately reduced impacts to jurisdictional waters from erosion and sedimentation. Any direct impacts were offset by reducing the width of existing trails in some areas and closing rogue trails, with associated passive or active

restoration, resulting in restoration and enhancement exceeding at least 9.2 acres of riparian habitat onsite (HELIX 2023a).

Additionally, the approved project identified a substantial amount of habitat restoration. Total restoration acreage was designed to exceed the approved project EIR mitigation requirement of 30.47 acres. Mitigation completed that met final project success criteria totaled 33.53 acres of riparian restoration and 19.87 acres of upland restoration. Restoration mitigation completed exceeded the mitigation requirements identified in the approved project EIR (HELIX 2023b). Restoration efforts were determined to compensate for and fully mitigate any impacts caused by the approved project. The approved project EIR determined that there were no potentially adverse impacts to wildlife dispersal or migration corridors (issue identified as not applicable in the approved project EIR).

Biological resources mitigation measures 1 through 24 from the approved project EIR were incorporated to reduce potential adverse impacts to less than significant levels, and special conditions were incorporated to further minimize impacts.

#### **Proposed Project Conclusions**

The following analysis for the four alternatives is based on the results of the proposed project's Aquatic Resources Delineation Report (HELIX 2024a), which is attached to this Addendum as Appendix A. Additionally, the following conclusions incorporate reviews of the existing Tijuana River Valley Regional Park Resource Management Plan (County 2007), Baseline Biodiversity Survey Report for the TRVRP (HELIX 2019), and Biological Resources Technical Report for the Tijuana River Valley Invasive Species Removal and Restoration Project (HELIX 2024b) for special-status species occurrences.

#### Alternative 1

Alternative 1 involves the replacement of drainage infrastructure and installation of permanent erosion control measures on Spooner's Mesa in the TRVRP including 370 linear feet of storm drain pipe and two catch basin inlets and outfalls. Activities would include culvert and pipe network improvements, implementation of fiber rolls and silt fences during construction, stabilization of trenches, excavations, and existing slopes, and installation of velocity dissipation devices (e.g., rip-rap, etc.) and vegetation to reduce erosion caused by discharged stormwater. Upon completion of Alternative 1, maintenance and monitoring would continue.

Biological Resources Conclusions

#### Sensitive Species

Sensitive species include protected vegetation communities and habitats as well as individual animal and plant species. Vegetation mapping, species habitat assessment, jurisdictional delineation, rare plant surveys, and protocol-level surveys throughout the TRVRP for the least Bell's vireo (*Vireo bellii pusillus*), coastal California gnatcatcher (*Polioptila californica californica*), and southwestern willow flycatcher (*Empidonax traillii extimus*) were conducted during the period of March 2021 to July 2021 in support of the Tijuana River Valley Invasive Species Removal and Restoration project (HELIX 2024b). To demonstrate that conditions in the field have not changed since the approved project EIR was prepared, a site assessment to confirm vegetation mapping and to complete a jurisdictional delineation occurred on December 5, 2023.
Alternative 1 would result in direct impacts to a maximum of 1.82 acres of vegetation communities/land use types (Figure 8, *Biological Resources – Alternative 1*). Project impacts are presented below in Table 2, *Vegetation Community Impacts*.

|  |                   | Project Impacts <sup>3</sup> |                                     |                      |                     |                                    |                     |  |  |  |
|--|-------------------|------------------------------|-------------------------------------|----------------------|---------------------|------------------------------------|---------------------|--|--|--|
|  |                   |                              | Temporary                           |                      | Permanent           |                                    |                     |  |  |  |
| Vegetation Community <sup>1</sup>                            | Tier <sup>2</sup> | Approved<br>Project          | Proposed<br>Project<br>Anticipated⁴ | Mitigation<br>Ratio⁵ | Approved<br>Project | Proposed<br>Project<br>Anticipated | Mitigation<br>Ratio |  |  |  |
| Wetlands   |                   |                              |                                     |                      |                     |                                    |                     |  |  |  |
| Southern Cottonwood-<br>Willow riparian forest<br>(61330)    |                   |                              |                                     | 3:1                  | 1.73                |                                    | 3:1                 |  |  |  |
| Mule fat scrub (63310)                                       |                   |                              |                                     | 2:1                  | 0.67                |                                    | 2:1                 |  |  |  |
| Southern willow scrub<br>(63320)                             |                   |                              |                                     | 2:1                  | 0.01                |                                    | 2:1                 |  |  |  |
| Riparian woodland (62000)                                    |                   | 0.26                         |                                     | 3:1                  |                     |                                    | 3:1                 |  |  |  |
| Riparian scrub (63000)                                       |                   | 0.34                         |                                     | 2:1                  |                     |                                    | 2:1                 |  |  |  |
| Wetlands Subtotal  |                   | 0.58                         |                                     |                      | 2.41                |                                    |                     |  |  |  |
| Uplands  |                   |                              |                                     |                      |                     |                                    |                     |  |  |  |
| Coastal scrub (32000)  | П                 |                              | Approx. 0 -<br>0.48                 | 1:1                  |                     | Approx. 0 -<br>0.21                | 1:1                 |  |  |  |
| Diegan coastal sage scrub<br>(32500)                         | II                | 10.02                        | Approx. 1.60 -<br>2.19              | 1:1                  |                     | Approx. 0.04 -<br>0.10             | 1:1                 |  |  |  |
| Diegan coastal sage scrub:<br>baccharis-dominated<br>(32530) | II                |                              | Approx. 0.02 -<br>0.04              | 1:1                  |                     |                                    | 1:1                 |  |  |  |
| Non-native Grassland<br>(42200)                              | IIIA              | 2.99                         |                                     | 1:1                  | 0.19                |                                    | 1:1                 |  |  |  |
| Disturbed habitat – trail<br>(11300)                         | IV                | 13.54                        | Approx. 0<br>- 0.09                 |                      |                     | Approx. 0 -<br><0.01 (0.001)       |                     |  |  |  |
| Developed land (12000)                                       | IV                |                              | Approx. 0<br>- 0.09                 |                      | 0.53                |                                    |                     |  |  |  |
| Developed land - trail<br>(12000)                            | IV                |                              | Approx. 0.11<br>- 0.46              |                      |                     | Approx. <0.01<br>(0.002) -0.03     |                     |  |  |  |
| Uplands Subtotal   |                   | 26.55                        | Approx. 1.64 -<br>3.03              |                      | 0.72                | Approx. 0.05 -<br>0.27             |                     |  |  |  |
|  | TOTAL             | 27.13                        | Approx. 1.64 -<br>3.03              |                      | 3.13                | Approx. 0.05<br>- 0.27             |                     |  |  |  |

 Table 2

 VEGETATION COMMUNITY IMPACTS

<sup>1</sup> Vegetation community codes are from Oberbauer (2008).

<sup>2</sup> City Subarea Habitats and Tiers per Attachment K of the BMO (County 2010).

<sup>3</sup> Habitats are rounded to the nearest 0.01 acre; thus, total reflects rounding.

<sup>4</sup> Proposed project impacts are estimates based on current design (Section 3.4). Changes in design may change impacts, however, any changes in impact acreage would be subject to the mitigation ratios from the approved project's EIR.

<sup>5</sup> Mitigation ratios are from the approved project's EIR and would be applicable to any changes to the proposed project impacts.





Spooner's Mesa Culvert Project

**Biological Resources - Alternative 1** 

Impacts from Alternative 1 would occur to a total of 1.62 acres of Tier II habitats (including 1.60 acres of Diegan coastal sage scrub and less than 0.1 acre [0.02 acre] of Diegan coastal sage scrub: baccharisdominated). Impacts to non-sensitive vegetation communities would include 0.20 acre of Tier IV habitats (0.09 acre of developed land and 0.11 acre of developed land – trail).

While the proposed project is a public project and exempt from the Biological Mitigation Ordinance pursuant to Sections 86.503(a)(8) and 87.502(b), mitigation for impacts Tier II habitat would be revegetated on-site within the Tijuana River Valley at a 1:1 ratio or provided through purchase of up to 1.62 credits at a 1:1 ratio from a County-approved mitigation bank. Two years of maintenance and monitoring shall be required to ensure the temporarily impacted area is revegetated sufficiently to avoid erosion and avoid degradation of the City of San Diego's MHPA. Through the implementation of the approved project EIR's biological resources mitigation measures 10, 11, 13, and 15, and PDFs 4, 5, and 7, impacts to Tier II habitat would be less than significant.

Six special status plant species were identified as occurring within the study area during rare plant surveys in 2021, including the following: Sea dahlia (*Leptosyne maritima*); cliff spurge (*Euphorbia misera*); San Diego barrel cactus (*Ferocactus viridescens*); ashy spike moss (*Selaginella cinerascens*); San Diego viguiera (*Bahiopsis laciniata*); and golden-spined cereus (*Bergerocactus emoryi*). Alternative 1 would avoid impacts to five of the six special status animal species, including sea dahlia, cliff spurge, San Diego barrel cactus, ashy spike-moss, and golden-spined cereus; however, impacts would occur to one sensitive plant: 13 individuals of San Diego viguiera; California Rare Plant Rank (CRPR) 4.2 (Table 3, *Special Status Plant Impacts*).

Impacts to 13 individuals of low-ranking sensitive plant species (San Diego viguiera) are not expected to affect regional populations because the species sensitivity is low (CRPR 4.2), County List D, not federal or state listed, not MSCP Covered, and not MSCP Narrow Endemic, impacts to up to 13 San Diego viguiera would not be considered significant due to the potential overall population size of the species, insignificant fraction of the population that could be impacted, and lower CRPR sensitivity status. Therefore, mitigation would not be required for the impact to 13 San Diego viguiera under Alternative 1.

| Species                   | Alternative 1 | Alternative 2 | Alternative 3 | Alternative 4 |
|---------------------------|---------------|---------------|---------------|---------------|
| San Diego viguiera        | 13            | 23            | 43            |               |
| (Bahiopsis laciniata)     |               |               |               |               |
| Sea dahlia                |               |               |               | 24            |
| (Leptosyne maritima)      |               |               |               |               |
| Ashy-spike moss           |               |               |               | 1             |
| (Selaginella cinerascens) |               |               |               |               |

Table 3 SPECIAL STATUS PLANT IMPACTS

Special status animal species include those that have been afforded special status and/or recognition by the U.S. Fish and Wildlife Service (USFWS), CDFW, and/or the County. Based on the 2023 site assessment, the study area provides potential habitat for two special status animal species known to occur in the TRVRP, including coastal California gnatcatcher (USFWS Federally threatened, County Group 1, and MSCP covered) and least Bell's vireo; USFWS Federally endangered, CDFW State endangered, County Group 1, MSCP covered, and MSCP narrow endemic). Project construction within 300 feet of the breeding habitat for these sensitive bird species could result in adverse indirect impacts related to

construction noise, however through the implementation of the approved project EIR's biological resources mitigation measure 15 and PDFs 2 and 3, impacts to these species would be less than significant.

Coastal California gnatcatcher was observed within the study area, but outside of Alternative 1. Suitable coastal sage scrub nesting habitat for this species occurs in the study area on the slopes of Spooner's Mesa, although it was not observed nesting in the study area during the 2021 or 2023 surveys. Alternative 1 would result in impacts to approximately 1.62 acres of Diegan coastal sage scrub (including baccharis-dominated), which provides potential nesting and foraging habitats for this species. However, extensive nesting and foraging habitat for the species is already preserved throughout the region within the TRVRP and other open space areas located in the Alternative 1 vicinity. Existing stands of native coastal sage scrub habitat would be avoided during construction and temporary loss of potential nesting and foraging habitat during initial restoration activities would not affect the local long-term survival of this species, and noise-related activities adjacent to active nests could result in direct impacts. However, through the implementation of the approved project EIR's mitigation measures 9 and 15, and PDFs 2 and 3, impacts to this species would be less than significant.

Additionally, three species of raptor were observed flying over the study area during the 2018 and 2021 biological surveys. Cooper's hawk (CDFW Watch List, County Group 1, MSCP-covered), red-shouldered hawk, and turkey vulture (both County Group 1 species) were observed within the study area, but outside of the Alternative 1 site. Suitable woodland nesting habitat for hawks occurs in the study area along the Tijuana River, and habitat for turkey vultures exists along rocky crevices in the southern portion of Spooner's Mesa and steeper slopes bordering Smuggler's Gulch, although none of the species were observed nesting in the study area during the 2021 or 2023 surveys. Alternative 1 would not impact potential nesting and foraging habitats for Cooper's hawk or red-shouldered hawk. Additionally, extensive nesting and foraging habitat for these species is already preserved throughout the region within the TRVRP and other open space areas located in the vicinity. Existing stands of native woodland habitat would be avoided by Alternative 1 activities; temporal loss of potential nesting and foraging habitat during initial restoration activities would not affect the local long-term survival of these species. Removal of vegetation during the breeding season could result in direct impacts to these species, and noise-related activities adjacent to active nests could result in adverse indirect impacts. However, through the implementation of the approved project EIR's mitigation measure 15, and PDFs 2 and 3, impacts to these species would be less than significant.

Implementation of Alternative 1 would impact the nesting success of coastal California gnatcatcher, least Bell's vireo, and tree-nesting raptors, which have the potential to nest on and/or within 500 feet of Alternative 1. Noise from clearing and ground disturbing activities could result in a potential impact to wildlife. Noise-related impacts would be considered significant if sensitive species (such as coastal California gnatcatcher, least Bell's vireo, and raptors) were displaced from their nests and failed to breed. Raptors or other sensitive bird species nesting within any area impacted by noise exceeding 60 decibels (dB) or ambient conditions, could be impacted. If coastal California gnatcatcher, least Bell's vireo, or tree-nesting raptors are nesting within 500 feet of the impact area, effects resulting from construction noise would be significant. PDFs 2 and 3 would limit any possible impacts to nesting birds and raptors of concern. These impacts will be further mitigated through the implementation of the approved project EIR's biological resources mitigation measure 15.

### Sensitive Natural Communities

The study area for Alternative 1 supports 12 vegetation communities/habitat types, including seven vegetation communities/habitat types, including five that are sensitive: southern willow scrub, mule fat scrub, coastal scrub, and Diegan coastal sage scrub (including baccharis dominated). The remaining five vegetation types/habitat types are not considered sensitive: eucalyptus woodland, disturbed habitat (including trails), and developed land (including trails).

Alternative 1 would involve restoration of temporarily impacted habitat to natural habitat with native species. Furthermore, PDF 4 would result in the avoidance of impacts to nearby sensitive vegetation communities and jurisdictional resources. PDF 5 would involve revegetation of temporarily impacted Tier II habitat areas and PDF 6 would involve permits to avoid impacts to jurisdictional wetland and waterway resources authorized by the RWQCB and CDFW. Impacts to sensitive natural communities would be less than significant.

# Federal Wetlands

The 2023 delineation resulted in no identification waters of the U.S. within the study area based on the 2023 Conforming Rule, which would mean that no 404 Permit is required (HELIX 2024a). The final determination of the extent of USACE's jurisdiction in the study area pursuant to Section 404 of the federal CWA would depend on the results of verification by the USACE/delineation concurrence, if requested by the Project applicant. Therefore, Alternative 1 would not result in significant impacts to federal waters of the U.S. and mitigation would not be required.

## State Wetlands

Alternative 1 would permanently impact 0.02 acre of non-wetland waters of the State and temporarily impact 0.08 acre of non-wetland waters of the State. No isolated wetlands meeting the State Water Resources Control Board (SWRCB)'s State Wetland Definition were identified in the study area. Because the ephemeral stream channels within the study area are not waters of the U.S., they are subject to RWQCB regulation solely under the Porter-Cologne Water Quality Control Act (Table 4, *Impacts to Jurisdictional Waters [Permanent]* and Table 5, *Impacts to Jurisdictional Waters [Temporary]* and Figure 8). These impacts would be considered potentially significant. These impacts would be reduced to a less than significant level through the implementation of PDF 6, which requires the project to obtain wetland permits through the appropriate wetland permitting agencies, and PDF 7, which would require the project to prepare a Habitat Restoration Plan addressing impacts and subsequent restoration of jurisdictional waters. Additionally, the approved project EIR's biological resources mitigation measures 10, 11, 12, 13, 16, 17, and 18 and PDF 4 would apply to Alternative 1.

Alternative 1 would result in permanent impacts to 0.04 acre of CDFW unvegetated streambed and temporarily impact 0.17 acre of CDFW unvegetated streambed (Table 4, Table 5, and Figure 8). These impacts would be reduced to a less than significant level through the implementation of PDF 6, which require the County to obtain wetland permits through the appropriate wetland permitting agencies, and PDF 7, which require the preparation of a Habitat Restoration Plan addressing impacts and subsequent restoration jurisdictional waters. Additionally, the approved project EIR's biological resources mitigation measures 10, 11, 12, 13, 16, 17, and 18 and PDF 4 would apply to Alternative 1.

### California Coastal Commission

The 2023 delineation found no California Coastal Commission coastal wetlands within Alternative 1.

#### City Wetlands

The 2023 delineation found no City wetlands within Alternative 1.

# Table 4 IMPACTS TO JURISDICTIONAL WATERS (PERMANENT)<sup>1, 2, 3</sup>

|  | USACE               |                                    |                     | RWQCB               |                                    |                     | CDFW                |                                    |                     | CCC/City Wetlands   |                                    |                     |
|--|---------------------|------------------------------------|---------------------|---------------------|------------------------------------|---------------------|---------------------|------------------------------------|---------------------|---------------------|------------------------------------|---------------------|
| Habitat  | Approved<br>Project | Proposed<br>Project<br>Anticipated | Mitigation<br>Ratio |
| Wetlands/Riparian  |                     |                                    |                     |                     |                                    |                     |                     |                                    |                     |                     |                                    |                     |
| Southern Cottonwood-<br>Willow riparian forest<br>(61330     |                     |                                    | 3:1                 |                     |                                    | 3:1                 | 1.73                |                                    | 3:1                 |                     |                                    | 3:1                 |
| Mule fat scrub (63310)                                       |                     |                                    | 2:1                 |                     |                                    | 2:1                 | 0.67                |                                    | 2:1                 |                     |                                    | 2:1                 |
| Southern willow scrub<br>(63320)                             |                     |                                    | 2:1                 |                     |                                    | 2:1                 | 0.01                |                                    | 2:1                 |                     |                                    | 2:1                 |
| Riparian woodland<br>(62000)                                 |                     |                                    | 3:1                 |                     |                                    | 3:1                 |                     |                                    | 3:1                 |                     |                                    | 3:1                 |
| Riparian scrub (63000)                                       |                     |                                    | 2:1                 |                     |                                    | 2:1                 |                     |                                    | 2:1                 |                     |                                    | 2:1                 |
| Subtotal   |                     |                                    |                     |                     |                                    |                     | 2.41                |                                    |                     |                     |                                    |                     |
|  | Non-wetland Waters  |                                    |                     |                     |                                    |                     |                     |                                    |                     |                     |                                    |                     |
| Non-wetland waters of<br>the State/ Unvegetated<br>streambed | 0.49                |                                    | 2:1                 |                     | Approx.<br><0.01<br>(0.003) - 0.02 | 1:1                 | 0.16                | Approx. 0.01 -<br>0.04             | 2:1                 |                     |                                    | 2:1                 |
| Subtotal   | 0.49                |                                    |                     |                     | Approx.<br><0.01<br>(0.003) - 0.02 |                     | 0.16                | Approx. 0.01 -<br>0.04             |                     |                     |                                    |                     |
| TOTAL  | 0.49                |                                    |                     |                     | Approx.<br><0.01<br>(0.003) - 0.02 |                     | 2.57                | Approx. 0.01 -<br>0.04             |                     |                     |                                    |                     |

<sup>1</sup> Impacts are presented in acre(s) rounded to the nearest 0.01.

<sup>2</sup> Proposed project impacts are estimates based on current design (Section 3.4). Changes in design may change impacts, however, any changes in impact acreage would be subject to the mitigation ratios from the approved project's EIR.

<sup>3</sup> Mitigation ratios are from the approved project's EIR and would be applicable to any changes to the proposed project impacts.

