



CITY OF ESCONDIDO  
PLANNING DIVISION  
201 NORTH BROADWAY  
ESCONDIDO, CA 92025-2798  
(760) 839-4671

**NOTICE OF INTENT TO ADOPT A  
MITIGATED NEGATIVE DECLARATION FOR  
"Channel Maintenance Activities"  
City File No. ENV 12-0001**

**BACKGROUND:** The City of Escondido has prepared a Draft Mitigated Negative Declaration (MND) for the project described below. A Mitigated Negative Declaration is prepared when an Initial Study identifies project related impacts that might be potentially significant, but revisions in the project plans and/or mitigation measures agreed to by the applicant would provide mitigation to a point where potential impacts to the environment are reduced to less than a significant level. The description of the project is as follows:

**PROJECT DESCRIPTION:** The City of Escondido owns and operates a Municipal Separate Storm Sewer System (MS4) infrastructure that includes various storm water facilities associated with flood control and drainage in Escondido. The City has ongoing needs to effectively perform routine Operations and Maintenance (O&M) activities for flood control and the management of sediment deposition at 63 maintenance sites within MS4 facilities (constructed and natural) throughout Escondido. The 63 maintenance sites are associated with MS4 facilities that include outlet structures, channel structures, inlets, a culvert structure, and a basin, all of which occur at locations characterized by concrete/earthen, earthen, and/or concrete bottoms. Together, the proposed O&M activities at these locations would impact approximately 76 acres. Of these 76 acres, 73 acres are concrete facilities, 2 acres are earthen bottom, and 1 acre is combined concrete and earthen bottom facilities. O&M activities for facility maintenance in the City would include repairs and improvements such as the removal of silt and vegetation including: concrete and earthen channel-dredging; basin dredging; culvert, inlet, and outlet clean-out; vegetation clearing and trimming; and access road clearing. Dredging for flood control purposes is proposed at 60 of the 63 maintenance sites. The draft MND addresses the proposed routine maintenance at the 63 sites associated with this project.

In analyzing the project, it has been determined that impacts related to Biological Resources, Cultural Resources, and Hydrology and Water Quality may occur. The City is requesting a Regional General Permit (RGP) from the U.S. Army Corps of Engineers (USACE) under the Clean Water Act (CWA) Section 404 program to allow for O&M activities in jurisdictional wetlands and nonwetland waters of the U.S., as well as complementary programmatic authorization from the Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA. These permits would apply to activities where impacts are considered less than minimal by USACE (Code of Federal Regulations [CFR] 322.2[f]). The City is also requesting authorization from the California Department of Fish and Game (CDFG), under California Fish and Game Code [CFG] Section 1600 to allow these O&M activities to occur within jurisdictional wetlands and nonwetland waters of the state.

**LOCATION:** Approximately 76 acres of land, among 63 maintenance sites within flood control and storm drainage facilities throughout the City.

**APPLICANT:** City of Escondido

**PUBLIC REVIEW PERIOD:** The review and comment period will begin on **December 26, 2012** and end at 5:30 p.m., on **January 25, 2013**. Copies of the Mitigated Negative Declaration are on file and available for public review in the Escondido Planning Division, at 201 N. Broadway, and also posted on the City of Escondido web site at <http://www.escondido.org/planning.aspx>. Further information may be obtained by contacting **Jay Paul at the Planning Division, telephone (760) 839-4537**. Please refer to **Case No. ENV 12-0001**.

Dated: December 20, 2012

  
Jay Paul, Associate Planner



**CITY OF ESCONDIDO  
CHANNEL MAINTENANCE ACTIVITIES  
DRAFT MITIGATED NEGATIVE DECLARATION**

*Prepared for:*



Planning Division  
201 North Broadway  
Escondido, CA 92025-2798  
(760) 839-4671

*Prepared by:*

**AECOM**

1420 Kettner Boulevard, Suite 500  
San Diego, CA 92101  
(619) 233-1454





CITY OF ESCONDIDO  
PLANNING DIVISION  
201 NORTH BROADWAY  
ESCONDIDO, CA 92025-2798  
(760) 839-4671

## **DRAFT MITIGATED NEGATIVE DECLARATION**

(Case No.: ENV 12-0001)  
**ENVIRONMENTAL CHECKLIST  
SUPPLEMENTAL COMMENTS**

### **INTRODUCTION**

This Draft Mitigated Negative Declaration (MND) assesses the environmental effects of the proposed project involving Channel Maintenance Activities on approximately 76 acres of land, among 63 maintenance sites within flood control and storm drainage facilities throughout the City of Escondido.

An Initial Study Environmental Checklist (Appendix A) was prepared for this project and is included as a separate attachment to the Supplemental Comments within this report. The information contained in the Initial Study Environmental Checklist and the Supplemental Comments will be used by the City of Escondido to determine potential impacts associated with the proposed maintenance activities.

The detailed Supplemental Comments included in this document identify and evaluate physical impacts to the environment associated with developing or implementing the proposed project based on preliminary review of a variety of environmental factors identified in the attached Environmental Checklist. In analyzing the project, it has been determined that impacts related to Biological Resources, Cultural Resources, and Hydrology and Water Quality may occur. Based on information and documentation incorporated into the analysis, it has been concluded that this Initial Study warrants issuing an MND in Draft form. The Initial Study identified certain aspects of the project that may result in potentially significant impacts to the environment but those impacts would be reduced to acceptable less than significant level by incorporating appropriate mitigation measures. As provided by the California Environmental Quality Act (CEQA), the City of Escondido will act as lead agency because of its role in reviewing and potentially approving or issuing permits for the project.

As mandated by CEQA Guidelines Section 15105, affected public agencies and the interested public may submit comments on the Draft MND in writing before the end of the 30-day public review period starting on (December 26, 2012) and ending on (January 25, 2013). Written comments on this environmental document shall be submitted to the following address by 5:00 p.m. on (January 25, 2013). Following the close of the public comment review period, the City of Escondido will consider this Draft MND and all received comments in determining the approval of this project.

City of Escondido  
Planning Division  
201 North Broadway  
Escondido, CA 92025-2798

Contact: Jay Paul, Associate Planner  
Telephone: (760) 839-4537  
Fax: (760) 839-4313  
e-mail: [jpaul@ci.escondido.ca.us](mailto:jpaul@ci.escondido.ca.us)

A hard copy of this document and any associated plans and/or documentation are available for review during normal operation hours for the duration of the public review period at the City of Escondido Planning Division.

## **SECTION 1.0: PROJECT DESCRIPTION**

### **1.1 BACKGROUND**

The City of Escondido (City) owns and operates a Municipal Separate Storm Sewer System (MS4) infrastructure that includes various storm water facilities associated with flood control and drainage in Escondido, San Diego County, California. Pursuant to the California Environmental Quality Act (CEQA) Section 15301 Class 1 (Existing Facilities), operation, repairs, maintenance, or minor alterations of existing facilities are typically exempt from CEQA. However, Operation and Maintenance (O&M) activities associated with the proposed project need to occur near sensitive natural resources. O&M activities that have the potential to impact these resources are not categorically exempt from CEQA (15300.2[c]); therefore, a Draft Mitigated Negative Declaration (MND) has been prepared pursuant to CEQA and provides an analysis of potential impacts from the proposed project. Pursuant to the City's Mobility and Infrastructure Element of the General Plan update (2012), Storm Drainage Policy 14.11 requires that the City "maintain flood control channels and storm drains through periodic dredging, repair, desilting, and clearing to prevent losses in effective use." As identified in this policy, the City has ongoing needs to effectively perform routine O&M activities for flood control and the management of sediment deposition at 63 maintenance sites within MS4 facilities (constructed and natural) throughout Escondido. The following environmental analysis addresses the proposed routine maintenance at the 63 sites associated with this project.

The City is requesting a Regional General Permit (RGP) from the U.S. Army Corps of Engineers (USACE) under the Clean Water Act (CWA) Section 404 program to allow for O&M activities in jurisdictional wetlands and nonwetland waters of the U.S., as well as complementary programmatic authorization from the Regional Water Quality Control Board (RWQCB) under Section 401 of the CWA. These permits would apply to activities where impacts are considered less than minimal by USACE (Code of Federal Regulations [CFR] 322.2[f]). The City is also requesting authorization from the California Department of Fish and Game (CDFG), under California Fish and Game Code [CFG] Section 1600 to allow these O&M activities to occur within jurisdictional wetlands and nonwetland waters of the state.

### **1.2 PURPOSE AND NEED**

As stated above, the City has ongoing needs to effectively perform routine O&M activities for flood control and the management of sediment deposition at 63 maintenance sites within MS4 facilities (constructed and natural) at various locations throughout the City (Figures 1 and 2). The routine O&M activities in the various facilities (constructed and natural) are necessary for proper storm drain function and the recovery of the original system capacity. Facility locations are provided in Appendix B.