 Table 5

 IMPACTS TO JURISDICTIONAL WATERS (TEMPORARY)<sup>1, 2, 3</sup>

|                           | USACE    |             |            | RWQCB    |                  |            | CDFW     |                         |            | CCC/City Wetlands |             |            |
|---------------------------|----------|-------------|------------|----------|------------------|------------|----------|-------------------------|------------|-------------------|-------------|------------|
| Habitat                   | Approved | Proposed    | Mitigation | Approved | Proposed Project | Mitigation | Approved | <b>Proposed Project</b> | Mitigation | Approved          | Proposed    | Mitigation |
|                           | Project  | Project     | Ratio      | Project  | Anticipated      | Ratio      | Project  | Anticipated             | Ratio      | Project           | Project     | Ratio      |
|                           |          | Anticipated |            |          |                  |            |          |                         |            |                   | Anticipated |            |
| Wetlands/Riparian         |          |             |            |          |                  |            |          |                         |            |                   |             |            |
| Southern Cottonwood-      |          |             |            |          |                  |            |          |                         |            |                   |             |            |
| Willow riparian forest    |          |             | 3:1        |          |                  | 3:1        |          |                         | 3:1        |                   |             | 3:1        |
| (61330)                   |          |             |            |          |                  |            |          |                         |            |                   |             |            |
| Mule fat scrub (63310)    |          |             | 2:1        |          |                  | 2:1        |          |                         | 2:1        |                   |             | 2:1        |
| Southern willow scrub     |          |             | 2:1        |          |                  | 2:1        |          |                         | 2:1        |                   |             | 2:1        |
| (63320)                   |          |             |            |          |                  |            |          |                         |            |                   |             |            |
| Riparian woodland (62000) | 0.26     |             | 3:1        |          |                  | 3:1        | 0.26     |                         | 3:1        |                   |             | 3:1        |
| Riparian scrub (63000)    | 8.34     |             | 2:1        |          |                  | 2:1        | 8.34     |                         | 2:1        |                   |             | 2:1        |
| Subtotal                  | 8.60     |             |            |          |                  |            | 8.60     |                         |            |                   |             |            |
| Non-wetland Waters        |          |             |            |          |                  |            |          |                         |            |                   |             |            |
| Non-wetland waters of the |          |             | 2:1        |          | Approx. 0.03 -   | 2:1        |          | Approx. 0.04 -          | 2:1        |                   |             | 2:1        |
| State/ Unvegetated        |          |             |            |          | 0.09             |            |          | 0.20                    |            |                   |             |            |
| streambed                 |          |             |            |          |                  |            |          |                         |            |                   |             |            |
| Subtotal                  |          |             |            |          | Approx. 0.03 -   |            |          | Approx. 0.04 -          |            |                   |             |            |
|                           |          |             |            |          | 0.09             |            |          | 0.20                    |            |                   |             |            |
| TOTAL                     | 8.60     |             |            |          | Approx. 0.03 -   |            | 8.60     | Approx. 0.04 -          |            |                   |             |            |
|                           |          |             |            |          | 0.09             |            |          | 0.20                    |            |                   |             |            |

<sup>1</sup> Impacts are presented in acre(s) rounded to the nearest 0.01.

<sup>2</sup> Proposed project impacts are estimates based on current design (Section 3.4) and are subject to change based on coordination with the resource agencies during the permitting process.

<sup>3</sup> Mitigation ratios are from the approved project's EIR and would be applicable to any changes to the proposed project impacts.

#### Wildlife Movement and Dispersal

The open and relatively undisturbed mesas, ridges, slopes, valley bottom, and riparian corridor within the study area and surrounding TRVRP, Tijuana River National Estuarine Research Reserve, and Tijuana Slough National Wildlife Refuge contain native habitat that provides functional wildlife habitat and movement capability. Alternative 1 is in a location that is incredibly steep. In addition, the channel in need of repair has become very incised with steep sites approximately ten to 15 feet up on each side of the channel. The area comprising Alternative 1 in its current state would not allow movement of wildlife from east to west.

The study area would be expected to be used by small and medium mammals for ease of movement; however, no features would be constructed that would impinge any movement areas, including ridgelines or canyons. Wildlife movement is not expected to be substantially constrained by temporary construction as (1) contours following construction would not substantially change topography; and (2) habitat connectivity occurs to the south of the project site allowing wildlife to safely move around outside the project footprint. The study area and surrounding preserved lands provide adequate space and resources for wildlife known to use the site, maintain connectivity to off-site resources, and function to facilitate bird and mammal movement through the area, including for species targeted for conservation in the region, such as the coastal California gnatcatcher and least Bell's vireo. Therefore, Alternative 1 would not significantly impact the viability of a core wildlife area, and biological connectivity between the TRVRP and adjacent open space areas would be maintained.

Further, the primary species of concern in this area are the coastal California gnatcatcher. Alternative 1 activities would not preclude the coastal California gnatcatcher from crossing through the project site. Coyotes are highly mobile and adaptable wildlife species also known to frequent areas within the TRVRP. Movement of other medium-sized mammals, such as bobcat, is more likely to follow riparian areas associated with the Tijuana River and other areas with sufficient vegetative cover. Given the location of Alternative 1 on the side of a steep hill, smaller species, such as rodents and lizards, may not currently be able to cross the area safely, therefore repairing the erosion will result in more opportunities for localized wildlife movement.

Given birds' ability to fly, proposed Alternative 1 construction would not result in a barrier to their movement throughout the study area or to adjacent open space lands. As previously noted, Alternative 1 would temporarily impact upland vegetation. By restoring disturbed habitats within and adjacent to the impacted drainage, Alternative 1 would not result in a barrier to movement for amphibian species. General wildlife movement routes would be maintained under Alternative 1. Therefore, Alternative 1 impacts on wildlife movement would be less than significant and do not require mitigation.

### Habitat Conservation Plans, Local Policies and Ordinances Protecting Biological Resources

Alternative 1 would not conflict with the County's South County MSCP Subarea Plan or the City of San Diego's MSCP Subarea Plan. Alternative 1 would be consistent with the MSCP by incorporating mitigation measures, special conditions, and design features to avoid and minimize impacts to sensitive habitats and sensitive species. The project site occurs within the MHPA. Therefore, the project is subject to MHPA Land Use Adjacency Guidelines designed to minimize indirect impacts to sensitive resources contained in the MHPA and thus maintain the value of the preserve. By conforming to the Land Use Adjacency Guidelines, the project addresses edge effects. PDF 5 would involve revegetation of temporarily impacted Tier II habitat areas using native plant species, therefore Alternative 1 would not introduce invasive plant species into a natural open space area.

Specific management policies and directives that pertain to the Tijuana Estuary/River Valley biological core area and MHPA include:

- Maintain existing Reserve (estuary) and park uses;
- Maintain buffers around all wetland areas;
- Maintain existing agricultural uses on Spooner's Mesa, with the long-term goal of phased restoration to coastal sage scrub, maritime succulent scrub, or native grassland habitat;
- Maintain agricultural use on County-owned lands, with the long-term goal of restoration to native vegetation where possible, consistent with the County's Framework Management Plan (County 1998); and
- Retain and enhance, where possible, existing riparian habitat along the Tijuana River.

Alternative 1 would not disrupt existing Reserve (estuary) and park uses, would maintain buffers around wetland areas, restore temporarily impacted areas to native habitat, and retain existing riparian habitat along the Tijuana River. To help ensure errant impacts to sensitive vegetation communities outside of the impact footprint are avoided during construction, environmental fencing (including silt fencing, where determined necessary by the SWPPP), would be installed at the edges of the impact limits prior to initiation of activities. Alternative 1 would involve restoration of temporarily impacted habitat to natural habitat with native species. Furthermore, PDF 4 would result in the avoidance of impacts to nearby sensitive vegetation communities and jurisdictional resources. PDF 5 would involve revegetation of temporarily impacted Tier II habitat areas. Alternative 1 would be consistent with the MHPA Guidelines and Specific Management Policies and Directives for the Tijuana River Valley, as identified in the City of San Diego MSCP Subarea Plan.

In addition, Alternative 1 would minimize impacts to jurisdictional habitats, and through the permitting process ensure that any impacts were adequately mitigated to minimize potential impacts to sensitive species. Alternative 1 would not conflict with local policies or ordinances, tree preservation policies, or other approved local, regional, or State Habitat Conservation Plans. Therefore, impacts would be less than significant.

The approved project EIR identified biological resources impacts that were mitigated to less than significant. Alternative 1 would have less than significant impacts similar to the approved project EIR's findings. There is no new information, a change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. After installation of restoration is complete and the plantings/seed have become established, the proposed project will have achieved similar goals of the approved project. Potential impacts to sensitive species, such as the least Bell's vireo, southwestern willow flycatcher, California gnatcatcher, light-footed clapper rail, and yellow-breasted chat will be minimized by confining construction activities to the period outside of the nesting and fledgling season, unless approved by a biologist. Construction activities within the nesting and fledgling season may be allowable after incorporation of appropriate biological surveys and monitoring as referenced in the PDF 2 and 3. The

proposed project does not result in different conclusions related to biological resources, either on a project-related or cumulative basis. The approved project analyzed impacts of approximately 27.12 acres of temporary and permanent significant impacts. The proposed project would temporarily impact between 1.64 and 3.03 acres and permanently impact between 0.05 and 0.27 acres. The Alternative 1 anticipated temporary impact to 1.62 acres of sensitive habitat and anticipated permanent impact to 0.05 acre of sensitive habitat would be mitigated at the same ratios from the approved project EIR, thus would not result in a substantial increase in new significant impacts. Additionally, any changes in design or minor addition of temporary or permanent impacts would be approved by the project biologist and mitigated at the same ratios from the approved by the project biologist and

Mitigation measures 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, and PDFs 2, 3, 4, 5, 6, 7, and 8 are incorporated as part of the proposed project.

**Biological Resources Mitigation Measure 10**: Prior to any on site construction work, the limits of the Project Impact Area (including access and staging) will be surveyed, staked, and fenced.

**Biological Resources Mitigation Measure 11**: A qualified biologist will delineate the boundaries of the project footprint with orange snow fencing, or similar delineation methods, to avoid surface disturbance to the surrounding areas. Movement of vehicles and equipment will be confined within these delineated areas. The limits of the project footprint will be clearly delineated upstream and downstream of the project footprint.

**Biological Resources Mitigation Measure 12**: Jurisdictional wetlands and sensitive habitats should be protected from construction activities using silt fencing and orange snow fencing. If trail widening and associated project components in the floodplain or in riparian wetlands require dredging or filling of wetlands or seasonal streambeds, and/or removal of riparian vegetation, permits from USACE, CDFW, and RWQCB will be necessary.

**Biological Resources Mitigation Measure 13:** A biological monitor (qualified biologist) will be present to monitor and enforce environmental protection measures, including the installation and maintenance of BMPs, maintenance of fences, and all construction-related provisions identified in this document to minimize and mitigate impacts.

**Biological Resources Mitigation Measure 14:** Personnel will be trained prior to the action by experienced biologists. All employees that will work on the project will be educated and instructed of the following: to limit and restrict their activities, vehicle and equipment use, and construction materials to the designated construction/staging areas and routes of travel. Impact areas will be the minimal area necessary to complete the project.

**Biological Resources Mitigation Measure 15**: To meet the protection measures of the MBTA, construction activities will be conducted outside of the bird breeding season (February 1 through September 15) whenever feasible. However, if such activities must occur within the breeding season, a qualified biologist will conduct a preconstruction survey of the project site and surrounding habitat within one week prior to the start of construction, to determine if there are active nests within the project area, including raptors and ground nesting birds. The survey should begin no more than three days prior to the beginning of construction activities. It is recommended that if an active nest is observed in the Project area, a 300-foot buffer will be established between the construction activities (clearing, grubbing, building, etc.) and the nest so that nesting activities are not interrupted, and the buffers should be in effect as long as

construction is occurring and/or until the nest is no longer active, or until approved by the project's qualified biologist.

**Biological Resources Mitigation Measure 16**: Siltation and erosion in and around the project site will be controlled with BMPs, including silt fences, gravel bags, fiber rolls, and slope stabilization by hydroseeding with binders and tackifiers.

**Biological Resources Mitigation Measure 17**: Construction personnel will apply appropriate erosion control measures, where appropriate, and adhere to BMPs as directed by County guidelines.

**Biological Resources Mitigation Measure 18:** Construction personnel will also avoid onsite fuel changes and use appropriate facilities for equipment repair. All transport, handling, use, and disposal of substances such as petroleum products, solvents, and paints related to construction of the sewer line will comply with all Federal, State, and local laws regulating the management and use of hazardous materials.

**Biological Resources Mitigation Measure 19:** Construction traffic will be minimal and confined to the well-traveled access roads and the fenced action area.

**PDF 2: General Nesting Season Avoidance**. Grubbing or clearing of vegetation during the general avian breeding season (February 1 to September 15), least Bell's vireo breeding season (March 15 to September 15), coastal California gnatcatcher breeding season (March 1 to August 15), or raptor breeding season (January 15 to July 15) shall be avoided to the extent feasible.

If construction activities would occur during the breeding season, a pre-construction survey shall be conducted by a qualified biologist no more than three days prior to the commencement of activities to determine if active bird nests are present in the affected areas. If there are no nesting birds (includes nest building or other breeding/nesting behavior) within 300 feet of the survey area (500 feet for raptors), construction activities shall be allowed to proceed in that area. Furthermore, if construction activities are to resume in an area where they have not occurred for a period of seven or more days during the breeding season, an updated survey for avian nesting will be conducted by a qualified biologist within three days prior to the commencement of construction activities in that area.

If active nests or nesting birds are observed within 300 feet of the survey area (500 feet for raptors), the biologist shall flag a buffer around the active nests and construction activities shall not occur within 300 feet of active nests (500 feet for raptors) until nesting behavior has ceased, nests have failed, or young have fledged as determined by a qualified biologist. If the qualified biologist determines that the species will not be impacted with a reduced buffer (i.e., less than 300 feet for general avian species and 500 feet for raptors), potentially with implementation of avoidance measures to reduce noise, as necessary, and the qualified biologist monitors the active nest during construction to ensure no impacts to the species occur, construction may occur outside the reduced buffer during the breeding season, as long as the species is not impacted.

**PDF 3: Costal California Gnatcatcher, least Bell's vireo, and Raptor Noise Attenuation**. If preconstruction surveys determine the presence of active nests belonging to coastal California gnatcatcher, least Bell's vireo, or raptors, then the contractor will install noise attenuation materials within the work area to reduce the noise levels to below 60 A-weighted decibels averaged over a given hour (dBA L<sub>EQ</sub>) or ambient, unless a qualified biologist determines that noise attenuation is not necessary due to existing barriers, ambient noise levels, or other biological factors relevant to the species present. The type of material and location of installation will be determined prior to installation in coordination with a qualified biologist knowledgeable of that species and in coordination with a qualified acoustician. All noise attenuation materials will be installed prior to construction, and noise monitoring will be implemented to help ensure noise is below 60 dBA L<sub>EQ</sub> at the edge of the species' habitat both during noise attenuation installation (if installed during the breeding season) and during construction. Prior to starting construction, the qualified acoustician will provide a written report to DPR that confirms that noise attenuation is installed and adequately reducing noise levels at the edge of the species' habitat. Noise monitoring will continue into the species' breeding season until ground disturbing activities are completed or until nestlings have fledged.

**PDF 4: Temporary Construction Fencing.** To help ensure errant impacts to sensitive vegetation communities outside of the impact footprint are avoided during construction, temporary environmental fencing (including silt fencing where determined necessary by the SWPPP), would be installed at the edges of the impact limits prior to initiation of ground disturbing activities. All construction staging shall occur within the approved limits of construction.

**PDF 5: Revegetation.** Revegetation of all temporarily impacted Tier II habitat areas shall occur. Two years of maintenance and monitoring shall be conducted to ensure the temporarily impacted area is revegetated sufficiently to avoid erosion and degradation of the City of San Diego's MHPA.

**PDF 6: Aquatic Resources Permitting.** Impacts to jurisdictional wetland and waterway resources require permits and authorizations by the USACE, RWQCB, and CDFW prior to impacts.

**PDF 7: Habitat Restoration Plan.** A Habitat Restoration Plan addressing impacts and subsequent restoration of jurisdictional waters, as well as sensitive upland habitats, shall be prepared by County prior to construction.

**PDF 8: Sea Dahlia.** Avoidance of potential impacts occurring within Alternative 4 to 24 individuals of sea dahlia, a CRPR 2B.2 and County List B plant species, would be achieved through the inclusion of this species in the project's restoration plant palette.

The approved project EIR concluded that impacts to biological resources would be less than significant. Likewise, Alternative 1 of the proposed project would not change any of the approved project EIR's findings with respect to biological resources impacts. There is no new information, change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant biological resources effects. This analysis does not result in different conclusions related to biological resources than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

## Alternative 2

Alternative 2, which is additive to Alternative 1, proposes approximately 663 linear feet of piping for the replacement of the existing drainage infrastructure between the top landing inlet structure and Monument Road. Because Alternative 2 involves a slightly larger area of disturbance to implement additional piping, it would disturb more vegetation and potential aquatic resources than Alternative 1 (Table 3, Table 4, Table 5, and Figure 9, *Biological Resources – Alternative 2*). However, this increase would be negligible, and similar to Alternative 1, mitigation would reduce any potential impacts below levels of significance. Alternative 2 would not change the approved project EIR's findings with respect to impacts to biological resources and impacts would be less than significant.

### Alternative 3

Alternative 3 proposes approximately 278 linear feet of piping for the replacement of the existing drainage infrastructure near the existing access road. Alternative 3 also proposes the construction of an upstream detention storage on top of the mesa. Because Alternative 3 involves a slightly larger area of disturbance to implement additional piping and a detention basin, it may disturb more vegetation and potentially more aquatic resources than Alternative 1 (Table 3, Table 4, Table 5, and Figure 10, *Biological Resources – Alternative 3*). However, this increase would be negligible, and similar to Alternative 1, mitigation would reduce any potential impacts below levels of significance. Alternative 3 would not change the approved project EIR's findings with respect to impacts to biological resources and impacts would be less than significant.

# Alternative 4

Alternative 4 would involve the replacement of existing drainage infrastructure between a top landing inlet structure and the access road, similar to Alternative 1, and would include the installation of up to an approximately 700 linear foot concrete swale along the access road. Because Alternative 4 involves removing and relocating the storm drain pipe along the gravel access road instead of directly downslope within natural areas, it would disturb less vegetation and potentially less aquatic resources than Alternative 1 (Table 3, Table 4, Table 5, Table 6, and Figure 11, *Biological Resources – Alternative 4*). However, two sensitive plant species: including 24 individuals of sea dahlia; County List B and CRPR 2.B2 and one individual of ashy-spike moss; County List D and CRPR 4.1 (Table 3, *Special Status Plant Impacts*) are located along the proposed concrete swale under Alternative 4.

Impacts to one individual of a low-ranking sensitive plant species (ashy-spike moss) are not expected to significantly impact regional populations because the species sensitivity is low (CRPR 4.1, County List D), not federal or state listed, not MSCP Covered, and not MSCP Narrow Endemic. Therefore, impacts to one ashy-spike moss would be considered less than significant due to the potential for a low overall population size of the species to be present, determination that an insignificant fraction of the population could be impacted, and its lower CRPR sensitivity status. The potential impact to the sea dahlia would be avoided through the inclusion of this species in the project's restoration plant palette as part of project design feature PDF 8.

Because Alternative 4 involves a smaller area of disturbance, it would disturb less vegetation and less aquatic resources than Alternative 1 (Table 3, Table 4, Table 5, Table 6, and Figure 11). Alternative 4 impacts would be similar to Alternative 1 impacts, and mitigation would reduce any potential impacts below levels of significance. Alternative 4 would not change the approved project EIR's findings with respect to impacts to biological resources and impacts would be less than significant.



HELIX

Spooner's Mesa Culvert Project

**Biological Resources - Alternative 2** 





Spooner's Mesa Culvert Project

**Biological Resources - Alternative 3** 



HELIX

Spooner's Mesa Culvert Project

**Biological Resources - Alternative 4** 

# 3.5 Cultural and Paleontological Resources

# **EIR Conclusions**

The approved project EIR concluded that the approved project includes ground disturbing trail restoration activities that could impact sensitive cultural resources. The passive closure of existing trails that run through previously recorded cultural resources is considered to result in possible impacts to cultural resources, as there could be a substantial adverse change to the resources. Trail restoration is likely to involve more ground disturbing activities such as ripping the soil and placing large boulders at the entrances of the trails to be closed. Accordingly, the EIR concluded that the approved project would result in less than significant impacts with the incorporation of mitigation measures on cultural resources.