### **1.3 OPERATIONS AND MAINTENANCE ACTIVITIES**

As stated above, O&M activities would occur at 63 maintenance sites within MS4 facilities (constructed and natural) and along existing access roads (Figure 2). O&M activities for facility maintenance in the City would include repairs and improvements such as the removal of silt and vegetation through measures including the following:

- concrete and earthen channel-dredging;
- basin dredging;
- culvert, inlet, and outlet clean-out;
- vegetation clearing and trimming; and
- access road clearing.

Dredging for flood control purposes is proposed at 60 of the 63 maintenance sites. As summarized in Table 1, the 63 maintenance sites are associated with MS4 facilities that include outlet structures, channel structures, inlets, a culvert structure, and a basin, all of which occur at locations characterized by concrete/earthen, earthen, and/or concrete bottoms. Together, the proposed O&M activities at these locations would impact approximately 76 acres. Of these 76 acres, 73 acres are concrete facilities, 2 acres are earthen bottom, and 1 acre is combined concrete and earthen bottom facilities. At each facility, the City has made great efforts to constrain the extent and type of impact that would occur. Generally, the impact within earthen facilities versus serviceable concrete-lined facilities would be as follows:

- In natural facilities with native vegetation growing in earthen-bottom channels, the City reviewed each site and minimized impacts to trimming the understory (trimming/clearing of vegetation under the tree canopy), limiting the scale of impacts to a 20-foot radius, and/or impacting only the minimal low-flow channel resulting in total site specific impacts of less than 0.1 acre. The City will avoid removal of native riparian trees and shrubs, and conduct only minor trimming of lower branches where necessary to maintain access and flow.
- Maintenance activities conducted within serviceable concrete-lined features (i.e., features that have intact concrete linings, do not support mature native trees or shrubs, and can therefore be maintained through removal of sediment, debris, and opportunistic herbaceous vegetation without alterations to the channel bed/bank or removal of established habitat) would not be limited to an acreage threshold as no adverse or significant impacts would result from these activities.

**Table 1: Facility Type, MS4 Structure, and Associated Maintenance Sites and Impact Acreages**

Facility Type	MS4 Structure					Total Number of This Facility Type	Acreage (approx.)
	Outlet Structures	Channel Structures	Inlets	Culvert Structure	Basin		
Concrete & Earthen bottom	2	3	2	–	–	7	1 acre
Earthen Bottom	10	10	4	1	1	26	2 acres
Concrete Bottom	3	21	6	–	–	30	73 acres
<b>Total</b>	<b>15</b>	<b>34</b>	<b>12</b>	<b>1</b>	<b>1</b>	<b>63</b>	<b>76 acres</b>

Proposed activities are identified in Appendix B. O&M activities are necessary to ensure proper function and integrity of the channel system and structures, and the activities do not otherwise alter or expand the existing system. Of the 63 maintenance sites, five require routine maintenance of the existing access roads that lead to the facility to provide critical access when emergency repairs are needed; all five of these sites are located in Kit Carson Park (H-08, H-09, H-10, H-11, and H-12). Refer to Appendix B for additional detail on facility locations and required O&M activities.

The frequency with which maintenance activities would be conducted is site-specific, varies by structure and location, and ranges from 1 to 2 years. The duration of the maintenance work would generally last between 2 to 5 days, but depending on the activity the work could last up to 45 days. A variety of equipment would be utilized to complete O&M activities, including manual and mechanical hand tools, graders, backhoes, excavators, skid steers, and front-end loaders.

Facilities requiring maintenance are located on privately owned parcels or on City easements or rights-of-way (Figure 2). All work done on private land would be completed with appropriate permission from the landowners. Access to structures for O&M activities would typically be from the nearest public roadway. All of the sites would be accessed without impacting the surrounding areas, which would include either development (i.e., private homeowner landscaping) or upland native habitat. All O&M activities would be completed during normal business hours (6 a.m. to 6 p.m.), Monday through Friday.

#### **1.4 ANTICIPATED PUBLIC MEETINGS/HEARINGS**

**City Council:** The proposed project is tentatively scheduled for City Council consideration and adoption in February, 2013.

#### **1.5 ENVIRONMENTAL SETTING**

O&M activities will occur at 63 maintenance sites throughout the City of Escondido (Figures 1 and 2). Therefore, the topography, elevation, and setting would vary dependent upon where the activities occur. The general area is bound by Lake Hodges and Highland Valley Road to the south, Woodland Parkway to the west, Lake Wohlford to the east, and the area of Hidden Meadows to the north.