Mitigation measures A-1, A-2, A-3, A-4, A-5, A-6, A-7, and A-8 from the approved project EIR provide for a County certified archaeologist and Native American Observer to implement a flagging, grading monitoring, and data recovery program during ground disturbing trail restoration activities to reduce impacts to cultural resources to a less-than-significant level.

The approved project EIR reported that no known fossil localities were within the approved project's boundaries and that no impact to known paleontological resources would occur; however, all ground disturbing activities within the San Diego, Bay Point, and Linda Vista formations were concluded to result in potentially significant impacts to paleontological resources and mitigation measures B-1 through B-6 were included to reduce impacts to less than significant.

# **Proposed Project Conclusions**

The following analysis for the project alternatives is based on historic data collected in the project area and the results of recent cultural resources studies conducted for the TRVRP (Wilson et al. 2024a, 2024b).

# Alternative 1

Alternative 1 would involve the replacement of existing storm drain pipe (370 linear feet) two catch basin inlets and outfalls, and installation of permanent erosion control measures such as velocity dissipation devices (e.g., rip-rap, etc.) and permanent vegetation, and installation of concrete K-rail barriers along the existing access road. These improvements would involve some ground disturbance during construction.

A records search for the TRVRP was obtained from the South Coastal Information Center (SCIC) on December 1, 2020. The records search results revealed that seven reports or cultural resources studies have covered the proposed project and include several surveys and significance evaluation programs, as well as one monitoring report. The SCIC has a record of one previously recorded cultural resource within 100 feet of the project area, prehistoric archaeological resource (P-37-007456 [CA-SDI-7456]). P-37-007456 was initially recorded as a lithic scatter with two flakes, a scraper, a core, and a piece of firecracked rock (Van Wormer 1980). The site was observed within road cuts along the south side of Monument Road. The artifacts were collected and provided to the Museum of Man (now the Museum of Us). Several flakes were observed in the road cut for Monument Road and noted that no artifactual material was observed in the area documented in 1980. The 1981 site record further notes that the site has been destroyed by road construction (Polan 1981). A 2004 pedestrian survey conducted in support of the approved project EIR did not indicate P-37-007456 as being reidentified by the surveyors (SWCA Environmental Consultants 2004a). HELIX conducted pedestrian surveys of the TRVRP in March and November 2021, and November 2023 (Wilson et al. 2024a, 2024b). No indication of P-37-007456 in the mapped boundary on file at the SCIC or vicinity could be observed during these surveys. It is likely that erosion and road maintenance activities have further disturbed the area where the site had been originally documented in 1980.

Based on the results of the records search and recent pedestrian surveys, no adverse impacts to known significant cultural resources are anticipated. However, ground disturbing activities could inadvertently impact unknown buried cultural resources.

The approved project EIR identified impacts that were able to be mitigated below levels of significance. The proposed project would not result in a substantial increase in ground disturbance that could result in new or more significant impacts on cultural resources, as compared to the approved project. There is no new information, a change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. The proposed project does not result in different conclusions related to cultural resources than those reached in the approved project EIR, either on a project-related or cumulative basis.

To avoid inadvertent impacts to unknown buried cultural resources, mitigation measures A-2, A-3, A-4, A-5, A-6, A-7, and A-8 are incorporated as part of the proposed project.

**Cultural Resources Mitigation Measure A-2:** The County certified archaeologist/historian (and Native American Observer) shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program. The County shall approve all persons involved in the monitoring program prior to any pre-construction meetings. The consulting archaeologist shall contract with a Native American Observer to be involved with the grading monitoring program.

**Cultural Resources Mitigation Measure A-3:** During the original cutting of previously undisturbed deposits, the archaeological monitor(s) (and Native American Observer) shall be onsite full-time to perform periodic inspections of the excavations. The frequency of inspections will depend on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features.

**Cultural Resources Mitigation Measure A-4:** Isolates and clearly non-significant deposits will be minimally documented in the field and the monitored grading can proceed.

**Cultural Resources Mitigation Measure A-5:** In the event that previously unidentified potentially significant cultural resources are discovered, the archaeologist shall have the authority to divert or temporarily halt ground disturbance operation in the area of discovery to allow evaluation of potentially significant cultural resources. The archaeologist shall contact the County Archaeologist at the time of discovery. The archaeologist, in consultation with County staff archaeologist, shall determine the significance of the discovered resources. The County Archaeologist must concur with the evaluation before construction activities will be allowed to resume in the affected area. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the consulting archaeologist and approved by the County Archaeologist, then carried out using professional archaeological

methods. If any human bones are discovered, the County Coroner shall be contacted. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains.

**Cultural Resources Mitigation Measure A-6:** Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The archaeological monitor(s) (and Native American Observer) shall determine the amount of material to be recovered for an adequate artifact sample for analysis.

**Cultural Resources Mitigation Measure A-7:** In the event that previously unidentified cultural resources are discovered, all cultural material collected during the grading monitoring program shall be processed and curated according to current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility within San Diego County, to be accompanied by payment of the fees necessary for permanent curation.

**Cultural Resources Mitigation Measure A-8:** In the event that previously unidentified cultural resources are discovered, a report documenting the field and analysis results and interpreting the artifact and research data within the research context shall be completed. The report will include Department of Parks and Recreation Primary and Archaeological Site forms.

No new mitigation measures are required for the proposed change.

In accordance with PDF 1, in the unlikely event that human remains are discovered, the County Coroner shall be contacted. If the remains are determined to be of Native American origin, the Most Likely Descendant, as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. All requirements of Health & Safety Code §7050.5 and PRC §5097.98 shall be followed (see Section 2.5).

Spooner's Mesa is located in the San Diego Formation, a high paleontological resource sensitivity geologic unit. The San Diego Formation is a marine sedimentary rock of the late Pliocene (1.5 to 3 million years old) and is considered to have high paleontological sensitivity because of the abundance and diversity of fossil localities and their fossil assemblages. The San Diego Formation is a marine sedimentary deposit that typically consists of yellowish-gray, fine-grained sandstones with well-sorted, rounded pebble conglomerate lenses (Demere and Walsh 1993). The rock unit has yielded rich fossil beds of marine invertebrates, such as clams, scallops, snails, crabs, and barnacles, and marine vertebrates, including sharks, rays, bony fishes, dolphins, and baleen whales (Demere and Walsh 1993). The County of San Diego Paleontological Guidelines indicate that projects within High Paleontological Resources potential that propose to excavate equal to or greater than 2,500 cubic yards (CY) are required to mitigate potential paleontological impacts by using a project Paleontologist/Monitor during construction. The goal of the proposed project is to limit excavation and focus on stabilization and excavation is expected to be below the 2,500 CY threshold. However, if during final design, it is determined that the excavation would exceed 2,500 CY for Alternative 1 a paleontological monitor would be required. Therefore, Alternative 1 would not change the approved project EIR's findings with respect to impacts to cultural and paleontological resources and impacts would be less than significant with mitigation.

## Alternative 2

Alternative 2, which is additive to Alternative 1, proposes approximately 663 linear feet of piping for the replacement of the existing drainage infrastructure between the top landing inlet structure and Monument Road. Because Alternative 2 involves a slightly larger area of disturbance to implement additional piping, it may involve more ground disturbance than Alternative 1. However, similar to Alternative 1, incorporation of PDF 1 and mitigation measures A-2, A-3, A-4, A-5, A-6, A-7, and A-8 would reduce any potential impacts to buried cultural resources below levels of significance. As discussed for Alternative 1, the goal of the proposed project is to limit excavation and focus on stabilization and excavation is expected to be below the 2,500 CY threshold. However, if during final design, it is determined that the excavation would exceed 2,500 CY for Alternative 2 a paleontological monitor would be required. Therefore, Alternative 2 impacts to paleontological resources would be less than significant. Alternative 2 would not change the approved project EIR's findings with respect to impacts to cultural and paleontological resources and impacts would be less than significant with mitigation.

### Alternative 3

Alternative 3 proposes approximately 278 linear feet of piping for the replacement of the existing drainage infrastructure near the existing access road. Alternative 3 also proposes the construction of an upstream detention storage on top of the mesa. One cultural resource, an isolated prehistoric flake (P-37-038322), is recorded within 100 feet of the detention storage area, outside of the limits of grading for Alternative 3. Like Alternative 1, no adverse impacts to known significant cultural resources are anticipated; however, ground disturbing activities could inadvertently impact unknown buried cultural resources. As with Alternative 1, incorporation of PDF 1 and mitigation measures A-2, A-3, A-4, A-5, A-6, A-7, and A-8 would reduce any potential impacts to buried cultural resources below levels of significance. As discussed under the previous alternatives, the goal of the proposed project is to limit excavation and focus on stabilization and excavation is expected to be below the 2,500 CY threshold. However, if during final design, it is determined that the excavation would exceed 2,500 CY for Alternative 3 a paleontological monitor would be required. Therefore, Alternative 3 impacts to paleontological resources would be less than significant. Alternative 3 would not change the approved project EIR's findings with respect to impacts to cultural and paleontological resources and impacts would be less than significant.

### Alternative 4

Alternative 4 would involve the replacement of existing drainage infrastructure between a top landing inlet structure to the access road, similar to Alternative 1, and would also include the installation of up to an approximately 700 linear foot concrete swale along the access road. However, similar to Alternative 1, incorporation of PDF 1 and mitigation measures A-2, A-3, A-4, A-5, A-6, A-7, and A-8 would reduce any potential impacts to buried cultural resources below levels of significance. As discussed under the previous alternatives. the goal of the proposed project is to limit excavation and focus on stabilization and excavation is expected to be below the 2,500 CY threshold. However, if during final design, it is determined that the excavation would exceed 2,500 CY for Alternative 4 a paleontological monitor would be required. Therefore, Alternative 4 impacts to paleontological resources would be less than significant. Alternative 4 would not change the approved project EIR's findings with respect to impacts to cultural and paleontological resources and impacts would be less than significant with mitigation.

# 3.6 Geology and Soils

# **EIR** Conclusions

The approved project EIR reported that areas by the Tijuana River are subject to liquefaction and settlement due to ground shaking from an earthquake and did not identify other potential impacts associated with geology and soils. Environmental impacts associated with geology and soils were summarized in approved project EIR Chapter 4.0, *Effects Found Not to be Significant*, and included a discussion of impacts to mineral resources. A bridge over the Tijuana River was included as part of the approved project and recommendations for a SWPPP and Erosion Control Plan prior to design of the bridge were included as Environmental Design Considerations to address potential risks associated with earthquakes. The remaining components of the approved project were determined to result in less than significant impacts to geology and soils because they included the establishment of a formal trail system that would not introduce habitable structures. Trail closures and restoration of habitat on closed trail segments were also noted to improve erosion and soil stability. The approved project was determined to have no impacts to mineral resources because there are no operating mines in the TRVRP.

# **Proposed Project Conclusions**

# Alternative 1

Alternative 1 would involve the replacement of existing storm drain pipe (220 linear feet), creation of two catch basins, installation of permanent erosion control measures such as velocity dissipation devices (e.g., rip-rap, etc.) and permanent vegetation, and installation of concrete K-rail barriers along the existing access road. None of these improvements would involve the construction of habitable structures or new development that would attract more people to use the site. The maintenance of storm drain infrastructure in the project area would improve storm water flows and reduce erosion in and around Spooner's Mesa and the canyons in the area.

Alternative 1 may result in the possibility for initial soil erosion due to trenching and installation of vegetation during and immediately following construction. However, after installation of vegetation is complete and the plantings/seed have become established, the potential risk for soil erosion will have decreased, similar to the goals of the approved project. Additionally, during construction erosion control would be used to include, but limited to, fiber rolls (straw wattles) and silt fencing. Erosion control materials would be removed from the site once sufficient native plant cover is established. The Alternative 1 site is not currently being utilized for mineral extraction and is not planned or zoned for extractive uses. Alternative 1 does not include the installation or connection to alternative wastewater systems or septic tanks.

The approved project EIR concluded that impacts to geology and soils would be less than significant. Likewise, Alternative 1 of the proposed project would not change any of the approved project EIR's findings with respect to geology and soils impacts. There is no new information, a change of circumstances, or changes to the project, which would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in any different conclusions than those reached in the approved project EIR related to geology and soils, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

### Alternative 2

Alternative 2, which is additive to Alternative 1, includes approximately 663 linear feet of storm drain pipe for the replacement of existing drainage infrastructure between the top landing inlet structure, the access road, and Monument Road. Alternative 2 would involve more trenching and installation of vegetation during and following construction and erosion would be incrementally increased. However, this increase would be negligible, and the project area would be restored after construction. The Alternative 2 site is not currently being utilized for mineral extraction and is not planned or zoned for extractive uses. Alternative 2 would not change the approved project EIR's findings with respect to geology and soils and impacts would be less than significant.

#### Alternative 3

Alternative 3 proposes approximately 278 linear feet of piping for the replacement of the existing drainage infrastructure near the existing access road. The Alternative 3 site is not currently being utilized for mineral extraction and is not planned or zoned for extractive uses. Alternative 3 involves less trenching but more ground disturbance associated with the upstream detention storage compared to Alternative 1 or 2 and impacts would be incrementally increased; however, Alternative 3 would not change the approved project EIR's findings with respect to geology and soils and impacts would be less than significant.

#### Alternative 4

Alternative 4 would involve the replacement of existing drainage infrastructure between a top landing inlet structure to the access road, similar to Alternative 1, and would also include the installation of up to an approximately 700 linear foot concrete swale along the access road. The Alternative 4 site is not currently being utilized for mineral extraction and is not planned or zoned for extractive uses. Alternative 4 would not change the approved project EIR's findings with respect to geology and soils and impacts would be less than significant.

# 3.7 Public Health and Safety - Hazardous Materials

# **EIR Conclusions**

The approved project was determined to have no impacts in relation to public health and safety and hazardous materials because County activities in the TRVRP use very limited amounts of hazardous materials and any use is typically confined to routine maintenance of equipment including petroleum hydrocarbons (e.g., gasoline and lubricating fluids), paints, and insecticides/herbicides. Park use was not anticipated to increase because of the approved project and the formal establishment of a trail system was concluded to be a beneficial impact to health and safety for park users who may otherwise use unregulated trails that occur in the area. The approved project EIR dismissed impacts to public health and safety and hazardous materials in approved project EIR Chapter 4.0, *Effects Found Not to be Significant*, and no mitigation measures were included.

# **Proposed Project Conclusions**

## Alternative 1

Alternative 1 would involve the replacement of existing storm drain pipe (370 linear feet) and two catch basin inlets and outfalls. Construction equipment to build the project would involve the transportation and use of limited quantities of fuel, oil, sealants, and other hazardous materials related to construction. The transportation and use of hazardous materials and substances during construction would be subject to federal, state, and local health and safety requirements. After completion, routine maintenance may require equipment that would require fuel for operation. As with most construction activities. This alternative would be required to obtain and adhere to the National Pollution Discharge Elimination System (NPDES) Construction General Permit, which requires the preparation of a SWPPP. The SWPPP would be prepared and implemented, in compliance with the requirements of the RWQCB. Further, the SWPPP would include BMPs that are primarily intended to protect water quality and have mechanisms that protect against hazardous materials or wastes incidents (further discussion provided below in Section 3.10, *Hydrology and Water Quality*).

A review of environmental databases was conducted in compliance with Government Code 65962.5, which stipulates that the Department of Toxic Substances Control (DTSC), the Department of Health Services, the SWRCB, and any local enforcement agency, as designated by Section 18051, Title 14 of the California Code of Regulations, identify and update annually a list of sites that have been reported to have certain types of contamination. Specifically, the DTSC EnviroStor database and the SWRCB GeoTracker databases were consulted to identify if the Alternative 1s site or surrounding nearby properties were of concern in relation to Government Code 65962.5 A review of the EnviroStor and GeoTracker databases did not identify the Alternative 1 area on any such environmental database (DTSC 2024). However, there is a cleanup program site 1,200 feet southwest of Alternative 1. The cleanup program site is for military evaluation of explosives and the case has been inactive since 2005. Alternative 1 would not take place in the vicinity of the cleanup program site and the cleanup program site would not pose risks to individuals.

Alternative 1 is not located within one-quarter mile of any school; however, it is located approximately 1.3 miles southeast of the Naval Outlying Landing Field Imperial Beach (NOLF IB). As shown on Exhibit 1-1 in the NOLF IB Airport Land Use Compatibility Plan, Alternative 1 is located within Review Area 2, which requires additional review by the Airport Land Use Commission for projects involving increases in height limits or other elements involving glare, lighting, electromagnetic interference, dust, water vapor and smoke, thermal plumes, and bird attractants (San Diego County Regional Airport Authority 2015). Alternative 1 would not involve the construction of habitable or above-ground structures that extend above the surrounding grade. Alternative 1 would include the repair of drainage infrastructure and would not be accessible to the public and would not introduce other elements that could cause airspace hazards like glare and lighting and would not be subject to review for airspace hazards.

In relation to emergency response, the proposed change involves the replacement of drainage infrastructure and would not impair or interfere with the Operational Area Emergency Plan or the Site Evacuation Plan because it would not prohibit subsequent plans from being established or prevent the goals and objectives of the existing plan from being carried out.

The approved project EIR concluded that impacts to public health and safety would be less than significant. Likewise, Alternative 1 of the proposed project would not change any of the approved project EIR's findings with respect to health and safety impacts. There is no new information, change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant health and safety effects. This analysis does not result in different conclusions related to health and safety than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

# Alternative 2

Alternative 2, which is additive to Alternative 1, proposes approximately 663 linear feet of piping for the replacement of the existing drainage infrastructure between the top landing inlet structure and Monument Road. Because Alternative 2 involves additional materials and time to complete, it may use slightly higher quantities of fuel, oil, sealants, and other hazardous materials than Alternative 1 during construction. However, this increase would be negligible, and Alternative 2 would comply with appropriate permit requirements and best management practices regarding hazardous substances. Alternative 2 would not change the approved project EIR's findings with respect to public health and safety impacts and impacts would be less than significant.

# Alternative 3

Alternative 3 proposes approximately 278 linear feet of piping for the replacement of the existing drainage infrastructure near the existing access road. Alternative 3 also proposes the construction of an upstream detention storage on top of the mesa. Because Alternative 3 involves construction of an upstream detention storage, it would likewise involve slightly increased handling and use of hazardous materials; however, Alternative 3 would comply with appropriate permit requirements and best management practices regarding hazardous substances. Alternative 3 would not change the approved project EIR's findings with respect to public health and safety impacts and impacts would be less than significant.

# Alternative 4

Alternative 4 would involve the replacement of existing drainage infrastructure between a top landing inlet structure to the access road, similar to Alternative 1, and would also include the installation of up to an approximately 700 linear foot concrete swale along the access road. Alternative 4 would comply with appropriate permit requirements and best management practices regarding hazardous substances. Alternative 4 would not change the approved project EIR's findings with respect to public health and safety impacts and impacts would be less than significant.

# 3.8 Hydrology and Drainage

# **EIR** Conclusions

The approved project EIR was determined to have no impacts in relation to hydrology and drainage and impacts were summarized and dismissed in approved project EIR Chapter 4.0, *Effects Found Not to be Significant*. No mitigation measures were included in the approved project EIR for hydrology and drainage.

# **Proposed Project Conclusions**

## Alternative 1

Alternative 1 would involve the replacement of existing storm drain pipe (370 linear feet) and two catch basin inlets and outfalls. The components of Alternative 1 would improve storm drainage flows in the area and would be similar to the types of on-going activities that occur in the TRVRP under the approved project. No groundwater supplies would be impacted and drainage patterns would generally be maintained by replacing storm drainage infrastructure. After construction, revegetation of disturbed areas would restore work areas to their natural condition and would not have a long-term impact on erosion. Alternative 1 would disturb over one acre of land and would be required to obtain a NPDES General Construction Permit. Compliance with the General Construction Permit would require the preparation of a SWPPP for Alternative 1 site and would identify potential pollutants and outline the BMPs that would be implemented during construction activities to prevent those pollutants from entering nearby water bodies. Alternative 1 would be covered under the County's existing Regional Waste Discharge Requirement Permit. The stormwater runoff would be consistent with the County of San Diego Jurisdictional Runoff Management Plan (JRMP) and the BMP Design Manual. Alternative 1 conformance to the waste discharge requirements ensures the proposed project would not create cumulatively considerable water quality impacts related to waste discharge because, through the permit, Alternative 1 would conform to countywide watershed standards in the JRMP and BMP Design Manual.

The approved project EIR concluded that impacts to hydrology and drainage would be less than significant. Likewise, Alternative 1 of the proposed project would not change any of the approved project EIR's findings with respect to hydrology and drainage impacts. There is no new information, change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified hydrology and drainage effects. This analysis does not result in different conclusions related to hydrology and drainage than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

### Alternative 2

Alternative 2, which is additive to Alternative 1, proposes approximately 663 linear feet of piping for the replacement of the existing drainage infrastructure between the top landing inlet structure and Monument Road. Because Alternative 2 involves additional piping, it may have slightly increased activities compared to Alternative 1 during construction. However, this increase would be negligible. Additionally, the proposed improvements are substantially similar to stormwater improvements analyzed in the approved project EIR which included a bridge, several trails over drainages, etc.. Therefore, Alternative 2 would not change the approved project EIR's findings with respect to hydrology and drainage impacts and impacts would be less than significant.

### Alternative 3

Alternative 3 proposes approximately 278 linear feet of piping for the replacement of the existing drainage infrastructure near the existing access road. Because Alternative 3 involves more ground disturbance than Alternatives 1 and 2, it would likewise involve slightly increased activities to hydrology and drainage. However, Alternative 3 would not change the approved project EIR's findings with respect to hydrology and drainage impacts and impacts would be less than significant.

Alternative 4

Alternative 4 would involve the replacement of existing drainage infrastructure between a top landing inlet structure to the access road, similar to Alternative 1, and would also include the installation of up to an approximately 700 linear foot concrete swale along the access road. However, Alternative 4 would not change the approved project EIR's findings with respect to hydrology and drainage impacts and impacts would be less than significant.

# 3.9 Land Use and Planning

# **EIR Conclusions**

The approved project EIR identified a less than significant impact with mitigation in relation to land use and planning. Specifically, an area of the TRVRP called the "Eastern Staging Area" did not have the required 100-foot wetlands buffer required by the California Coastal Commission. Mitigation included fencing between the wetlands and staging area, restricting lighting and nighttime use, and including the Eastern Staging Area in regular ranger patrols. No other impacts to land use and planning and no other mitigation measures were identified.

# **Proposed Project Conclusions**

# Alternative 1

Alternative 1 would involve the replacement of existing storm drain pipe (370 linear feet) and two catch basin inlets and outfalls within the TRVRP, which is a regional park open to the public for hiking, biking, horseback riding, birdwatching, and other passive recreational activities. Alternative 1 would be within the parameters of the types of projects envisioned to occur under the approved project. Alternative 1 would not be located in the vicinity of the Eastern staging area, which required mitigation in the approved project EIR. Alternative 1 would therefore not increase existing impacts or create new impacts, and Alternative 1 would not conflict with goals and policies of applicable plans.

The approved project EIR concluded that impacts to land use and planning would be less than significant. Likewise, Alternative 1 of the proposed project would not change any of the approved project EIR's findings with respect to land use and planning impacts. There is no new information, change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant land use and planning effects. This analysis does not result in different conclusions related to land use and planning than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

### Alternative 2

Alternative 2, which is additive to Alternative 1, proposes approximately 663 linear feet of piping for the replacement of the existing drainage infrastructure between the top landing inlet structure and Monument Road. Like Alternative 1, Alternative 2 would occur entirely within the footprint of an existing similar use and would not divide an existing community. Alternative 2 would not change the approved project EIR's findings with respect to land use and planning impacts and impacts would be less than significant.

Alternative 3

Alternative 3 proposes approximately 278 linear feet of piping for the replacement of the existing drainage infrastructure near the existing access road. Alternative 3 also proposes the construction of an upstream detention storage on top of the mesa. Alternative 3 involves less replacement piping; however, the overall ground disturbance would occur over a larger area compared to Alternatives 1 and 2. However, Alternative 3 would not change the approved project EIR's findings with respect to land use and planning impacts and impacts would be less than significant.

#### Alternative 4

Alternative 4 would involve the replacement of existing drainage infrastructure between a top landing inlet structure to the access road, similar to Alternative 1, and would also include the installation of up to an approximately 700linear foot concrete swale along the access road. Alternative 4 would not change the approved project EIR's findings with respect to land use and planning impacts and impacts would be less than significant.

# 3.10 Noise

# **EIR Conclusions**

The approved project EIR determined that the approved project would have less than significant noise impacts and impacts were dismissed in approved project EIR Chapter 4.0, *Effects Found Not to be Significant*. The approved project EIR included Noise EDC 1 through EDC 4, which would require the use of mufflers on construction equipment, turning off construction equipment when not in operation, avoidance of bird breeding season, and compliance with City and County noise regulations.

# **Proposed Project Conclusion**

### Alternative 1

Alternative 1 would involve the replacement of existing storm drain pipe (370 linear feet) and two catch basin inlets and outfalls, the installation of permanent erosion control measures such as velocity dissipation devices (e.g., rip-rap, etc.) permanent vegetation Mesa, and installation of concrete K-rail barriers along the existing access road. None of these improvements would involve the construction of habitable structures or new development that would attract more people to use the site.

The coastal sage scrub and riparian areas within TRVRP are suitable habitat for the noise-sensitive least Bell's vireo and the coastal California gnatcatcher. The least Bell's vireo has been recorded in riparian habitat within the study area and coastal California gnatcatcher has been recorded in coastal sage scrub on the north facing slopes of Spooner's Mesa.

Construction vehicles would operate on site, similar to the existing activities that occur during revegetation and restoration projects in the project area and throughout the TRVRP as described in the approved project EIR. Each construction activity would create short-term construction noise. Construction activities would result in temporary or periodic increases in ambient noise levels, albeit similar to approved project activities. General construction noise would comply with the construction noise limits of the County of San Diego Noise Ordinance (Section 36.409), defined as an excess of

75 A-weighted decibels (dBA) for more than 8 hours during a 24-hour period between 7:00 am and 7:00 pm. EDC 1 through EDC 3 would be applied to minimize impacts from noise.

**Noise EDC 1: Conformance with Noise Requirements**. Construction activities shall conform to County of San Diego and City of San Diego requirements, which make it unlawful to operate construction equipment on Sundays or major holidays. Construction may occur Mondays through Saturdays between the hours of 7:00 a.m. and 7:00 p.m.

**Noise EDC 2: Noise Reducing Equipment.** Construction equipment shall be equipped with manufacturer's recommended mufflers or other noise-reducing equipment.

**Noise EDC 3**: **Construction Equipment**. Construction equipment shall be turned off when not in operation.

Alternative 1 could result in a significant noise impact if habitat restoration occurred during the breeding season for least Bell's vireo (March 15 to September 15), coastal California gnatcatcher (March 1 to August 15) or raptors (January 15 to July 15). PDF 2 would require preconstruction surveys during the breeding season to determine if active nests are present in areas that would be impacted by elevated noise levels. Potential impacts from noise would be avoided through the incorporation of PDF 2, PDF 3, and biological resources mitigation measure 15, which would require, surveys, monitoring, and noise-attenuation materials within the work area to reduce noise levels at nearby nests to below 60 dBA L<sub>EQ</sub> or ambient. PDF 2 and PDF 3 would be applied in place of the approved project EIR's EDC 4 to ensure less than significant noise impacts to nesting birds.

The loudest pieces of equipment to be used during construction would be hydra break ram for the removal of the existing culvert. The nearest noise-sensitive land use is the Tijuana River Valley Campground approximately 1,000 feet west of Alternative 1. The nearest residence is about 1,600 feet east of Alternative 1. According to the Roadway Construction Noise Model [RCNM] (U.S. Department of Transportation 2008) at 300 feet distance the hourly noise level for the hydra break ram would be  $64.3 \text{ dBA } L_{EQ}$ . Alternative 1 noise levels would therefore be substantially lower than the County construction noise limit of 75 dBA at the Tijuana River Valley Campground at the nearest residence. Alternative 1 construction would therefore be consistent with and adhere to the noise standards identified in the County of San Diego Noise Ordinance.

Post-construction, Alternative 1 would not generate noise, with the exception of ongoing and periodic routine maintenance. The noise associated with routine maintenance would be similar to existing activities and would not be greater than what was anticipated for the approved project. Alternative 1 would therefore not result in a substantial increase in noise impacts related to Alternative 1 construction or operation.

The approved project EIR did not identify significant impacts related to noise. Likewise, Alternative 1 would not change the approved project EIR's findings with respect to noise impacts. There is no new information, a change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in different conclusions related to noise impacts than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

## Alternative 2

Alternative 2, which is additive to Alternative 1, includes approximately 663 linear feet of storm drain pipe for the replacement of existing drainage infrastructure between the top landing inlet structure, the access road, and Monument Road. Alternative 2 would involve more trenching and installation of vegetation during and following construction and short-term noise levels would be incrementally increased. However, this increase would be negligible. Alternative 2 would not change the approved project EIR's findings with respect to noise and impacts would be less than significant.

## Alternative 3

Alternative 3 proposes approximately 278 linear feet of piping for the replacement of the existing drainage infrastructure near the existing access road. Alternative 3 involves less trenching but more ground disturbance than Alternative 1 or 2 and short-term construction noise would be similar. Alternative 3 would not change the approved project EIR's findings with respect to noise and impacts would be less than significant.

### Alternative 4

Alternative 4 would involve the replacement of existing drainage infrastructure between a top landing inlet structure to the access road, similar to Alternative 1, and would also include the installation up to an approximately 700 linear foot concrete swale along the access road. Alternative 4 involves similar trenching and ground disturbance as Alternative 2 and short-term construction noise would be similar. Alternative 4 would not change the approved project EIR's findings with respect to noise and impacts would be less than significant.

# 3.11 Public Services and Utilities

# **EIR Conclusions**

Public services and utilities impacts were dismissed in approved project EIR Chapter 4.0, *Effects Found Not to be Significant*, and the approved project was determined to have no impacts to public services because the approved project was not anticipated to result in an increase in park users and would not create any new buildings or structures that would require additional demands for services.

# **Proposed Project Conclusion**

### Alternative 1

Alternative 1 would involve the replacement of existing storm drain pipe (370 linear feet) and two catch basin inlets and outfalls. Alternative 1 would repair existing drainage infrastructure and would therefore not create any new buildings or structures that will require additional demand for services or the need for new or physically altered government facilities. In addition, Alternative 1 would not cause a direct or indirect increase in population that would require public services and would not have an impact on public services.

The approved project EIR did not identify significant impacts related to public services. Likewise, Alternative 1 would not change the approved project EIR's findings with respect to public services. There is no new information, a change of circumstances, or changes to the project, which would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in different conclusions than those reached in the approved project EIR related to public services, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

#### Alternative 2

Alternative 2, which is additive to Alternative 1, includes approximately 663 linear feet of storm drain pipe for the replacement of existing drainage infrastructure between the top landing inlet structure, the access road, and Monument Road. Alternative 2 would not involve the construction of new buildings or an increase in population that would require public services. Alternative 2 would not change the approved project EIR's findings with respect to public services and impacts would not occur.

#### Alternative 3

Alternative 3 proposes approximately 278 linear feet of piping for the replacement of the existing drainage infrastructure near the existing access road. Alternative 3 would also not involve the construction of new buildings or an increase in population that would require public services. Alternative 3 would not change the approved project EIR's findings with respect to public services and impacts would not occur.

#### Alternative 4

Alternative 4 would involve the replacement of existing drainage infrastructure between a top landing inlet structure to the access road, similar to Alternative 1, and would also include the installation of up to an approximately 700 linear foot concrete swale along the access road. Alternative 4 would not involve the construction of new buildings or an increase in population that would require public services. Alternative 4 would not change the approved project EIR's findings with respect to public services and impacts would not occur.

# 3.12 Recreation

# **EIR Conclusions**

Recreation impacts were dismissed in approved project EIR Chapter 4.0, *Effects Found Not to be Significant*, and the approved project was determined to have no impacts to recreation because the approved project was not anticipated to result in an increase in park users and would not include any residential uses that would require additional demands for parks. Short-term construction disruptions were identified during construction of the recreational bridge and eastern trailhead staging area; however, no impacts were identified for ongoing maintenance and other components of the approved project EIR.

# **Proposed Project Conclusion**

### Alternative 1

Alternative 1 would involve the replacement of existing storm drain pipe (370 linear feet) and two catch basin inlets and outfalls. Alternative 1 would not impact or increase the use of a recreational facility, nor would it result in an increased demand for recreational facilities. Rather, Alternative 1 would provide

improved drainage infrastructure adjacent to public access spaces. The site itself has not been, and would not be, accessible to the public upon completion of restoration.

Alternative 1 would result in a continuation of functioning drainage infrastructure and would be within the types of projects envisioned to occur in the TRVRP compliance with the approved project. There would be no impacts to recreation.

The approved project EIR did not identify significant impacts related to recreation. Likewise, Alternative 1 would not change the approved project EIR's findings with respect to recreation. There is no new information, a change of circumstances, or changes to the project, which would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant effects. This analysis does not result in different conclusions than those reached in the approved project EIR related to recreation, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

# Alternative 2

Alternative 2, which is additive to Alternative 1, includes approximately 663 linear feet of storm drain pipe for the replacement of existing drainage infrastructure between the top landing inlet structure, the access road, and Monument Road. Like Alternative 1, Alternative 2 involves the repair of drainage infrastructure that would not result in an increased demand for recreational facilities. Alternative 2 would not change the approved project EIR's findings with respect to recreation and impacts would not occur.

#### Alternative 3

Like Alternative 1, Alternative 3 involves the repair of drainage infrastructure that would not result in an increased demand for recreational facilities. Alternative 3 would not change the approved project EIR's findings with respect to recreation and impacts would not occur.

### Alternative 4

Like Alternative 1, Alternative 3 involves the repair of drainage infrastructure that would not result in an increased demand for recreational facilities. Alternative 4 would not change the approved project EIR's findings with respect to recreation and impacts would not occur.

# 3.13 Traffic/Circulation

# **EIR Conclusions**

Traffic and circulation impacts were dismissed in approved project EIR Chapter 4.0, *Effects Found Not to be Significant*. The approved project was determined to have no traffic impacts because the approved project represents an enhancement of existing facilities, rather than an expansion, or increase in intensity. Given these uses and activities, the operational phase of the approved project was not anticipated to result in a net increase in vehicle trips. Short-term construction trips were identified; however, no impacts were identified for any specific intersection or roadway segment.

# **Proposed Project Conclusion**

## Alternative 1

Alternative 1 would involve the replacement of existing storm drain pipe (370 linear feet) and two catch basin inlets and outfalls. Alternative 1 would generate traffic during construction. However, increases in construction-related traffic associated with Alternative 1 would be short-term and are not expected to result in any traffic congestion or generate a substantial increase in Vehicle Miles Traveled. Trips to the Alternative 1 site would be most apparent during site preparation and construction. Operational traffic would be negligible, requiring occasional maintenance visits. Traffic during construction and post-construction would be substantially similar to traffic during construction of the approved project and post-construction maintenance.

The approved project EIR concluded that impacts to traffic/circulation would be less than significant. Likewise, Alternative 1 of the proposed project would not change any of the approved project EIR's findings with respect to traffic/circulation impacts. There is no new information, change of circumstances, or changes to the project that would give rise to new significant environmental effects or a substantial increase in the severity of previously identified significant traffic/circulation effects. This analysis does not result in different conclusions related to traffic/circulation than those reached in the approved project EIR, either on a project-related or cumulative basis. No new mitigation measures are required for the proposed change.

# Alternative 2

Alternative 2, which is additive to Alternative 1, includes approximately 663 linear feet of storm drain pipe for the replacement of existing drainage infrastructure between the top landing inlet structure, the access road, and Monument Road. Alternative 2 would not involve an increase in use of the area that would generate additional trips. Alternative 2 would not change the approved project EIR's findings with respect to transportation and impacts would not occur.

# Alternative 3

Like Alternatives 1 and 2, Alternative 3 involves the repair of drainage infrastructure that would not result in a substantial increase in traffic or vehicle trips. Alternative 3 would not change the approved project EIR's findings with respect to transportation and impacts would not occur.

# Alternative 4

Like Alternatives 1 and 2, Alternative 3 involves the repair of drainage infrastructure that would not result in a substantial increase in traffic or vehicle trips. Alternative 4 would not change the approved project EIR's findings with respect to transportation and impacts would not occur.

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# 4.0 CONCLUSIONS

The purpose of this Addendum is to address and analyze the environmental effects associated with changes to the approved project that occurred since the adoption of the approved project EIR. Based on the foregoing analysis, it is concluded that the analysis conducted, and the conclusions reached in the approved project EIR adopted December 13, 2006, remain valid. The proposed alternatives would not cause new significant impacts not identified in the approved project EIR or a substantial increase in the severity of previously identified significant impacts, and no new mitigation measures would be necessary to reduce said environmental impacts.

Therefore, no further environmental documentation or review beyond this Addendum is required.

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## 5.0 **REFERENCES USED IN COMPLETION OF THE ADDENDUM**

### 5.1 Agricultural and Forestry Resources

California Department of Conservation (DOC)

2016 California Important Farmland Finder. Accessed June 2, 2022. Retrieved from: https://maps.conservation.ca.gov/dlrp/ciff/.

### 5.2 Biological Resources

HELIX Environmental Planning, Inc. (HELIX)

2024a Spooner's Mesa Project Aquatic Resources Delineation Report. February.

- 2024b Tijuana River Valley Invasive Species Removal and Restoration Biological Resources Technical Report. January.
- 2023a Mitigation and Restoration Completed by HELIX in the Tijuana River Valley Regional Park. September.
- 2023b Current Status of Mitigation and Restoration Completed by HELIX in the Tijuana River Valley Regional Park. September.
- 2019 Tijuana River Valley Regional Park Baseline Biodiversity Survey Report. August.

San Diego, County of (County)

- 2010 Guidelines for Determining Significance and Report Format and Content Requirements, Biological Resources. Fourth Revision, September 15.
- 2007 Tijuana River Valley Regional Park Area Specific Management Directives. June 22.

### 5.3 Cultural and Paleontological Resources

Demere, Thomas A. and Walsh, Stephan, L.

1993 Paleontological Resources. County of San Diego. Prepared for San Diego Planning Commission 1-68.

#### Polan, Keith

1981 DPR Site Form for P-37-007456. Site form on file at South Coastal Information Center (SCIC), San Diego State University, San Diego.

#### SWCA Environmental Consultants

2004a Cultural and Paleontological Resources Study for the Tijuana River Valley Regional Park Trails and Habitat Restoration Enhancement Project.

#### Van Wormer, Steve

1980 DPR Site Form for P-37-007546. Site form on file at South Coastal Information Center (SCIC), San Diego State University.

Wilson, Stacie, Theodore Cooley, and James Turner

- 2024a Cultural Resources Inventory and Assessment for the Tijuana River Valley Invasive Species Removal and Restoration Project, San Diego, California. Report on file at HELIX Environmental Planning (HELIX).
- 2024b Cultural Resources Phase I Survey and Inventory: Tijuana River Valley Regional Park. Report on file at HELIX Environmental Planning (HELIX).

### 5.4 Public Health and Safety - Hazardous Materials

Department of Toxic Substances Control (DTSC)

2024 EnviroStor Database. Electronic Resource available at: <u>https://www.envirostor.dtsc.ca.gov/public/</u>., Accessed February 2024.

San Diego County Regional Airport Authority

2015 Airport Land Use Compatibility Plan for Naval Outlying Landing Field Imperial Beach. October 15

State Water Resources Control Board (SWRCB)

2024 GeoTracker Database. Electronic Resource available at: https://geotracker.waterboards.ca.gov/. Accessed February 2024.