Facilities requiring O&M activities are located on privately owned parcels or within City easements or rights-of-way. Access to structures for O&M activities would typically be from the nearest public roadway. As stated above, the existing environmental setting varies from facility to facility. It is typically suburban or urban in nature. General Plan Land Uses in the area are mainly Residential (Urban, Suburban, and Estate), Commercial, Industrial, and Public Land/Open Space and Specific Plan Areas (Figure 3). Surrounding development varies in size, type, and age. Surrounding development includes urban and suburban residences, industrial and commercial buildings and shopping centers, schools, parks and open space, sports facilities, churches, roadways, and other infrastructure, among other development types.

Facilities occur in and appurtenant to native, naturalized, and developed channels, varying in size, shape, habitat composition, and habitat quality. Natural communities and other land cover types in the proposed project area are further discussed in Section 2.1 of this document, including a tabular summary of the habitat types occurring in the area.

#### **1.6 REGULATORY SETTING**

Applicable regional planning documents include the general plan of the City of Escondido and the City of Escondido Subarea Plan (City of Escondido 2001) under the Draft Multiple Habitat Conservation Program (MHCP; SANDAG 2003).

The Draft MHCP Escondido Subarea Plan documents core conservation areas, known as Habitat Management Plan (HMP) Areas (Figure 4). Sites E-11, E-12, E-13, and portions of E-29, E-37, and H-09 occur within HMP areas; these areas are evaluated in conformance with the conservation measures set forth by the City's Draft MHCP Subarea Plan, which includes 90 to 100 percent species conservation and no net loss of wetlands.

Various regulations govern jurisdictional wetlands and nonwetland waters of the U.S. and state. Moreover, the federal and state agencies that govern activities within these resources must ensure that the activities they authorize will not adversely affect other regulated resources that can occur within jurisdictional waters. As applicable to the project, these other regulated resources include federally and state-listed species, migratory birds, and potential historic properties. Additionally, ordinances promulgated by the City of Escondido protect certain resources known to occur within the project study area. Therefore, as applicable to the project, jurisdictional waters (including wetlands and other aquatic environments/habitats), and the protected species and potential historic properties that may occur within or adjacent to these waters, are regulated under the following federal and state laws, and local ordinances.

### Federal Regulations

#### *Clean Water Act*

Pursuant to Section 404 of the CWA, USACE is authorized to regulate any activity that would result in the discharge of dredged or fill material into jurisdictional waters of the U.S., which include those waters listed in 33 CFR Part 328 (Definitions). USACE, with oversight by the U.S. Environmental Protection Agency (USEPA), has the principal authority to issue CWA Section 404 Permits.

Pursuant to Section 401 of the CWA, RWQCB (Region 9) certifies that any discharge into jurisdictional waters of the U.S. will comply with state water quality standards. RWQCB, as delegated by USEPA, has the principal authority to issue a CWA Section 401 water quality certification or waiver.

#### *Endangered Species Act*

USFWS and the National Marine Fisheries Service (NMFS) administer the federal Endangered Species Act (ESA). Enacted in 1973, the ESA provides for the conservation of threatened and endangered species and their ecosystems. Section 9 of the ESA prohibits the take of any fish or wildlife species listed under the ESA as endangered and most species listed as threatened.<sup>1</sup> *Take*, as defined by the ESA, means "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." *Harm* is defined as "any act that kills or injures the species, including significant habitat modification." For threatened and endangered plant species, Section 9 prohibits the "removal or reduction to possession" of any listed plant species "under federal jurisdiction" (i.e., on federal land). The ESA includes mechanisms that provide exceptions to the Section 9 take prohibitions. These are addressed in the ESA under Section 4(d), 7, and 10(a).

---

<sup>1</sup> The protection of threatened species under Section 9 is discretionary through a rule issued under Section 4(d) of the ESA. Until a "4(d) rule" is issued by NMFS, threatened anadromous fish or marine species are not protected by the ESA. By regulation, USFWS automatically affords Section 9 protection to threatened species at the time of listing. These protections later can be modified by USFWS through a 4(d) rule.

### *Migratory Bird Treaty Act*

The Migratory Bird Treaty Act (MBTA) of 1918, as amended, implements various treaties and conventions between the United States and Canada, Japan, Mexico, and the former Soviet Union for the protection of migratory birds. Under the MBTA, taking, killing, or possessing migratory birds is unlawful as is taking of any parts, nests, or eggs of such birds (16 United States Code 703). The definition of *taking* is different under MBTA from the definition under the ESA and includes only the death or injury of individuals of a migratory bird species or its eggs. *Take* under the MBTA does not include the concepts of harm and harassment as defined by the ESA. It is also important to note that the MBTA defines migratory birds broadly; most of the bird species documented from the project area are covered by the provisions of the MBTA. No permit is issued under the MBTA; however, the proposed activities would need to comply with measures that would avoid or minimize effects on migratory birds.