#### 5.5 Noise

U.S. Department of Transportation

2008 Roadway Construction Noise Model.

# Appendix A

Aquatic Resources Delineation Report



# Spooner's Mesa Project

## Final Aquatic Resources Delineation Report

February 2024 | 00187.00131.007

Prepared for:

#### **County of San Diego, Department of Parks and Recreation** 5500 Overland Avenue, Suite 410 San Diego, CA 92123

Prepared by:

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La Mesa, CA 91942

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|  | ontact Information<br>verage Monthly Precipitation for Years 2002-2022<br>otal Monthly Precipitation for Years 2021-2023<br>/etland Determination Data Form Summary<br>HWM Datasheet Summary<br>WQCB Waters of the State in the Study Area<br>DFW Jurisdictional Habitats in the Study Area<br>CC Coastal Wetlands in the Study Area |

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## ACRONYMS AND ABBREVIATIONS

| AgACIS<br>AMSL<br>APT                               | Agricultural Applied Climate Information System<br>above mean sea level<br>Antecedent Precipitation Tool   |
|---|--|
| CCC<br>CDFW<br>CFGC<br>CFR<br>City<br>County<br>CWA | California Coastal Commission<br>California Department of Fish and Wildlife<br>California Fish and Game Code<br>Code of Federal Regulations<br>City of San Diego<br>County of San Diego<br>Clean Water Act |
| EPA   | U.S. Environmental Protection Agency   |
| FGDC  | Federal Geographic Data Committee  |
| HA<br>HSA<br>HELIX<br>HU                            | Hydrologic Area<br>Hydrologic Sub Area<br>HELIX Environmental Planning, Inc.<br>Hydrologic Unit  |
| I   | Interstate   |
| LCP   | Local Coastal Program  |
| mi <sup>2</sup>                                     | square miles   |
| NRCS<br>NWI   | Natural Resources Conservation Service<br>National Wetlands Inventory  |
| OHWM  | ordinary high water mark   |
| Project   | Spooner's Mesa Project   |
| RWQCB   | Regional Water Quality Control Board   |
| SAA<br>SWRCB  | Streambed Alteration Agreement<br>State Water Resources Control Board  |
| TRVRP   | Tijuana River Valley Regional Park   |

# ACRONYMS AND ABBREVIATIONS (cont.)

| U.S.  | United States                  |
|-------|--------------------------------|
| USACE | U.S. Army Corps of Engineers   |
| USFWS | U.S. Fish and Wildlife Service |
| USGS  | U.S. Geological Survey         |

# **1.0 INTRODUCTION**

This report presents the results of a field-based jurisdictional delineation conducted by HELIX Environmental Planning, Inc. (HELIX) for the Spooner's Mesa Project (Project) located in the Tijuana River Valley Regional Park (TRVRP) in southwestern San Diego County, California. The delineation was completed within an approximately 77-acre study area (site) to identify and map the approximate extent of existing aquatic resources potentially subject to the regulatory jurisdiction of the U.S. Army Corps of Engineers (USACE) pursuant to Section 404 of the Clean Water Act (CWA; 33 USC 1344); waters of the state potentially subject to the regulatory jurisdiction of the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA and the Porter-Cologne Water Quality Control Act; stream and riparian habitats potentially subject to the jurisdiction of the California Department of Fish and Wildlife (CDFW) pursuant to Section 1602 of the Fish and Game Code; and coastal wetlands potentially subject to the jurisdiction of the California Coastal Act.

This report has been prepared in accordance with the USACE's Minimum Standards for Acceptance of Aquatic Resources Delineation Reports ("Minimum Standards"; USACE 2017). This report presents HELIX's best effort to identify the extent of potential USACE-, RWQCB-, CDFW-, and CCC-jurisdictional aquatic resources in the study area in accordance with current regulations, policy, and regulatory guidance. The descriptions and maps provided represent HELIX's recommendation based on our experience and the information available at the time of the delineation. The potential jurisdictional boundaries suggested herein are subject to verification by the regulatory agencies.

## 1.1 CONTACT INFORMATION

Contact information for the property owner/Project applicant is below in Table 1, *Contact Information*. Access to the study area is not restricted; however, the Project applicant or agent would like to accompany the regulatory staff to the study area if a site visit is requested.

|   | Property Owner/Project Applicant          |  |  |  |  |  |  |  |
|---|---|--|--|--|--|--|--|--|
| Name                                    | Kiran Seibel                              |  |  |  |  |  |  |  |
|   | County of San Diego, Parks and Recreation |  |  |  |  |  |  |  |
| Address 5500 Overland Avenue, Suite 410 |   |  |  |  |  |  |  |  |
|   | San Diego, CA 92123                       |  |  |  |  |  |  |  |
| Phone                                   | 619-209-9922                              |  |  |  |  |  |  |  |
| Email                                   | Kiran.Seibel@sdcounty.ca.gov              |  |  |  |  |  |  |  |

Table 1 CONTACT INFORMATION

# 2.0 SITE LOCATION AND DIRECTIONS

The study area is located west of Interstate (I-) 5, just north of the United States (U.S.)/Mexico border in southwestern San Diego County, California (Figure 1, *Regional Location*), and is owned by the County of San Diego (County). The study area is north of the U.S.-Mexico International Border, east of Border Field State Park, south of the TRVRP Campground, and west of Smuggler's Gulch (Figure 2a, *Project Vicinity* [Aerial]). The study area is situated within Sections 4 and 5, Township 19 South, and Range 2 West of the



U.S. Geological Survey (USGS) Imperial Beach topographic quadrangle map (Figure 2b, *Project Vicinity [USGS Topography]*). The entire study area is located within the coastal zone (Figure 3, *Coastal Zone*).

The study area can be accessed from Monument Road. The geographic coordinates for the center of the study area are latitude 32.544270, longitude -117.099263.

# 3.0 INVESTIGATION METHODS

### 3.1 PRE-FIELD REVIEW

Before beginning fieldwork, aerial photographs (1"=250' scale), topographic maps (1"=250' scale), San Diego County soil survey maps, USGS quadrangle maps, and National Wetlands Inventory (NWI; U.S. Fish and Wildlife Service [USFWS] 2023) maps were reviewed to assist in determining the locations of potential aquatic resource features in the study area.

## 3.2 DELINEATION METHODOLOGY AND REFERENCE DOCUMENTS

Delineation fieldwork was completed on December 5, 2023, by Laura Moreton and Benjamin Rosenbaum. Vegetation mapping and jurisdictional resources data were previously collected as part of the Tijuana River Valley Invasive Species Removal and Restoration Project (HELIX 2023) and Tijuana River Valley Regional Park Campground Spooner's Mesa Septic Project (ICF 2020), which are separate County projects, portions of which overlap with the current study area. Those results were relied on during the collection of data for this report.

Aquatic resources were mapped in the field on 1'' = 250' aerial imagery with two-foot topographic contours, and data collection was assisted with a submeter Global Positioning System unit. The study area identified herein includes all aquatic resources identified during the delineation. Remote sensing was not used for the delineation. Interpretation of aerial imagery and topographic maps were used to delineate features in areas where the site was inaccessible due to steep terrain.

Plants were identified according to Baldwin et al. (2012), and plant nomenclature was updated according to Rebman and Simpson (2014). Wetland affiliations of plant species follow the National Wetland Plant List (USACE 2020). Soil descriptions and survey information were taken from the Web Soil Survey (National Resource Conservation Service [NRCS] 2023a), and hydric soil information was obtained from the NRCS online query tool for the National List of Hydric Soils (NRCS 2023b). Soil chromas were identified according to Munsell's Soil Color Charts (Munsell Color 2009).

### 3.2.1 U.S. Army Corps of Engineers

Wetland waters of the U.S. boundaries were delineated using the three criteria (vegetation, hydrology, and soils) established for wetland delineations as described within the Wetlands Delineation Manual (Environmental Laboratory 1987) and Arid West Supplement (USACE 2008a). Standard Arid West Region wetland determination data forms were completed for each sampling point in the field and are included in Appendix A, *Wetland Determination Data Forms*. Photographs were taken of the sampling points and are included in Appendix C, *Representative Site Photographs*.



Spooner's Mesa Culvert Project



ntal Planning

Spooner's Mesa Culvert Project



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Figure 2a

**Project Vicinity (Aerial)** 

Spooner's Mesa Culvert Project



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Township 18S; Range 2W; Sections 32 -35 Township 19S; Range 2W; Sections 2 - 5 and 8 - 11

# Project Vicinity (USGS Topography)

Figure 2b





**Coastal Zone** 

Sampling point locations were constrained by the large size of the study area combined with access limitations stemming from steep hillsides, dense vegetation and trail closures, and contamination from raw sewage resulting from cross-border flows of polluted water. Thus, sampling points to obtain representative data were in areas that could be safely accessed, and then the results were extrapolated across broader areas based on a variety of factors, including direct observation from adjacent locations, aerial interpretation across multiple years of imagery, results of recent vegetation mapping efforts, soil survey review, and topography review.

Boundaries of potential non-wetland waters of the U.S. were delineated by their relation to an ordinary high water mark (OHWM). The OHWM is defined in 33 Code of Federal Regulations (CFR) Section 329.11 as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas." The USACE has issued further guidance on the OHWM (Riley 2005; USACE 2008b), which was used for this delineation. The OHWM widths were measured to the nearest foot at various locations along the non-wetland water stream features. All features exhibiting an OHWM were included in the delineation as aquatic resources. Completed OHWM data forms are in Appendix B, *OHWM Datasheets*. Photographs were taken of the OHWM points and are included in Appendix C.

On August 29, 2023, the U.S. Environmental Protection Agency (EPA) and USACE announced a final rule (2023 Conforming Rule) amending the definition of waters of the United States. The changes are to conform with the May 25, 2023, U.S. Supreme Court decision in the case of Sackett versus the EPA. The amendments to the rule will provide clarity for regulating wetlands consistent with the Supreme Court's recent decision. The amended final rule became effective following publication in the Federal Register on September 8, 2023. Guidance from the USACE on this ruling is forthcoming. The results presented in this report reflect HELIX's understanding of the 2023 Conforming Rule.

### 3.2.2 Regional Water Quality Control Board

The RWQCB asserts regulatory jurisdiction over activities affecting wetland and non-wetland waters of the State pursuant to Section 401 of the CWA and the State Porter-Cologne Water Quality Control Act. The State Water Resources Control Board's (SWRCB's) State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), adopted on April 2, 2019 (SWRCB 2019), and implemented as of May 28, 2020, was used to identify potential RWQCB wetland waters of the State within the study area. The boundaries of non-wetland waters of the State stream channels were delineated to the OHWM.

### 3.2.3 California Department of Fish and Wildlife

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code (CFGC), the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife. CDFW does not have a specific definition of what constitutes a stream as it relates to regulation under Sections 1600-1603 of the CFGC. In practice, CDFW defines a stream channel as that area where water uniformly or habitually flows over a given course, and where the width of the water course can reasonably be identified by physical or biological indicators. CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW jurisdictional boundaries were determined based on the presence of riparian vegetation or regular



surface flow. Delineation of CDFW streambed was measured to the top of bank. Riparian habitat extending outside the limits of stream channels was delineated as CDFW jurisdiction to the outermost edge.

#### 3.2.4 California Coastal Commission

The Coastal Zone Management Act of 1972 established two national programs the National Coastal Zone Management Program and the <u>National Estuarine Research Reserve System</u>. Under the Coastal Zone Management Program local agencies, State agencies, such as the CCC, and other agencies provide the means to protect the coastal zone. Potential coastal wetlands under the jurisdiction of the CCC were determined based on the "one-parameter" definition, which only requires evidence of a single parameter to establish wetland conditions: "Wetland shall be defined as land where the water table is at, near, or above the land surface long enough to promote the formation of hydric soils or to support the growth of hydrophytes, and shall also include those types of wetlands where vegetation is lacking and soil is poorly developed or absent as a result of frequent and drastic fluctuations of surface water levels, wave action, water flow, turbidity or high concentrations of salts or other substances in the substrate" (California Code of Regulations Title 14, Section 13577).

# 4.0 SITE DESCRIPTION

### 4.1 PROJECT SETTING AND LAND USE

The study area consists mostly of undeveloped land, supporting both native and non-native vegetation communities (Figure 4, *Vegetation Communities/Habitats [Holland Oberbauer]*). Dirt roads traverse the top and side of the mesa. Upland habitats are located on the top and sides of the mesa. Disturbed habitat is more common at the top of the mesa. On the sides of the mesa where steep slopes prevent human activity, native plant communities are more common. Wetland vegetation occurs at the bottom of the mesa in areas where water tends to pool, after flowing down the sides of the mesa. To the north of the study area, wetland habitats are concentrated along the Tijuana River, which traverses the TRVRP in a northwesterly direction, and receives flows from the mesa.

While most of the portions of the TRVRP, in which the study area is located, consist of native and naturalized vegetation communities, developed lands also are present, including a ranger station, campground, a sports complex/baseball fields, community garden, bird and butterfly garden, and parking areas, in addition to an extensive formal trail network and existing unplanned informal trails and dirt roads. Passive recreation activities such as hiking, biking, birdwatching, and equestrian uses are popular within the TRVRP.

Surrounding land uses include designated federal and state open space to the west, which includes Border Field State Park, the Tijuana River National Estuarine Research Reserve, and the Tijuana Slough National Wildlife Refuge; agricultural uses and residential development to the north and east; and the U.S./Mexico border to the south.







Vegetation Communities/Habitats (Holland Oberbauer)

## 4.2 CURRENT AND PAST DISTURBANCE

HELIX reviewed historic aerial photographs (<u>http://www.historicaerials.com</u>) to gain an understanding of historic uses within the study area. The earliest aerial photograph available was taken in 1949. The photographs showed that the study area was part of a working ranch and dirt roadways had already been constructed on Spooner's Mesa. Additionally, Hollister Street and Monument Road were present as dirt roads. Large areas of disturbed habitat are still present within the study area, including on the top of Spooner's Mesa. In addition, former agricultural lands occur north of the study area on the valley floor east and west of Saturn Boulevard and north of Sunset Avenue.

Since the late 1800s, the Tijuana River Valley, which the study area is a tributary, has been modified for agricultural practices and affected by increasing populations of invasive non-native plants. These non-native species populations displace native habitats, alter riverine hydrology, impair water quality, hinder water filtration capabilities, trap sediments, and degrade wildlife habitat. In recent years, trash, sediment, and invasive non-native plant species within the Tijuana River have posed a serious threat to the overall health of the watershed and the ecosystems that depend on it. In addition, substantial flooding has occurred in some areas, exacerbated by the accumulation of large amounts of sediment, debris, and thick vegetation.

The study area is also affected by contaminated water that originates from cross-border flows entering the U.S. from Mexico via the Tijuana River, Smuggler's Gulch channel, Goat Canyon, and other areas. While dry-weather flows are intended to be diverted and treated, the amount of flow that occurs during major rain events generally exceeds the capacity of the existing diversion and treatment system, resulting in cross-border flows of sewage, trash, and sediment, which cause public health, environmental, and safety issues. Dredging and placement of trash booms within Smuggler's Gulch channel and Goat Canyon have been used to help address these issues.

## 4.3 SOILS

The study area is in the relatively stable Coastal Plain province of San Diego County. The area contains alluvium, terrace deposits, recent and old alluvial fan deposits, and fill. Higher elevations within the Tijuana River Valley have conglomerates consisting of San Diego Formation materials. The valley soils are characterized by coarse sands with a medium to low amount of fine substrate (silts and clays). The alluvial deposits contain rocky zones consisting of large amounts of boulders, cobbles, and gravels.

A total of four soil mapping units in four soil series are shown within the study area (Figure 5, *Soils*): Carlsbad gravelly loamy sand, 2 to 5 percent slopes (CbB<sup>1</sup>); Chino silt loam, saline, 0 to 2 percent slopes (Cka); Terrace escarpments (TeF); and Visalia sandy loam, 0 to 2 percent slopes (VaA). Each of the mapped soil types is described in greater detail below based on information taken from the soil survey (NRCS 2023a).

### 4.3.1 Soil Map Units on the Hydric Soils List

Hydric soil definitions and hydric soil criteria approved by the National Technical Committee for Hydric Soils are used by the NRCS to compile the National List of Hydric Soils (NRCS 2023b), which is a

<sup>&</sup>lt;sup>1</sup> Map unit symbol in the soil survey report and map sheets. The symbol for each map unit herein is identified in parentheses after the name of the map unit.



compilation of all soil map units that are at least in part hydric. The hydric soil list is typically used as a desktop tool before a field delineation to cross-check with soil survey mapping to help identify potential locations where hydric soil might be present on a site. The list identifies map units that may contain hydric soil.

Per the National List of Hydric Soils, two of the four soil types within the study area are listed either as hydric or as having the potential to contain hydric inclusions; these soils are further described below. Inclusions are minor components of soil types that are not reflected in the map unit name.

**Carlsbad gravelly loamy sand, 2 to 5 percent slopes (CbB):** Carlsbad series soils consist of moderately well-drained soils formed from ferruginous sandstone. Carlsbad series soils are not hydric soils, but the CbB map unit has the potential to contain unnamed hydric inclusions occurring as ponds, depressions, and swamps. This map unit occurs in the southern portion of the study area in association with the top of Spooner's Mesa.

**Chino silt loam, saline, 0 to 2 percent slopes (Cka):** Chino soils are moderately well drained fine sandy loams derived mainly from granitic alluvium. Soils in this series occur on alluvial fans and terraces, and are frequently used as pasture and farmland. Chino series soils are not hydric soils, but the Chino silt loam (CkA) map unit has potential to contain unnamed hydric inclusions on alluvial fans. This soil is in the western portion of the study area, at the bottom of Spooner's Mesa.

**Visalia sandy loam, 0 to 2 percent slopes (VaA):** Visalia soils are moderately well-drained, very deep sandy loams, derived from granitic alluvium. They occur on alluvial fans and flood plains. Visalia series soils are not hydric soils, but the VaA map unit is identified as having the potential to contain unnamed hydric inclusions on floodplains. It is mapped in the northeastern portion of the study area at the bottom of Spooner's Mesa.

### 4.3.2 Soil Map Units Not on the Hydric Soils List

One of the four soil types mapped in the study area is considered entirely upland soil: terrace escarpments (TeF). This soil type is not on the hydric soils list as hydric or as having the potential to contain hydric inclusions.

**Terrace escarpments (TeF):** Terrace escarpments are steep to very steep escarpments and similar landforms that occur on the fronts of terraces or alluvial fans. These soils formed in variable alluvium on terraces or barrancas, and may have exposed gravel, cobblestones, stones, or large boulders. Terrace escarpments are not hydric soils. This soil type is mapped in the southern and southwestern portions of the study area along the base of Spooner's Mesa.

## 4.4 TOPOGRAPHY

The southern portion of the study area is a flat mesa top, which drops down steeply to the north, and flattens out at the bottom of the mesa, in the far north. Elevations within the study area range from approximately 15 feet above mean sea level (AMSL) to 330 feet AMSL.









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## 4.5 HYDROLOGY

The study area is within the Tijuana River Hydrologic Unit (HU; watershed), specifically within the San Ysidro Hydrologic Subarea ([HSA] – 911.11) of the Lower San Diego Hydrologic Area ([HA]; Figure 6, *Watersheds/Hydraulic Designations*). The Tijuana watershed is a binational watershed since the river originates in Mexico but flows into the United States, terminating at the Pacific Ocean. Approximately 1,245 square miles (mi<sup>2</sup>; 65 percent) of the watershed is in Mexico, and 455 mi<sup>2</sup> (35 percent) is in the U.S., totaling approximately 1,700 mi<sup>2</sup>.

The unnamed tributaries that occur within the study area all drain north into the Tijuana River. The majority of wetland and riparian vegetation occurring in the study area are associated with these tributaries. These smaller features are located on the steep hillslopes coming off the mesa.

The Tijuana River originates in Mexico, where it flows through Tijuana as a channelized, concrete-lined watercourse, entering the U.S. just west of the San Ysidro border crossing. Shortly after entering the U.S., the river reverts to a natural channel bed (not concrete-lined), flows in a northwesterly direction, and into the Pacific Ocean approximately 1.4 miles downstream of the study area. The river crosses through the Tijuana National Estuarine Research Reserve and Tijuana Slough National Wildlife Refuge en route to the ocean.

Sources of hydrology near the study area include rainfall, stormwater runoff from surrounding areas, and nuisance and flood flows coming from Mexico through the Tijuana River and Smuggler's Gulch channel.

## 4.6 VEGETATION COMMUNITIES

The survey area supports two vegetation community types associated with aquatic resources: southern willow scrub and mule fat scrub; in addition, it supports five vegetation community types associated with upland areas: Diegan coastal sage scrub (including baccharis-dominated), coastal scrub, eucalyptus woodland, disturbed habitat (including trails), and developed land (including trails; Figure 4: *Vegetation Communities/Habitats (Holland Oberbauer*)).

Vegetation community types associated with aquatic resources occurring within the study area are described below. Upland vegetation communities are not described herein.

### 4.6.1 Southern Willow Scrub

Southern willow scrub consists of dense, broad-leaved, winter-deciduous stands of trees dominated by shrubby willows in association with mule fat, and with scattered emergent cottonwood and western sycamores. This vegetation community occurs on loose, sandy, or fine gravelly alluvium deposited near stream channels during flood flows. Frequent flooding maintains this early seral community, preventing the succession to a riparian woodland or forest (Holland 1986).

Characteristic species in southern willow scrub in the study area include arroyo willow (*Salix lasiolepis*), mule fat (*Baccharis salicifolia*), and sandbar willow (*Salix exigua*). This habitat occurs as a single stand at the bottom of Spooner's Mesa, north of Monument Road, in the eastern part of the study area. A total of 0.43 acre of southern willow scrub was mapped in the study area.



### 4.6.2 Mule Fat Scrub

Mule fat scrub is a depauperate, shrubby riparian scrub community dominated by mule fat and interspersed with small willows. This vegetation community occurs along intermittent stream channels with fairly coarse substrate and moderate depth to the water table. This early seral community is maintained by frequent flooding, the absence of which would lead to cottonwood or sycamore dominated riparian woodland or forest (Holland 1986). In some environments, limited hydrology may favor the persistence of mule fat.

Mule fat is the defining species within this community. Stands of mule fat occur in the study area north of Monument Road. A total of 0.26 acre of mule fat scrub was mapped in the study area.

## 4.7 NATIONAL WETLANDS INVENTORY

NWI mapping for the study area is depicted on Figure 7, *National Wetlands Inventory*. According to the Wetlands Mapper Documentation and Instructions Manual (USFWS 2019), the NWI defines wetlands according to the Cowardin et al. 2<sup>nd</sup> Edition definition of wetlands published by the Federal Geographic Data Committee (FGDC 2013). This definition is a one-parameter definition in which only one of the following three attributes need be present for an area to be considered wetland by the NWI: predominance of hydrophytes, undrained hydric soil, or non-soil substrate saturated or covered with shallow water at some time during the growing season of each year. As such, some wetlands shown on NWI may not meet the three-parameter definitions of USACE wetland waters of the U.S. or RWQCB state wetland. Such areas were observed in the study area and were identified as CDFW and CCC wetlands.

The results of the delineation generally align with NWI mapping of wetlands and riverine features in the study area, with some minor deviations.

Overall, HELIX's delineation results show a larger extent of non-wetland waters in the study area than shown on the NWI map, mostly associated with areas where water is draining from the north side of the mesa.

Other areas where wetlands/riparian habitats were identified in the field but not on the NWI map include areas in the north portion of the study area north of Monument Road, including patches of mule fat scrub and southern willow scrub.

HELIX also observed one general area where the NWI identified wetlands, but upon field investigation, these areas were found to be upland. This consisted of NWI freshwater forested shrub wetland in the western portion of the study at the bottom of the mesa west of the access road. This area is upland habitat (eucalyptus woodland).

# 5.0 PRECIPITATION DATA AND ANALYSIS

## 5.1 CLIMATE AND GROWING SEASON

Weather patterns within the County and study area are greatly influenced by proximity to the Pacific Ocean. The climate of San Diego is classified as a Mediterranean climate, which indicates hot, sunny, and





# **National Wetlands Inventory**

dry summers, and cooler, wetter winters. However, San Diego is more arid than most Mediterranean climates and averages 267 sunny days per year. The growing season in coastal San Diego County is year-round.

### 5.2 PRECIPITATION AND NORMAL CLIMATIC CONDITIONS ASSESSMENT

#### 5.2.1 Average and Actual Precipitation Comparison

WETS climate data was referenced to provide a comparison between average and actual rainfall amounts for the Project vicinity. Rainfall in the region occurs primarily between December and February, with average yearly rainfall for the Project vicinity totaling 9.19 inches, averaged over a 20-year period from 2002 to 2022 (Table 2, *Average Monthly Precipitation for Years 2002-2022*). December, January, and February are typically the months with the highest rainfall amounts.

| Year<br>Range | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  | Annual |
|---------------|------|------|------|------|------|------|------|------|------|------|------|------|--------|
| 2002-2022     | 1.40 | 1.89 | 1.21 | 0.70 | 0.30 | 0.04 | 0.02 | 0.00 | 0.15 | 0.54 | 1.00 | 1.94 | 9.19   |

Table 2

AVERAGE MONTHLY PRECIPITATION FOR YEARS 2002-2022<sup>1</sup>

<sup>1</sup> Data Station at Brown Field, San Diego. Source: AgACIS for San Diego County. <u>http://agacis.rcc-acis.org/</u>.

2021 produced slightly below-average rainfall, totaling 8.97 inches (Table 3, *Total Monthly Precipitation for Years 2021-2023*) compared to 9.19 inches in an average year. Annual rainfall in 2023, however, was slightly above average.

| Year | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul | Aug  | Sep  | Oct  | Nov  | Dec  | Annual |
|------|------|------|------|------|------|------|-----|------|------|------|------|------|--------|
| 2021 | 2.09 | 0.24 | 2    | 0.13 | 0.05 | Т    | Т   | Т    | 0.06 | 0.93 | 0    | 3.47 | 8.97   |
| 2022 | 0.5  | 1.33 | 3    | 0.37 | 0.01 | Т    | Т   | 0    | 0.28 | 0.18 | 2.41 | 1.27 | 9.35   |
| 2023 | 5.66 | 2.03 | 4.17 | 0.10 | 0.29 | 0.20 | Т   | 0.02 | 0.02 | 0.27 | 0.97 | 0.76 | 14.49  |
| Mean | 2.75 | 1.2  | 3.06 | 0.20 | 0.12 | 0.02 | 0   | 0.01 | 0.12 | 0.46 | 1.13 | 1.83 | 10.94  |

 Table 3

 TOTAL MONTHLY PRECIPITATION FOR YEARS 2021-2023<sup>1,2</sup>

<sup>1</sup> Data Station at Brown Field, San Diego. Source: AgACIS for San Diego County. <u>http://agacis.rcc-acis.org/</u>.

<sup>2</sup> T=Trace amount of precipitation

#### 5.2.2 Antecedent Precipitation Tool

The Antecedent Precipitation Tool ([APT]; Appendix D, *Typical Year Analysis - Antecedent Precipitation Tool Graphs*) was used to assist in determining whether normal climatic conditions were present at the time the delineation fieldwork was conducted. The APT is used as a resource for evaluating whether observations of flow conditions and surface water connections are representative of "typical year" conditions when assessing the jurisdictional status of certain features, based on the range of normal rainfall conditions that occurred during the preceding 30 years. An index score of 9 or lower indicates antecedent precipitation conditions are drier than normal; a score of 10 to 14 indicates conditions are normal; a score of 15 or higher indicates conditions are wetter than normal.



The results of the APT for the December 2023 fieldwork date were that normal conditions were present (see APT graphs in Appendix D). Although normal conditions were present, the APT graphs also indicated that the region was experiencing mild wetness according to the Palmer Drought Severity Index.

#### 5.2.3 Wetland Hydrology and Analysis

Although rainfall was slightly above average for the 2023 wet season, the APT indicated normal conditions were present at the time of the delineation. Aquatic resources were readily discernable, and normal circumstances were present during the delineation. No areas were significantly disturbed.

# 6.0 AQUATIC RESOURCES NARRATIVE/DELINEATION RESULTS

### 6.1 WATERS OF THE U.S. (USACE)

No potential waters of the U.S. were delineated in the USACE study area (Figure 8, *Waters of the U.S. Delineation*). Features determined not to qualify as waters of the U.S. are discussed in sections 6.1.4 and 6.1.5 below. Wetland determination data forms and OHWM data forms are in Appendices A and B, respectively. The sampling point and site photographs are in Appendix C.

#### 6.1.1 Wetlands

No wetland waters of the U.S. were present within the study area.

#### 6.1.2 Non-wetland Waters

No non-wetland waters of the U.S. were present within the study area.

#### 6.1.3 Sampling Point and OHWM Data Point Summary

#### 6.1.3.1 Wetland Determination Sampling Points

Two wetland determination sampling points were taken in the study area. See Appendix A for copies of the data forms. See Table 4, *Wetland Determination Data Form Summary*, for the overall results of the wetland determination sampling points.

| Sampling               | Fie        | ld Indicator   | S         |                      |                           |  |
|------------------------|------------|----------------|-----------|----------------------|---------------------------|--|
| Point # Hydrophytic Hy |            | Hydric Wetland |           | Vegetation Community | Results                   |  |
|                        | Vegetation | Soils          | Hydrology |                      |                           |  |
| 1                      | No         | No             | No        | DCSS                 | Non-wetland waters of the |  |
|                        |            |                |           |                      | State                     |  |
| 2                      | No         | No             | No        | Disturbed habitat    | Non-jurisdictional        |  |

Table 4 WETLAND DETERMINATION DATA FORM SUMMARY







# Waters of the U.S. Delineation

#### 6.1.3.2 OHWM Data Points

An OHWM datasheet was completed at one location on Spooner's Mesa within the eroded channel, and the results are summarized below in Table 5, *OHWM Datasheet Summary*. Refer to Appendix B for a copy of the datasheet. Additionally, OHWM datasheets in the Tijuana River Valley Invasive Species Removal and Restoration Project (HELIX 2023) and Tijuana River Valley Regional Park Campground Spooner's Mesa Septic Project (ICF 2020) delineation reports were used to help determine jurisdictional limits.

| Table 5                |
|------------------------|
| OHWM DATASHEET SUMMARY |

| Data<br>Point | Latitude/Lo<br>(Decimal D | ongitude<br>egrees) | Name   | Feature          |
|---------------|---------------------------|---------------------|--------|------------------|
| 1             | 32.54588                  | -117.09820          | OHWM 1 | Ephemeral Stream |

#### 6.1.4 Riparian Areas Not Meeting USACE Wetland Criteria

Portions of the study area support riparian habitat with hydrophytic vegetation mapped, i.e., mule fat scrub and southern willow scrub (Figure 4, *Vegetation Communities/Habitats [Holland Oberbauer]*). These habitats are in the upper portions of the floodplain far south of the Tijuana River channel, separated by uplands from waters of the U.S., and do not exhibit an OHWM, making them isolated and non-jurisdictional under the 2023 Conforming Rule. Although these areas do not meet the definition of wetland waters of the U.S., these riparian habitats fall under the jurisdiction of CDFW and the CCC.

### 6.1.5 Other Features

Potential features observed during the delineation included swales, erosional features, and ditches. Ephemeral features were also observed in the study area; however, following the 2023 Conforming Rule, ephemeral waters are no longer considered waters of the U.S. For this report, swales are defined as rounded features with a subtle appearance within the landscape with enough of a depression to move water during periods of rain or inundation but lacking an OHWM. Ditches are artificially created channels constructed in uplands adjacent to existing or historical roads. Erosional features occur where there is enough concentrated surface runoff to form a channel, but that channel has insufficient volume, frequency, and duration of flow to exhibit the physical characteristics of a bed and bank and/or OHWM. Swales and ditches also lack bed and bank and/or OHWM.

## 6.2 WATERS OF THE STATE (RWQCB)

A total of 0.45 acre/5,141 linear feet of potential waters of the State were delineated in the study area (Table 6, *RWQCB Waters of the State in the Study Area*; Figure 9, *RWQCB Waters of the State Delineation*), consisting of 0.45 acre of non-wetland waters. No isolated wetlands meeting the SWRCB's State Wetland Definition were identified in the study area. Because the ephemeral stream channels within the study area are not waters of the U.S., they are subject to RWQCB regulation solely under the Porter-Cologne Water Quality Control Act. The stands of mule fat scrub and southern willow scrub are not wetland waters of the State because they are composed of stands of wetland vegetation, with no other wetland indicators present.



| Table 6                                     |
|---|
| RWQCB WATERS OF THE STATE IN THE STUDY AREA |

| Non-wetland Waters |      | Acre <sup>1</sup> | Linear Feet <sup>2</sup> |
|--------------------|------|-------------------|--------------------------|
| Stream Channel     |      | 0.45              | 5,141                    |
| T                  | OTAL | 0.45              | 5,141                    |

<sup>1</sup> Acreage rounded to the nearest hundredth acre.

<sup>2</sup> Linear feet rounded to the nearest foot.

### 6.3 CDFW JURISDICTION

A total of 1.51 acres of CDFW jurisdictional habitats occur within the study area, composed of 0.69 acre of riparian habitat and 0.82 acre of non-vegetated stream channel (Table 7, *CDFW Jurisdictional Habitats in the Study Area*; Figure 10, *CDFW Jurisdictional Habitat Delineation*).

|                     | Table 7       |          |      |
|---------------------|---------------|----------|------|
| CDFW JURISDICTIONAL | HABITATS IN T | HE STUDY | AREA |

| CDFW Jurisdictional Areas                |          | Acres <sup>1</sup> |
|--|----------|--------------------|
| Riparian                                 |          |                    |
| Southern Willow Scrub (Riparian Habitat) |          | 0.43               |
| Mule Fat Scrub (Riparian Habitat)        |          | 0.26               |
|  | Subtotal | 0.69               |
| Streambed                                |          |                    |
| Stream Channel (Non-vegetated Streambed) |          | 0.82               |
|  | Subtotal | 0.82               |
|  | TOTAL    | 1.51               |

<sup>1</sup> Rounded to the nearest hundredth

## 6.4 CALIFORNIA COASTAL COMMISSION

A total of 0.69 acre of CCC coastal wetlands occur within the study area, composed of 0.43 acre of southern willow scrub and 0.26 acre of mule fat scrub (Table 8, *CCC Coastal Wetlands in the Study Area;* Figure 11, *CCC Coastal Wetlands*). The 0.69-acre of coastal wetland is considered to meet the "1-parameter" definition of a coastal wetland because of the presence of year-round wetland vegetation.

Table 8 CCC COASTAL WETLANDS IN THE STUDY AREA

| Habitats              | Acres |
|-----------------------|-------|
| Southern Willow Scrub | 0.43  |
| Mule Fat Scrub        | 0.26  |
| TOTAL                 | 0.69  |

<sup>1</sup> Rounded to the nearest hundredth







# **RWQCB** Waters of the State Delineation



HELIX Environmental Plan

# **CDFW** Jurisdictional Habitat Delineation



# **CCC Coastal Wetlands Delineation**

# 7.0 PERMITTING OVERVIEW

## 7.1 FEDERAL PERMITTING

Impacts to waters of the U.S. are regulated by the USACE under Section 404 of the Clean Water Act (33 USC 401 et seq.; 33 USC 1344; USC 1413; and Department of Defense, Department of the Army, Corps of Engineers 33 CFR Part 323). A federal Clean Water Act Section 404 Permit would be required for the Project to place fill in waters of the U.S. Depending on the size and scope of activities proposed within waters of the U.S., projects may be authorized by the USACE under a Nationwide Permit, Regional General Permit, or an Individual Permit.

The delineation found no waters of the U.S. within the study area based on the 2023 Conforming Rule, which would mean that no 404 Permit is required. The final determination of the extent of USACE's jurisdiction in the study area pursuant to Section 404 of the federal CWA would depend on the results of verification by the USACE/delineation concurrence, if requested by the Project applicant. Areas deemed to be jurisdictional would be subject to the regulatory requirements of the federal CWA, including permitting and mitigation, as required.

## 7.2 STATE PERMITTING

### 7.2.1 Regional Water Quality Control Board

A CWA Section 401 Water Quality Certification, which is administered by the RWQCB or SWRCB, must be obtained to certify any 404 Permit. When waters of the State that are not waters of the U.S. are impacted, and a 404 Permit is needed, as expected for this Project, the Project would need to apply for a Waste Discharge Requirements permit from the RWQCB under the Porter-Cologne Water Quality Control Act.

### 7.2.2 California Department of Fish and Wildlife

Impacts to CDFW jurisdictional habitats are regulated by CDFW under Sections 1600-1603 of the CFGC. The CDFW requires a Streambed Alteration Agreement (SAA) for projects that will divert or obstruct the natural flow of water; change the bed, channel, or bank of any stream; or use any material from a streambed. The SAA is a contract between the applicant and CDFW stating what activities can occur in the riparian zone and stream course.

### 7.2.3 California Coastal Commission

Impacts to coastal wetlands are regulated by the CCC under the California Coastal Act. The act also directs each coastal city or county to prepare a Local Coastal Program (LCP) to guide development in the coastal zone. Once an LCP is certified by the CCC, the permitting authority of the CCC is transferred to the local government. The study area is located within the Coastal Zone and planning boundaries of the City of San Diego's (City) certified LCP. The City's policies and regulations within the certified LCP are applied as the standard of review to development permit applications for proposed coastal development within the City.


The entire study area is within the Coastal Zone, with portions within the Coastal Zone Appealable Area and portions within the Deferred Certification Area (Figure 3, *Coastal Zone*). Appealable area means the area, as defined by California Public Resources Code Section 30603, within the Coastal Zone that constitutes the appeal jurisdiction of the CCC. This area includes lands between the sea and the first public road paralleling the sea or within 300 feet of the inland extent of any beach or of the mean high tideline of the sea where there is no beach, whichever is the greater distance; or within 100 feet of any wetland, estuary, or stream, or within 300 feet of the top of the seaward face of any coastal bluff. Development within this zone is regulated under the City's approved LCP, although the CCC retains appeal authority. Developments in deferred certification areas designated by the certified LCP require a permit or exemption issued by the CCC in accordance with the procedure as specified by the Coastal Act.

# 8.0 DISCLAIMER STATEMENT

This report presents HELIX's summary of the aquatic resources delineated in the Project study area. The descriptions and maps provided are HELIX's jurisdictional recommendation based on the field evidence, regulations, and environmental information available. Only the regulatory agencies can make a final determination on whether the features present are subject to USACE, RWQCB, CDFW, and/or CCC regulation.