### *National Historic Preservation Act, Title 16 United States Code Sections 431-433*

Among the provisions of Section 101 of the National Historic Preservation Act (NHPA), a State Historic Preservation Program was established in each state and a State Historic Preservation Officer (SHPO) was given the responsibility to consult with the appropriate federal agencies in accordance with the NHPA regarding:

- (i) Federal undertakings that may affect historic properties; and
- (ii) The content and sufficiency of any plans developed to protect, manage, or to reduce or mitigate harm to such properties;

Section 106 of the NHPA requires federal agencies to:

Take into account the effect of their undertaking on any district, site, building, structure, or object that is included in or eligible for inclusion in the National Register. The head of any such Federal agency shall afford the Advisory Council on Historic Preservation...a reasonable opportunity to comment with regard to such undertaking.

### State Regulations

#### *California Fish and Game Code*

The California Fish and Game Code (CFG) regulates the taking or possession of birds, mammals, fish, amphibians, and reptiles, as well as natural resources such as wetlands and waters of the state. It includes the California Endangered Species Act (CESA) (Sections 2050–2115) and Streambed Alteration Agreement regulations (Sections 1600–1616). These sections are described further below.

*CFG Sections 1600–1616* – Pursuant to Section 1600 et seq. of the CFG, CDFG regulates activities of an applicant's project that would substantially alter the flow, bed, channel, or bank of streams or lakes, unless certain conditions outlined by CDFG are met by the applicant. The limits of CDFG jurisdiction are

defined in CFGC Section 1600 et seq. as the “bed, channel, or bank of any river, stream,<sup>2</sup> or lake designated by CDFG in which there is at any time an existing fish or wildlife resource or from which these resources derive benefit.”<sup>3</sup> However, in practice, CDFG usually extends its jurisdictional limit and assertion to the top of a bank of a stream, the bank of a lake, or outer edge of the riparian vegetation, whichever is wider.

In some cases, drainage ditches and retention ponds<sup>4</sup> can be potentially considered under the regulatory administration of CDFG. CDFG provides specific guidance concerning its regulatory administration in California Code of Regulations (CCR) Title 14 Section 720 (Designation of Waters of Department Interest):

For the purpose of implementing Sections 1601 and 1603 of the Fish and Game Code, which requires submission to the department of general plans sufficient to indicate the nature of a project for construction by or on behalf of any person, governmental agency, state or local, and any public utility, of any project which will divert, obstruct, or change the natural flow or bed of any river, stream, or lake designated by the department, or will use material from the streambeds designated by the department, all rivers, streams, lakes, and streambeds in the State of California, including all rivers, streams, and streambeds, *which may have intermittent flows of water*, are hereby designated for such purpose. (Italics added.)

*CFGC Sections 2050–2115* – Any proposed impact to state-listed species within or adjacent to the project area would require a permit under CESA. CESA generally parallels the main provisions of the federal ESA and is administered by CDFG. CESA prohibits take of wildlife and plants listed as threatened or endangered by the California Fish and Game Commission. *Take* is defined under the California Fish and Game Code as any action or attempt to “hunt, pursue, catch, capture, or kill.” Therefore, take under CESA does not include “the taking of habitat alone or the impacts of the taking.”<sup>5</sup> Rather, the courts have affirmed that under CESA, “taking involves mortality.”

CESA allows exceptions to the take prohibition for take that occurs during otherwise lawful activities. The requirements of an application for incidental take permit under CESA are described in Section 2081 of the CFGC. Incidental take of state-listed species may be authorized if an applicant submits an approved plan that minimizes and “fully mitigates” the impacts of this take. Therefore, any proposed impact to state-listed species within or adjacent to the project area would require an incidental take permit under CESA.

CFGC Section 2080.1 allows an applicant who has obtained a federal incidental take statement as part of a Biological Opinion pursuant to a ESA Section 7 consultation or an incidental take permit under ESA Section 10(a) to notify the CDFG Director in writing that the applicant has been issued an incidental take statement or permit pursuant to the ESA and submit a copy to the CDFG Director. The Director then has 30 days to determine whether the incidental take statement or permit is “consistent” with the CESA in the form of a written “consistency determination.” If the Director determines that the incidental take statement

<sup>2</sup> Title 14 CCR 1.72 defines a stream as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation.”