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# Appendix A

## Wetland Determination Data Forms

#### WETLAND DETERMINATION DATA FORM – Arid West Region

| Project/Site: Spooner's Mesa  | City/County: San Diego/San Diego Sampling Date: 12/5/23                 |  |  |  |  |  |
|---|---|--|--|--|--|--|
| Applicant/Owner: County of San Diego  | State: CA Sampling Point:1  |  |  |  |  |  |
| Investigator(s): Laura Moreton, Ben Rosenbaum   | Section, Township, Range: Section 4, Township 19 South, Range 2 West    |  |  |  |  |  |
| Landform (hillslope, terrace, etc.): terrace  | Local relief (concave, convex, none): <u>CONVEX</u> Slope (%): <u>5</u> |  |  |  |  |  |
| Subregion (LRR): C  | 32.545910 Long: -117.098122 Datum: NAD83                                |  |  |  |  |  |
| Soil Map Unit Name: Terrace Escarpments   | NWI classification: Riverine (R4SBA)                                    |  |  |  |  |  |
| Are climatic / hydrologic conditions on the site typical for this time of year? Yes V No (If no, explain in Remarks.) |   |  |  |  |  |  |
| Are Vegetation, Soil, or Hydrology significantly disturbed? Are "Normal Circumstances" present? Yes No                |   |  |  |  |  |  |
| Are Vegetation, Soil, or Hydrology naturally  | / problematic? (If needed, explain any answers in Remarks.)             |  |  |  |  |  |
| SUMMARY OF FINDINGS – Attach site map show  | ing sampling point locations, transects, important features, etc.       |  |  |  |  |  |
| Hydrophytic Vegetation Present? Yes No _  | In the Sempled Area   |  |  |  |  |  |
| Hydric Soil Present? Yes No _✓  | within a Wetland? Yes No √  |  |  |  |  |  |
| Wetland Hydrology Present? Yes No   |   |  |  |  |  |  |
| Remarks:  |   |  |  |  |  |  |
| Sample point located in an area of extreme eros   | sion downstream from a broken pipe.                                     |  |  |  |  |  |

#### **VEGETATION – Use scientific names of plants.**

| - 20                                   | Absolute   | Dominant   | Indicator | Dominance Test worksheet:  |      |  |  |
|--|--|------------|-----------|--|------|--|--|
| Tree Stratum (Plot size: r=30)         | <u>% Cover</u>   | Species?   | Status    | Number of Dominant Species   |      |  |  |
| 1. Salix lasiolepis                    | 35   | YES        | FACW      | That Are OBL, FACW, or FAC: (A   | .)   |  |  |
| 2                                      |  |            |           | Total Number of Dominant   |      |  |  |
| 3                                      |  |            |           | Species Across All Strata:6 (B)  | )    |  |  |
| 4                                      |  |            |           | Descent of Descinent One size  |      |  |  |
|  | 35   | = Total Co | ver       | That Are OBL_EACW or EAC 33% (A)   | /B)  |  |  |
| Sapling/Shrub Stratum (Plot size:r=15) |  |            |           |  | , 2) |  |  |
| 1. Eriogonum fasciculatum              | 5  | YES        | UPL       | Prevalence Index worksheet:  |      |  |  |
| 2. Isocoma menziesii                   | 3  | no         | FAC       | Total % Cover of: Multiply by:   |      |  |  |
| 3. Acmispon glaber                     | 8  | YES        | UPL       | OBL species 0 x 1 = 0  |      |  |  |
| 4. Baccharis salicifolia               | 6  | YES        | FAC       | FACW species <u>35</u> x 2 = <u>70</u>   |      |  |  |
| 5.                                     |  |            |           | FAC species 9 $x_3 = 27$   |      |  |  |
|  | 22   | = Total Co | ver       | FACU species $0$ x 4 = $0$   |      |  |  |
| Herb Stratum (Plot size:r=5ft)         |  |            |           | UPL species $17 \times 5 = 85$   |      |  |  |
| 1. Stephanomeria virgata               | 3  | YES        | UPL       | $\begin{array}{c c} \hline c & c \\ c & c \\ \hline c & c \\ c & c \\ \hline c & c \\ c & c \\$ | B)   |  |  |
| 2. Pseudognaphalium californicum       | 1  | YES        | UPL       |  | 5)   |  |  |
| 3                                      |  |            |           | Prevalence Index = B/A =2.98   |      |  |  |
| 4                                      |  |            |           | Hydrophytic Vegetation Indicators:   |      |  |  |
| 5.                                     |  |            |           | Dominance Test is >50%   |      |  |  |
| 6                                      | _  |            |           | ✓ Prevalence Index is ≤3.0 <sup>1</sup>  |      |  |  |
| 7                                      |  |            |           | Morphological Adaptations <sup>1</sup> (Provide supporting   | ļ    |  |  |
| 8                                      |  |            |           | data in Remarks or on a separate sheet)  |      |  |  |
| 0                                      | 4  | - Total Ca |           | Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  |      |  |  |
| Woody Vine Stratum (Plot size: r=15ft) |  |            | ver       |  |      |  |  |
| 1                                      |  |            |           | <sup>1</sup> Indicators of hydric soil and wetland hydrology must  | t    |  |  |
| 2                                      |  |            |           | be present, unless disturbed or problematic.   |      |  |  |
|  | 0  | = Total Co | vor       | Hydrophytic  |      |  |  |
|  | -  |            | v C1      | Vegetation   |      |  |  |
| % Bare Ground in Herb Stratum % Cove   | % Bare Ground in Herb Stratum0 % Cover of Biotic Crust0 Present? Yes No _√ |            |           |  |      |  |  |
| Remarks:                               |  |            |           |  |      |  |  |

The site meets the prevalence test, but the dominance test is the applicable test because hydology and soils are not present.

| Denth                    | Matrix               | p                   | Redo  | v Epsturo          |                   |                           |  |                                    |                        |
|--------------------------|----------------------|---------------------|---|--------------------|-------------------|---------------------------|--|------------------------------------|------------------------|
| (inches)                 | Color (moist)        | %                   | Color (moist)                                   | <u>% 1 eatures</u> | Type <sup>1</sup> | $1 \text{ oc}^2$          | Texture  | Remarks                            |                        |
|                          |                      |                     |   |                    |                   |                           |  | . to mainto                        |                        |
|                          |                      |                     |   | ·                  | . <u> </u>        | <u> </u>                  |  |                                    |                        |
|                          |                      |                     |   |                    |                   |                           |  |                                    |                        |
|                          |                      |                     |   |                    |                   |                           |  |                                    |                        |
|                          |                      | <u> </u>            |   | ·                  |                   |                           |  |                                    |                        |
|                          |                      |                     |   | ·                  |                   |                           |  |                                    |                        |
|                          |                      |                     |   |                    |                   |                           |  |                                    |                        |
|                          |                      |                     |   |                    |                   |                           |  |                                    |                        |
| ·                        |                      |                     |   | ·                  |                   | <u> </u>                  |  |                                    |                        |
|                          |                      |                     |   |                    |                   |                           |  |                                    |                        |
|                          |                      |                     |   |                    |                   |                           |  |                                    |                        |
| <sup>1</sup> Type: $C=C$ | oncentration D=Denl  | etion RM=R          | educed Matrix CS                                | =Covered           | l or Coate        | d Sand Gr                 | ains <sup>2</sup> Location                           | PI =Pore Lining                    | M=Matrix               |
| Hydric Soil              | Indicators: (Applica | ble to all L        | RRs. unless other                               | wise note          | ad.)              |                           | Indicators for Pr                                    | oblematic Hydric                   | : Soils <sup>3</sup> : |
| Histosol                 | (A1)                 |                     | Sandy Rede                                      | v (S5)             | ,                 |                           | 1 cm Muck (A   |                                    |                        |
| Listic Er                | $(\Lambda 1)$        |                     | Strippod Ma                                     | $r_{\rm v}(00)$    |                   |                           | 2 cm Muck (A   |                                    |                        |
|                          | $A_2$                |                     |   | ky Minora          |                   |                           | 2 CITI Muck (P                                       | $(\mathbf{L}\mathbf{R}\mathbf{B})$ |                        |
|                          | Suc(A3)              |                     | Loamy Gleved Matrix (F2)                        |                    |                   | Red Parent Material (TF2) |  |                                    |                        |
| Tryatoge                 |                      | ·)                  | Loany Gleyed Matrix (F2)                        |                    |                   |                           | Other (Explain in Remarks)                           |                                    |                        |
|                          |                      | •)                  | Depleted Matrix (F3)<br>Redox Dark Surface (F6) |                    |                   |                           | II III Remarks)                                      |                                    |                        |
| T CHI MC                 | d Below Dark Surface | (Δ11)               |   | ark Surfac         | o (F7)            |                           |  |                                    |                        |
| Depleted                 | a Delow Dark Surface | (,,,,)              | Depleted Dark Surface (F7)                      |                    |                   |                           | <sup>3</sup> Indiantara of hydrophytic variation and |                                    |                        |
| Thick Do                 | AIR Sullace (AIZ)    |                     | Redox Depressions (F8)                          |                    |                   |                           | wotland bydrold                                      | noprigite vegetatio                | nanu                   |
| Sandy (                  | Nucky Milleral (31)  |                     |   | 5 (1 9)            |                   |                           |  | d or problematic                   | ,<br>,<br>,            |
| Sanuy G                  |                      |                     |   |                    |                   |                           |  | u or problematic.                  |                        |
| -                        | Layer (il present):  |                     |   |                    |                   |                           |  |                                    |                        |
| Туре:                    |                      |                     |   |                    |                   |                           |  |                                    |                        |
| Depth (in                | ches):               |                     |   |                    |                   |                           | Hydric Soil Prese                                    | nt? Yes                            | No                     |
| Remarks:                 |                      |                     |   |                    |                   |                           |  |                                    |                        |
| Largo coh                | bla an avorage       | $of \in 10^{\circ}$ | nchos in diam                                   | otor m             | ako un            | the cell                  | c in the comple                                      | noint                              |                        |
| Large COL                | nne, an average      | 010-10              | nches in ulan                                   | ieter m            | аке ир            | the soll                  | s in the sample                                      | μοιπι.                             |                        |

### HYDROLOGY

| Wetland Hydrology Indicators:                                 |   |   |  |  |  |  |  |  |
|---|---|---|--|--|--|--|--|--|
| Primary Indicators (minimum of one required; ch               | Secondary Indicators (2 or more required)             |   |  |  |  |  |  |  |
| Surface Water (A1)  | Salt Crust (B11)                                      | Water Marks (B1) (Riverine)               |  |  |  |  |  |  |
| High Water Table (A2)   | Biotic Crust (B12)                                    | Sediment Deposits (B2) (Riverine)         |  |  |  |  |  |  |
| Saturation (A3)   | Aquatic Invertebrates (B13)                           | Drift Deposits (B3) (Riverine)            |  |  |  |  |  |  |
| Water Marks (B1) (Nonriverine)                                | Hydrogen Sulfide Odor (C1)                            | Drainage Patterns (B10)                   |  |  |  |  |  |  |
| Sediment Deposits (B2) (Nonriverine)                          | Oxidized Rhizospheres along Living Roots              | (C3) Dry-Season Water Table (C2)          |  |  |  |  |  |  |
| Drift Deposits (B3) (Nonriverine)                             | Presence of Reduced Iron (C4)                         | Crayfish Burrows (C8)                     |  |  |  |  |  |  |
| Surface Soil Cracks (B6)                                      | Recent Iron Reduction in Tilled Soils (C6)            | Saturation Visible on Aerial Imagery (C9) |  |  |  |  |  |  |
| Inundation Visible on Aerial Imagery (B7)                     | Thin Muck Surface (C7)                                | Shallow Aquitard (D3)                     |  |  |  |  |  |  |
| Water-Stained Leaves (B9)                                     | Other (Explain in Remarks)                            | FAC-Neutral Test (D5)                     |  |  |  |  |  |  |
| Field Observations:   |   |   |  |  |  |  |  |  |
| Surface Water Present? Yes No _                               | ✓ Depth (inches):                                     |   |  |  |  |  |  |  |
| Water Table Present? Yes No                                   | ✓ Depth (inches):                                     |   |  |  |  |  |  |  |
| Saturation Present? Yes <u>No</u> (includes capillary fringe) | ✓ Depth (inches): Wetland                             | d Hydrology Present? Yes No _√_           |  |  |  |  |  |  |
| Describe Recorded Data (stream gauge, monitor                 | ring well, aerial photos, previous inspections), if a | vailable:                                 |  |  |  |  |  |  |
| NA  | NA  |   |  |  |  |  |  |  |
| Remarks:  | Remarks:  |   |  |  |  |  |  |  |
| Soils between cobble, near the sam November 25, 2023.         | ple point location appear moist. Las                  | t rain event (trace amount) was on        |  |  |  |  |  |  |

#### WETLAND DETERMINATION DATA FORM – Arid West Region

| Project/Site: Spooner's Mesa  | City/County: San Diego/San Diego Sampling Date: 12/5/23                  |  |  |  |  |
|---|--|--|--|--|--|
| Applicant/Owner: County of San Diego  | State: CA Sampling Point: 2  |  |  |  |  |
| Investigator(s): Laura Moreton, Ben Rosenbaum   | Section, Township, Range: Section 4, Township 19 South, Range 2 West     |  |  |  |  |
| Landform (hillslope, terrace, etc.): base of hill   | Local relief (concave, convex, none): <u>CONCave</u> Slope (%): <u>3</u> |  |  |  |  |
| Subregion (LRR): C Lat: 32  | 32.546160 Long: -117.098012 Datum: NAD 83                                |  |  |  |  |
| Soil Map Unit Name: Chino silt loam, saline, 0 to 2 percent slop  | ppes NWI classification: none  |  |  |  |  |
| Are climatic / hydrologic conditions on the site typical for this time of year? Yes 🗹 No (If no, explain in Remarks.) |  |  |  |  |  |
| Are Vegetation, Soil, or Hydrology significantly  | ntly disturbed? Are "Normal Circumstances" present? Yes _ ✓ No           |  |  |  |  |
| Are Vegetation, Soil, or Hydrology naturally pr   | problematic? (If needed, explain any answers in Remarks.)                |  |  |  |  |
| SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.           |  |  |  |  |  |
| Hydrophytic Vegetation Present? Yes No  | - Is the Sampled Area  |  |  |  |  |
| Hydric Soil Present? Yes No _✓  | — within a Wetland? Yes No √   |  |  |  |  |
| Wetland Hydrology Present? Yes No _✓  |  |  |  |  |  |

Remarks:

Sample point at toe of slope on north side of Monument Road.

#### **VEGETATION – Use scientific names of plants.**

|   | Absolute       | Dominant      | Indicator | Dominance Test worksheet:  |             |
|---|----------------|---------------|-----------|--|-------------|
| Tree Stratum     (Plot size:)       1)                  | <u>% Cover</u> | Species?      | Status    | Number of Dominant Species<br>That Are OBL, FACW, or FAC:1   | (A)         |
| 2   |                |               |           | Total Number of Dominant   |             |
| 3   |                |               |           | Species Across All Strata: 3   | (B)         |
| 4   |                |               |           | Percent of Dominant Species  |             |
| Contine (Charles Charles (Distring) $r = 15 \text{ft}$  | 0              | = Total Co    | ver       | That Are OBL, FACW, or FAC: 33%  | (A/B)       |
| <u>Saping/Sirub Stratum</u> (Plot size. <u>1-1511</u> ) | 20             | VES           | FACIL     | Provalence Index worksheet:  |             |
| <ul> <li>Baccharis salicifolia</li> </ul>               | 14             | YES           | FAC       | Total % Cover of Multiply by:  |             |
| 2. Peritoma arborea                                     | <u> </u>       | NO            |           | $\begin{array}{c c} \hline \hline$  |             |
|   |                | 110           |           | EACW species $0$ $x^2 = 0$   |             |
| 4   |                |               |           | EAC species $\frac{14}{2}$ $x_2 = \frac{42}{4}$  |             |
| o   | 40             | - Total Ca    |           | EACLI species $23$ $x = 92$  |             |
| Herb Stratum (Plot size: r=5ft )                        |                | _ = 10tal C0  | ver       | $\frac{1}{1} = \frac{1}{1} = \frac{1}$ |             |
| 1. Ricinus communis                                     | 3              | YES           | FACU      | Column Totala: $43$ (A) $164$  | (P)         |
| 2.  | _              |               |           |  | (D)         |
| 3.  | _              |               |           | Prevalence Index = B/A =3.81   |             |
| 4.  | _              |               |           | Hydrophytic Vegetation Indicators:   |             |
| 5.  | _              |               |           | Dominance Test is >50%   |             |
| 6.  |                |               |           | Prevalence Index is $\leq 3.0^1$   |             |
| 7   |                |               |           | Morphological Adaptations <sup>1</sup> (Provide support data in Remarks or on a separate sheet   | orting<br>) |
| 8   |                | - Tatal Ca    |           | Problematic Hydrophytic Vegetation <sup>1</sup> (Expl  | ain)        |
| Woody Vine Stratum (Plot size: r=15ft )                 |                | _ = 10tal Co  | ver       |  |             |
| 1.  |                |               |           | <sup>1</sup> Indicators of hydric soil and wetland hydrology   | must        |
| 2.  |                |               |           | be present, unless disturbed or problematic.   |             |
|   | 0              | = Total Co    | ver       | Hydrophytic<br>Vegetation  |             |
| % Bare Ground in Herb Stratum 0 % Cove                  | r of Biotic C  | rust <u>C</u> | )         | Present? Yes No _✓   |             |
| Remarks:  |                |               |           |  |             |
| Area dominated by castor bean.                          |                |               |           |  |             |
|   |                |               |           |  |             |
|   |                |               |           |  |             |

2

| Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.) |                              |               |                            |                      |                   |                            |   |                       |              |
|---|------------------------------|---------------|----------------------------|----------------------|-------------------|----------------------------|---|-----------------------|--------------|
| Depth   | Matrix                       |               | Redox                      | K Features           | 8                 |                            |   |                       |              |
| (inches)  | Color (moist)                | %             | Color (moist)              | %                    | Type <sup>1</sup> | Loc <sup>2</sup>           | Texture   | Remar                 | KS           |
| 0-16  | 2.5 YR 1/3                   | 100           |                            |                      |                   |                            | sandy loa   |                       |              |
|   |                              |               |                            |                      |                   |                            |   |                       |              |
|   |                              |               |                            |                      |                   |                            | ······  |                       |              |
|   | . <u> </u>                   |               |                            |                      |                   |                            | <u> </u>  |                       |              |
|   |                              |               |                            |                      |                   |                            | <u> </u>  |                       |              |
|   |                              |               |                            |                      |                   |                            |   |                       |              |
|   |                              |               |                            |                      |                   |                            |   |                       |              |
|   |                              |               |                            |                      |                   |                            |   |                       |              |
|   |                              |               |                            |                      |                   |                            | <u> </u>  |                       |              |
|   |                              |               |                            |                      |                   |                            | <u> </u>  |                       |              |
| <sup>1</sup> Type: C=C  | oncentration, D=Dep          | letion, RM=F  | Reduced Matrix, CS         | =Covered             | l or Coate        | d Sand G                   | rains. <sup>2</sup> Locatio                           | n: PL=Pore Lining     | g, M=Matrix. |
| Hydric Soil   | Indicators: (Applic          | able to all L | RRs, unless other          | wise note            | ed.)              |                            | Indicators for  | Problematic Hyd       | ric Soils°:  |
| Histosol  | (A1)                         |               | Sandy Redo                 | x (S5)               |                   |                            | 1 cm Muck   | (A9) ( <b>LRR C</b> ) |              |
| Histic Ep   | pipedon (A2)                 |               | Stripped Ma                | Stripped Matrix (S6) |                   |                            | 2 cm Muck (A10) ( <b>LRR B</b> )                      |                       |              |
| Black Hi  | istic (A3)                   |               | Loamy Mucky Mineral (F1)   |                      |                   | Reduced Vertic (F18)       |   |                       |              |
| Hydroge   | en Sulfide (A4)              |               | Loamy Gleyed Matrix (F2)   |                      |                   | Red Parent Material (TF2)  |   |                       |              |
| Stratified  | d Layers (A5) ( <b>LRR (</b> | C)            | Depleted Matrix (F3)       |                      |                   | Other (Explain in Remarks) |   |                       |              |
| 1 cm Mu   | ıck (A9) ( <b>LRR D</b> )    |               | Redox Dark Surface (F6)    |                      |                   |                            |   |                       |              |
| Deplete   | d Below Dark Surfac          | e (A11)       | Depleted Dark Surface (F7) |                      |                   |                            |   |                       |              |
| Thick Da  | ark Surface (A12)            |               | Redox Depressions (F8)     |                      |                   |                            | <sup>3</sup> Indicators of hydrophytic vegetation and |                       |              |
| Sandy N   | lucky Mineral (S1)           |               | Vernal Pools (F9)          |                      |                   |                            | wetland hydrology must be present,                    |                       |              |
| Sandy G   | Bleyed Matrix (S4)           |               |                            |                      |                   |                            | unless distur   | bed or problemation   | C.           |
| Restrictive   | Layer (if present):          |               |                            |                      |                   |                            |   |                       |              |
| Туре:   |                              |               |                            |                      |                   |                            |   |                       |              |
| Depth (in   | ches):                       |               |                            |                      |                   |                            | Hydric Soil Pres                                      | sent? Yes             | No _∕        |
| Remarks:  |                              |               |                            |                      |                   |                            | ·   |                       |              |
| No hydrio   | soil indicators              |               |                            |                      |                   |                            |   |                       |              |
| ,   |                              |               |                            |                      |                   |                            |   |                       |              |
|   |                              |               |                            |                      |                   |                            |   |                       |              |

### HYDROLOGY

| Wetland Hydrology Indicators:                          |           |      |                                      |                   |   |  |  |
|--|-----------|------|--------------------------------------|-------------------|---|--|--|
| Primary Indicators (minimum of one req                 | uired; ch | eck  | all that apply)                      |                   | Secondary Indicators (2 or more required) |  |  |
| Surface Water (A1)                                     |           |      | Salt Crust (B11)                     |                   | Water Marks (B1) (Riverine)               |  |  |
| High Water Table (A2)                                  |           |      | Biotic Crust (B12)                   |                   | Sediment Deposits (B2) (Riverine)         |  |  |
| Saturation (A3)  |           |      | Aquatic Invertebrates (B13)          |                   | Drift Deposits (B3) (Riverine)            |  |  |
| Water Marks (B1) (Nonriverine)                         |           |      | Hydrogen Sulfide Odor (C1)           |                   | Drainage Patterns (B10)                   |  |  |
| Sediment Deposits (B2) (Nonriveri                      | ne)       |      | Oxidized Rhizospheres along Livin    | ng Roots (C3)     | Dry-Season Water Table (C2)               |  |  |
| Drift Deposits (B3) (Nonriverine)                      |           |      | Presence of Reduced Iron (C4)        |                   | Crayfish Burrows (C8)                     |  |  |
| Surface Soil Cracks (B6)                               |           |      | Recent Iron Reduction in Tilled Sc   | oils (C6)         | Saturation Visible on Aerial Imagery (C9) |  |  |
| Inundation Visible on Aerial Imager                    | y (B7)    |      | Thin Muck Surface (C7)               |                   | Shallow Aquitard (D3)                     |  |  |
| Water-Stained Leaves (B9)                              |           |      | Other (Explain in Remarks)           |                   | FAC-Neutral Test (D5)                     |  |  |
| Field Observations:                                    |           |      |                                      |                   |   |  |  |
| Surface Water Present? Yes                             | No        | √    | Depth (inches):                      |                   |   |  |  |
| Water Table Present? Yes                               | No        | √    | Depth (inches):                      |                   |   |  |  |
| Saturation Present? Yes<br>(includes capillary fringe) | No        | √    | _ Depth (inches):                    | Wetland Hy        | drology Present? Yes No _✓                |  |  |
| Describe Recorded Data (stream gauge                   | , monitor | ring | well, aerial photos, previous inspec | tions), if availa | ble:                                      |  |  |
|  |           |      |                                      |                   |   |  |  |
| Remarks:   | Remarks:  |      |                                      |                   |   |  |  |
| No hydrology indicators.                               |           |      |                                      |                   |   |  |  |
|  |           |      |                                      |                   |   |  |  |
|  |           |      |                                      |                   |   |  |  |
|  |           |      |                                      |                   |   |  |  |

# Appendix B

### **OHWM** Datasheets

### Arid West Ephemeral and Intermittent Streams OHWM Datasheet

| Project: Spooner's Mesa Culvert  | Date:12/5/23 Time:1300   |       |  |  |  |  |
|--|--|-------|--|--|--|--|
| <b>Project Number:</b> 00187.00131.007   | Town:San Diego State:CA  |       |  |  |  |  |
| Stream: unnamed ephemeral stream   | Photo begin file#: Photo end file#:  |       |  |  |  |  |
| Investigator(s):Ben Rosenbaum, Laura Moreton   | 1  |       |  |  |  |  |
| $Y \blacksquare / N \square$ Do normal circumstances exist on the site?  | Location Details:<br>OHWM 1  |       |  |  |  |  |
| Y $\square$ / N $\square$ Is the site significantly disturbed?   | Projection: Datum: NAD &   | 83    |  |  |  |  |
| Potential anthropogenic influences on the channel syst   | em:  |       |  |  |  |  |
| Access road leading to the top of Spooner's Mesa ar  | nd associated storm drain culverts have erod   | led   |  |  |  |  |
| the side of the mesa.  |  |       |  |  |  |  |
|  |  |       |  |  |  |  |
| Brief site description:  |  |       |  |  |  |  |
| Froded drainage from Spooner's Mesa, Old culvert p   | ipes occur in the drainage   |       |  |  |  |  |
|  | ip oo oodar in the dramage.  |       |  |  |  |  |
|  |  |       |  |  |  |  |
| Checklist of resources (if available):   |  |       |  |  |  |  |
| Aerial photography Stream gag  | e data   |       |  |  |  |  |
| Dates: 1949, 2019, 2023 Gage numb  | ber:   |       |  |  |  |  |
| Topographic maps Period of r   | ecord:   |       |  |  |  |  |
| Geologic maps History  | y of recent effective discharges   |       |  |  |  |  |
| Vegetation maps Results  | s of flood frequency analysis  |       |  |  |  |  |
| Soils maps Most r  | ecent shift-adjusted rating  |       |  |  |  |  |
| Rainfall/precipitation mapsGage h  | heights for 2-, 5-, 10-, and 25-year events and the  | ;     |  |  |  |  |
| Existing delineation(s for site most r   | ecent event exceeding a 5-year event   |       |  |  |  |  |
| Global positioning system GPS  |  |       |  |  |  |  |
| U Other studies  |  |       |  |  |  |  |
| Hydrogeomorphic F  | loodplain Units  |       |  |  |  |  |
| . Active Floodplain  | . Low Terrace .  |       |  |  |  |  |
| 4  |  |       |  |  |  |  |
|  | 100  |       |  |  |  |  |
|  |  |       |  |  |  |  |
| the state of the s | and the second s |       |  |  |  |  |
|  |  |       |  |  |  |  |
|  |  |       |  |  |  |  |
| Low-Flow Channels  | ORWM Paleo Channel   |       |  |  |  |  |
| Procedure for identifying and characterizing the flood   | plain units to assist in identifying the OHWM  | :     |  |  |  |  |
| 1. Walk the channel and floodplain within the study area   | to get an impression of the geomorphology and  |       |  |  |  |  |
| vegetation present at the site.  |  |       |  |  |  |  |
| 2. Select a representative cross section across the channel.   | Draw the cross section and label the floodplain ur   | iits. |  |  |  |  |
| 3. Determine a point on the cross section that is character  | istic of one of the hydrogeomorphic floodplain u   | nits. |  |  |  |  |
| a) Record the floodplain unit and GPS position.  |  |       |  |  |  |  |
| b) Describe the sediment texture using the Wentworth   | class size and the vegetation characteristics of t   | he    |  |  |  |  |
| floodplain unit.   |  |       |  |  |  |  |
| c Identify any indicators present at the location.   |  |       |  |  |  |  |
| 4. Repeat for other points in different hydrogeomorphic fl   | oodplain units across the cross section.   |       |  |  |  |  |
| 5. Identify the OHWM and record the indicators. Record   | the OHWM position via:   |       |  |  |  |  |
| Mapping on aerial photograph   | GPS  |       |  |  |  |  |
| Digitized on computer  | Other:   |       |  |  |  |  |

| Mapping on aerial photograph | UP5    |  |
|------------------------------|--------|--|
| Digitized on computer        | Other: |  |

| cross section drawing:   | 이야가 이 것 같아요. 이 같아요. 이 나는 것 같아요. 아이가   |
|--|---|
| Low Terrace  | active floodplain<br>OHWM   |
| low<br>terrace   | I w flow<br>channel   |
| <u>OHWM</u>  |   |
| GPS point: 32.54 588 - 117.09820   | ) Settle she  |
| Indicators:▲ Change in average sediment texture▲ Change in vegetation species▲ Change in vegetation cover  | <ul> <li>Break in bank slope</li> <li>Other:</li> <li>Other:</li> </ul>   |
| Comments.  |   |
| Danks vegetated mainly   | with large cobbles  |
| <b>Floodplain unit:</b> I Low-Flow Channel<br><b>GPS point:</b> $32.545783117.69816$<br><b>Characteristics of the floodplain unit:</b><br>Average sediment texture: $20$ bb bc.<br>Total veg cover: $180.\%$ Tree: $\%$  | Active Floodplain Low Terrace   |
| <b>Floodplain unit:</b> I Low-Flow Channel<br><b>GPS point:</b> $32.545783117.69816$<br><b>Characteristics of the floodplain unit:</b><br>Average sediment texture: $205646$<br>Total veg cover: $100\%$ Tree: $\%$ S<br>Community successional stage:   | Active Floodplain $\Box$ Low Terrace<br>,6<br>Shrub: <u>\$5</u> % Herb: <u>15</u> %   |
| Grain a ge       Is       Once y         Floodplain unit:       Is       Low-Flow Channel         GPS point: $32.545783, -117.69816$ Characteristics of the floodplain unit:       Average sediment texture: $cobb Le$ Total veg cover: $100\%$ Tree: $\%$ S         Community successional stage: $\square$ NA  | <ul> <li>Active Floodplain □ Low Terrace</li> <li>,6</li> <li>Shrub: <u>\$5</u>% Herb: <u>15</u>%</li> <li>□ Mid (herbaceous, shrubs, saplings)</li> </ul>  |
| Grain a ge       Is       Onversion         Floodplain unit:       Is       Low-Flow Channel         GPS point: $32.545783117.69816$ Characteristics of the floodplain unit:       Average sediment texture: $cobb Le$ Total veg cover: $100\%$ Tree: $\%$ S         Community successional stage: $MA$ $\Box$ Early (herbaceous & seedlings)  | <ul> <li>Active Floodplain</li> <li>Low Terrace</li> <li>Low Terrace</li> <li>Low Terrace</li> <li>K Herb: 15_%</li> <li>Mid (herbaceous, shrubs, saplings)</li> <li>X Late (herbaceous, shrubs, mature trees)</li> </ul>   |
| Grain a gc       Is       Oniversity         Floodplain unit:       Is       Low-Flow Channel         GPS point: $32.545783$ , $-117.69816$ Characteristics of the floodplain unit:       Average sediment texture: $cobble         Total veg cover:       100\%       Tree:       \%       S         Community successional stage:       10\%       S       S         NA       Early (herbaceous & seedlings)       Indicators:   $   | <ul> <li>Active Floodplain □ Low Terrace</li> <li>.6</li> <li>Shrub: <u>\$5</u>% Herb: <u>15</u>%</li> <li>□ Mid (herbaceous, shrubs, saplings)</li> <li>☑ Late (herbaceous, shrubs, mature trees)</li> </ul>   |
| Grain a gc       Is       Our velses         Floodplain unit:       Is       Low-Flow Channel         GPS point: $32.545783, -117.69816$ Characteristics of the floodplain unit:       Average sediment texture: $cobb b b$ Total veg cover: $100\%$ Tree: $\%$ Community successional stage:       Intervention       NA         Early (herbaceous & seedlings)       Indicators:         Mudcracks       Directors   | Active Floodplain $\Box$ Low Terrace<br>.6<br>Shrub: $\frac{\$5\%}{15\%}$ Herb: $\frac{15\%}{15\%}$<br>Mid (herbaceous, shrubs, saplings)<br>Late (herbaceous, shrubs, mature trees)<br>Soil development<br>Surface relief  |
| Grain a ge       Is       Our construction         Floodplain unit:       Is       Low-Flow Channel         GPS point: $32.545783117.69816$ Characteristics of the floodplain unit:       Average sediment texture: $cobb Le$ Total veg cover: $100\%$ Tree: $\%$ S         Community successional stage: $\%$ S       S         Indicators: $\%$ Mudcracks $\%$ S         Indicators: $\%$ $\%$ $\%$ S         Indicators: $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ Indicators: $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ Indicators: $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ $\%$ $\%$  | <ul> <li>Active Floodplain □ Low Terrace</li> <li>Active Floodplain □ Low Terrace</li> <li>Shrub: <u>\$5</u>% Herb: <u>15</u>%</li> <li>Mid (herbaceous, shrubs, saplings)</li> <li>X Late (herbaceous, shrubs, mature trees)</li> <li>Soil development</li> <li>Surface relief</li> <li>Other:</li> </ul>  |
| Grain a gc       is       Our construction         Floodplain unit: $\overline{22.545785}$ , $-117.69816$ GPS point: $\underline{32.545785}$ , $-117.69816$ Characteristics of the floodplain unit: $\overline{20.545785}$ , $-117.69816$ Characteristics of the floodplain unit: $\overline{20.54558}$ , $-117.69816$ Characteristics of the floodplain unit: $\overline{20.54558}$ , $-117.69816$ Characteristics of the floodplain unit: $\overline{20.54558}$ , $-117.69816$ Community successional stage: $\overline{0.56586}$ $\overline{0.56586}$ Mudcracks $\overline{0.56586}$ $\overline{0.56586}$ $\overline{0.56586}$ Mudcracks $\overline{0.56586}$ $\overline{0.56586}$ $\overline{0.56586}$ Diff and/or debris $\overline{0.56586}$ $\overline{0.56586}$ $\overline{0.56586}$ | Active Floodplain   Low Terrace<br>Active Floodplain   Low Terrace<br>  |
| Grain a gc       is       Our velses         Floodplain unit:       Item Presence of bed and bank         GPS point: $32.545783, -117.69816$ Characteristics of the floodplain unit:         Average sediment texture: $cobble         Total veg cover:       100\%         Tree:       \%         Scommunity successional stage:         NA         Early (herbaceous & seedlings)   $  | <ul> <li>Active Floodplain □ Low Terrace</li> <li>Low Terrace</li> <li></li></ul> |
| Grain a ge       is       Our velses         Floodplain unit:       Is       Low-Flow Channel         GPS point: $32.545783117.69816$ Characteristics of the floodplain unit:         Average sediment texture: $cobb b ce$ Total veg cover: $100\%$ Tree: $\%$ Total veg cover: $100\%$ Tree: $\%$ $\%$ Community successional stage: $\%$ $\%$ $\%$ NA       Early (herbaceous & seedlings) $\%$ Indicators: $\%$ $\%$ $\%$ Drift and/or debris $\%$ $\%$ $\%$ Presence of bed and bank $\%$ $\%$ $\%$ Comments: $\%$ $\%$ $\%$  | Active Floodplain ☐ Low Terrace          Active Floodplain ☐ Low Terrace  |
| Grain a ge is Our velocity         Floodplain unit:         GPS point: $32.545783, -117.69816$ Characteristics of the floodplain unit:         Average sediment texture: $cobb b c$ Total veg cover: $100\%$ Tree: $\%$ S         Community successional stage: $\%$ S         Ommunity successional stage: $\%$ S         NA       Early (herbaceous & seedlings)         Indicators: $\%$ Mudcracks         Drift and/or debris $\%$ Presence of bed and bank $\checkmark$ Benches       Comments:   | <ul> <li>Active Floodplain □ Low Terrace</li> <li>Low Terrace</li> <li>Low Terrace</li> <li>Mid (herbaceous, shrubs, saplings)</li> <li>Late (herbaceous, shrubs, saplings)</li> <li>Late (herbaceous, shrubs, mature trees)</li> </ul>   |
| Grain a gc       is       Outverset         Floodplain unit:       Item Provide the State of the floodplain unit:         GPS point: $32.545783, -117.69816$ Characteristics of the floodplain unit:       Average sediment texture: $cobb b c$ Total veg cover: $100\%$ Tree: $\%$ Total veg cover: $100\%$ Tree: $\%$ Community successional stage: $\%$ $\%$ NA       Early (herbaceous & seedlings)         Indicators: $\%$ NA         Drift and/or debris $\%$ Drift and/or debris         Drift and/or debris $\%$ Benches         Comments: $\%$ South texture   | <ul> <li>Active Floodplain ☐ Low Terrace</li> <li>.6</li> <li>Shrub: <u>\$5</u>% Herb: <u>15</u>%</li> <li>Mid (herbaceous, shrubs, saplings)</li> <li>X Late (herbaceous, shrubs, mature trees)</li> <li>Soil development</li> <li>Surface relief</li> <li>Other:</li> <li>Other:</li> <li>Other:</li> </ul>   |
| Floodplain unit:   Spoint:   32.545783, -117.69816   Characteristics of the floodplain unit: Average sediment texture: Cobble Total veg cover: 100 % Tree: % Sommunity successional stage: NA Early (herbaceous & seedlings) Indicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank Senches Comments:  | Active Floodplain ☐ Low Terrace Shrub: <u>\$5</u> % Herb: <u>15</u> % Mid (herbaceous, shrubs, saplings) X Late (herbaceous, shrubs, mature trees) Soil development Surface relief Other: Other: Other:   |

| Project ID:                                  | <b>Cross section ID:</b>      | Date:                  | Time:                            |
|--|-------------------------------|------------------------|----------------------------------|
| Floodplain unit:                             | Low-Flow Channel              | Active Floodplain      | Low Terrace                      |
| GPS point:                                   |                               |                        |                                  |
| Characteristics of th<br>Average sediment te | e floodplain unit:<br>exture: |                        |                                  |
| Total veg cover:<br>Community success        | % Tree:% Shru<br>ional stage: | ub:% Herb:%            |                                  |
| ☐ NA<br>☐ Early herb                         | aceous seedlings              | Late herbaceous, shrub | os, saplings<br>os, mature trees |
| Indicators:                                  |                               | Soil development       |                                  |
| Ripples                                      |                               | Surface relief         |                                  |
| Drift and/or                                 | debris                        | Other:                 |                                  |
| Benches                                      | bed and bank                  | Other:                 |                                  |
| Comments:                                    |                               | o mon                  |                                  |
|  |                               |                        |                                  |
|  |                               |                        |                                  |
|  |                               |                        |                                  |
| Floodulain uni4                              |                               |                        |                                  |
|  | Low-Flow Channel              | Active Floodplain      | Low Terrace                      |
| GPS point:                                   |                               |                        |                                  |
| Characteristics of th<br>Average sediment te | e floodplain unit:<br>exture: |                        |                                  |
| Total veg cover:                             | % Tree: % Shru                | ub:% Herb:%            |                                  |
|  | ional suge.                   | Mid herbaceous, shrub  | os, saplings                     |
| Early herb                                   | aceous seedlings              | Late herbaceous, shrub | os, mature trees                 |
| Indicators:                                  |                               | 🗖 Coil dovolo muont    |                                  |
|  |                               | Solf development       |                                  |
| Drift and/or                                 | debris                        | Other:                 |                                  |
| Presence of                                  | bed and bank                  | Other:                 |                                  |
| Benches                                      |                               | Other:                 |                                  |
| Comments:                                    |                               |                        |                                  |
|  |                               |                        |                                  |
|  |                               |                        |                                  |
|  |                               |                        |                                  |

# Appendix C

Representative Site Photographs



Photo 1. Sample point 1 at toe of mesa under a willow tree. Located in eroded gully where pipe has been washed out. Area is non-wetland waters of the State and CDFW streambed.



Photo 2. Sample point 2 in in non-native vegetation on the north side of Monument Road. Area is not jurisdictional.







Photo 3. Several erosional features on north side of Spooner's Mesa.



Photo 4. Typical roadside erosion at top of mesa.



### **Representative Site Photos**

Appendix C



Photo 5. Typical culvert. Surrounded by upland vegetation.



Photo 6. RWQCB/CDFW ephemeral stream channel on side of Spooner's Mesa, looking downhill, where culvert has failed.



### **Representative Site Photos**

Appendix C



Photo 7. OHWM 1.



### **Representative Site Photos**

Appendix C

## Appendix D

Typical Year Analysis - Antecedent Precipitation Tool Graphs

## Antecedent Precipitation vs Normal Range based on NOAA's Daily Global Historical Climatology Network





Developed by: U.S. Army Corps of Engineers and U.S. Army Engineer Research and Development Center

| Weather Station Name        | Coordinates        | Elevation (ft) | Distance (mi) | Elevation $\Delta$ | Weighted $\Delta$ | Days Normal | Days Antecedent |
|-----------------------------|--------------------|----------------|---------------|--------------------|-------------------|-------------|-----------------|
| CHULA VISTA                 | 32.64, -117.0858   | 56.102         | 6.661         | 222.812            | 4.481             | 10887       | 87              |
| CHULA VISTA 2.5SE           | 32.6168, -117.0519 | 266.076        | 2.542         | 209.974            | 1.678             | 5           | 3               |
| CHULA VISTA 2.2 SSE         | 32.5982, -117.0352 | 208.005        | 4.125         | 151.903            | 2.483             | 2           | 0               |
| IMPERIAL BEACH REAM FLD NAS | 32.5681, -117.1172 | 23.95          | 5.293         | 32.152             | 2.552             | 154         | 0               |
| N IS NAS                    | 32.6922, -117.2097 | 14.108         | 8.059         | 41.994             | 3.965             | 243         | 0               |
| SAN DIEGO INTL AP           | 32.7336, -117.1831 | 15.092         | 8.593         | 41.01              | 4.219             | 61          | 0               |



- 30-Day Rolling Total
  - 30-Year Normal Range

| · | Feb  | Mar  | Apr  |
|---|------|------|------|
|   | 2024 | 2024 | 2024 |
|   |      |      |      |

| ondition Value | Month Weight | Product                |
|----------------|--------------|------------------------|
| 2              | 3            | 6                      |
| 2              | 2            | 4                      |
| 2              | 1            | 2                      |
|                |              | Normal Conditions - 12 |