<sup>3</sup> This also includes the habitat upon which they depend for continued viability (CFGC Division 5, Chapter 1, Section 45, and Division 2, Chapter 1, Section 711.2[a]).

<sup>4</sup> Title 14 CCR 1.56 defines a lake as a feature that “includes lakes or man-made reservoirs.”

<sup>5</sup> *Environmental Council of Sacramento v. City of Sacramento*, 142 Cal. App. 4th 1018 (2006).

or permit is consistent with the CESA, the applicant does not need to obtain separate take authorization from the CDFG in the form of an incidental take permit under CFGC Section 2081(b) and (c). However, consistency determinations apply only in those situations where the affected species is listed under both the ESA and the CESA. If the species is listed under the CESA only, an applicant must obtain an incidental take permit under CFGC 2081(b) and (c).

*CFGC Section 3503* – Under CFGC Division 4, Part 2, Chapter 1, Section 3503.5, “it is unlawful to take, possess, or destroy any birds in the orders Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto,” where “take” is defined under Division 0.5, Chapter 1, Section 86 as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” In addition, the MBTA restricts the killing of migratory birds or destruction of active migratory bird nests and/or eggs.

#### *Porter-Cologne Water Quality Act*

Pursuant to Section 13000 et seq. of the California Water Code (the 1969 Porter-Cologne Water Quality Control Act), RWQCB is authorized to regulate any activity that would result in discharges of waste or fill material to waters of the state, including “isolated” waters and wetlands (e.g., vernal pools and seeps). Waters of the state include any surface water or groundwater within the boundaries of the state (California Water Code § 13050[e]). RWQCB also adopts and implements water quality control plans (basin plans) that recognize and are designed to maintain the unique characteristics of each region with regard to natural water quality, actual and potential beneficial uses, maintaining water quality, and addressing the water quality problems of that region.

Designated beneficial uses of state waters that may be protected against quality degradation include preservation and enhancement of fish, wildlife, designated biological habitats of special significance, and other aquatic resources or preserves.

#### City Regulations

##### *Tree Protection Ordinance*

City ordinance protects against the removal of historically significant and mature trees within City limits, with a focus on oak tree protection. The City defines protected trees as “any oak (*Quercus* sp.) which has a ten (10) inch or greater DBH, or any other species or individual specimen listed on the local historic register, or determined to substantially contribute to the historic character of a property or structure listed on the local historic register, pursuant to Article 40 of the Escondido Zoning Code (2001).”

##### *City of Escondido General Plan*

A General Plan is a statement of long-range public policy to guide the use of private and public lands within a community's boundaries. The policies within the Plan are intended to become the basis for decisions by elected and appointed officials. The Plan is both general and comprehensive in that it provides broad guidelines for development in the City while addressing a wide range of issues that will affect the City's desirability as a place to live and work. The General Plan represents both an evaluation and vision of the future, typically 15 to 20 years, and beyond. The goals and policies are aimed at guiding growth and development in that direction.

The General Plan is an internally consistent document in that the goals, objectives, policies, principles, and standards present a comprehensive, unified program for development. California planning law requires consistency between the General Plan and its implementation programs—zoning and subdivision ordinances, growth management policies, capital improvements programming, specific plans, environmental review procedures, building and housing codes, and redevelopment plans.

The City of Escondido General Plan update was adopted by the City Council in May, 2012 and ratified by the voters on November 6, 2012 (Proposition N).

## 1.7 REGULATORY APPROVALS

The regulatory approvals listed in Table 2 would be obtained for the proposed O&M activities.

**Table 2: Permits**

<b>Resource Agency</b>	<b>Permit Type</b>
U.S. Army Corps of Engineers	Regional General Permit
California Department of Fish and Game	Streambed Alteration Agreement
Regional Water Quality Control Board	401 Water Quality Certification
U.S. Fish and Wildlife Service	Biological Opinion
California Fish and Game Code	2080.1 Consistency Determination

## **SECTION 2.0: DISCUSSION OF ENVIRONMENTAL IMPACTS**

An Environmental Checklist (Appendix A) was prepared as a preliminary assessment to determine whether the O&M activities associated with the project would have the potential to result in significant environmental impacts. Based on this initial assessment, it was determined that the proposed project would not have an impact on the following resource areas: Aesthetics, Greenhouse Gas Emissions, Land Use/Planning, Population and Housing, Transportation and Traffic, Agriculture and Forestry, Hazards and Hazardous Materials, Mineral Resources, Public Services, Utilities and Service Systems, Air Quality, Geology and Soils, Noise, and Recreation. The proposed project would not degrade the existing visual quality of the area, and it would not convert agricultural lands or conflict with agricultural or forest zoning. The proposed project would not violate air quality standards, and is not located in an area subject to greater seismic risk than surrounding areas. The proposed project would not create health hazards to the public, nor would it conflict with applicable land use policies and plans. It would cause no permanent increase in noise and the proposed project would not impact population growth or traffic congestion. These resources are further evaluated in Appendix A of this document. The environmental resources that were determined to be potentially affected by the proposed project include Biological Resources, Cultural Resources, and Hydrology and Water Quality.

The three issue areas that were determined to be potentially affected by the proposed project are discussed in detail in the following sections.

### **2.1 BIOLOGICAL RESOURCES**

The following section is based on the results of environmental surveys conducted by AECOM in summer and fall 2010, which included general biological surveys, vegetation mapping, and formal jurisdictional delineation of potential waters of the U.S. and state. AECOM cross-referenced regional datasets both prior to and after conducting field surveys, the results of which are incorporated into the analyses below. These datasets include:

- California Department of Fish and Game (CDFG) Natural Diversity Database (CNDDDB) (CDFG 2012a),
- California Native Plant Society (CNPS) Rare Plants Database (CNPS 2012),
- California Consortium of Herbaria (CCH 2012),
- San Diego Natural History Museum (SDNHM) Plant Atlas Database (SDNHM 2012),
- CDFG Vegetation Classification and Mapping Program (VegCAMP) Inventory (CDFG 2012b),
- National Wetlands Inventory (NWI) Wetlands Mapper (USFWS 2012)
- Natural Resource Conservation Service (NRCS) Web Soil Survey (NRCS 2012)

#### **2.1.1 EXISTING CONDITIONS**

The following discussion briefly describes the biological characteristics specific to the project's biological study area (BSA). The BSA includes the facility maintenance sites and a 100 foot buffer area.

## Biological Setting

### *Natural Communities and Other Land Covers*

AECOM ecologists conducted vegetation mapping during summer and fall 2010 (AECOM 2011). Nineteen vegetation communities and other land covers occur within the project study area. Habitats range in quality from dense, stratified riparian forest to disturbed habitat, occurring as isolated pockets or channel corridors within a matrix of urban/developed hardscape. Table 3 depicts the habitats occurring within the BSA, per the Holland Classification System, as modified for San Diego County by Oberbauer et al. (2008).

Vegetation communities and other land cover types classified as "sensitive" within this MND were determined by applying the following regulatory context. Guidance for determining sensitive vegetation communities is provided by the resource agencies including CDFG and CNPS, as well as supporting documentation such as the CNDDDB. These federal, state, and local agencies and related publications are typically in concurrence on the classification of sensitive vegetation communities and other land cover types. For example, vegetation communities or other cover types that are considered potential jurisdictional U.S. and state waters typically result in the vegetation community or nonvegetated area being considered sensitive. For this proposed project, these waters are regulated by Sections 401 and 404 of the Clean Water Act (CWA), Sections 1600 et seq. of the California Fish and Game Code, and the Porter-Cologne Water Quality Control Act. In addition, vegetation communities are considered sensitive if identified as warranting mitigation in the City's Subarea Plan. Biologically, the vegetation communities that provide the highest habitat values within the BSA are the structurally diverse riparian communities.

Of the 19 habitats/land cover types occurring within the BSA, 16 are sensitive according to the federal, state, and local guidance above and are denoted in Table 3 with an asterisk. The City has designed the project to avoid sensitive habitats where feasible. As shown in Table 3, the project estimates a total of 75.94 acres of impacts within the facility maintenance sites, 71.94 acres (95 percent) occur in areas that are already developed, 0.54 acre occurs in disturbed habitat, 0.03 acre occurs in uplands, and 3.43 acres occur in riparian and wetland communities.

### *Potential Jurisdictional Waters of the U.S. and State*

The 63 maintenance sites occur in and appurtenant to native, naturalized, and developed channels, varying in size, shape, habitat composition, and habitat quality. These ecologically heterogeneous locations share a common ecological context, in that they each convey storm water and other runoff through the City and are connected to larger creeks and waterways (Escondido Creek, San Marcos Creek, or the San Dieguito River depending on the facility location), which eventually flow to the Pacific Ocean. Based on this hydrologic and ecologic context, the RGP maintenance facilities are considered to be located within potential jurisdictional waters and are protected by federal, state, and local regulations.

The biological study area is encompassed by three Hydrologic Areas (HAs) within two Hydrologic Units (HUs): (1) Carlsbad HU, Escondido HA (RWQCB Basin 904.62, USACE Hydrologic Unit Code [HUC] 18070303); (2) Carlsbad HU, San Marcos HA (RWQCB Basin 904.51, USACE HUC 18070303); and San Dieguito HU, Hodges HA (RWQCB Basin 905.21, USACE HUC 18070304).

Table 3: Vegetation Communities and Other Cover Types Occurring within the Biological Study Area

Vegetation Community or Other Cover Type	Acres within Biological Study Area <sup>2</sup>					Composition within the Biological Study Area <sup>3</sup>
	Facility Footprints			100-foot Facility Buffers	Total	
	Serviceable Concrete Lining	Serviceable Concrete Lining or Non- Serviceable Concrete Lining	Subtotal Facility Footprints			
<b>Riparian and Wetland Communities</b>						
Alkali Seep*	-	≤ 0.01	≤ 0.01	0.63	0.64	Disturbed meadow dominated by <i>Distichlis spicata</i> , <i>Isocoma menziesii</i> ssp. <i>vernonioides</i> , <i>Helminthotheca echioides</i> , and <i>Polygonum monspeliensis</i> .
Cismontane Alkali Marsh*	-	Less than 0.01	≤0.01	0.24	0.25	Channel bottoms, both concrete- and earthen-lined, dominated by <i>Typha</i> spp. and/or <i>Schoenoplectus</i> spp. Associated with restoration work along the floodplain of Reidy Creek, within the Reidy Creek Municipal Golf Course.
Coastal and Valley Freshwater Marsh*	0.10	0.10	0.20	0.57	0.77	Channel bottoms, both concrete- and earthen-lined, dominated by <i>Typha</i> spp. and/or <i>Schoenoplectus</i> spp.
Disturbed Wetland*	0.89	0.25	1.14	0.18	1.32	Restricted to disturbed, concrete- and earthen-lined channel bottoms and wet earthen slopes, dominated by a variable mix of exotic and early seral native species, including <i>Chenopodium album</i> , <i>Cynodon dactylon</i> , <i>Cyperus</i> spp., <i>Echinochloa crus-galli</i> , <i>Epilobium ciliatum</i> , <i>Helminthotheca echioides</i> , <i>Kickxia elatine</i> , <i>Lemna minor</i> , <i>Leptochloa fusca</i> ssp. <i>uninervis</i> , <i>Malva parviflora</i> , <i>Nasturtium officinale</i> , <i>Plantago lanceolata</i> , <i>Polygonum monspeliensis</i> , <i>Veronica anagallis-aquatica</i> , and <i>Washingtonia robusta</i> .
Emergent Wetland*	≤ 0.01	≤ 0.01	≤ 0.01	≤ 0.01	0.01	Sparsely vegetated earthen channel with <i>Polygonum viridis</i> , <i>Lemna minor</i> , and <i>Typha</i> sp.
Mulefat Scrub*	≤0.01	-	≤ 0.01	0.21	0.21	Dominated by <i>Baccharis salicifolia</i> .
Open Water*	1.20	0.03	1.23	0.19	1.42	Unvegetated (or less than 10 percent vegetated), with either concrete- or earthen-lined channel bottom.

Vegetation Community or Other Cover Type	Acres within Biological Study Area <sup>2</sup>					Composition within the Biological Study Area <sup>3</sup>
	Facility Footprints		100-foot Facility Buffers	Total		
	Serviceable Concrete Lining	Earthen or Non- Serviceable Concrete Lining				
Southern Arroyo Willow Riparian Forest*	0.02	0.31	0.33	5.94	6.27	Mature riparian forest with some stratification of herbs and shrubs in the understory. Tree stratum dominated by <i>Salix gooddingii</i> and <i>Salix lasiolepis</i> with scattered <i>Platanus racemosa</i> . Understory contains <i>Artemisia douglasiana</i> , <i>Baccharis salicifolia</i> , <i>Iva hayesiana</i> (CNPS List 2.2), <i>Juncus acutus</i> ssp. <i>leopoldii</i> (CNPS List 4.2), <i>Rubus ursinus</i> , <i>Schoenoplectus</i> spp., and <i>Typha domingensis</i> , with interspersed exotics such as <i>Arundo donax</i> , <i>Cortaderia selloana</i> , <i>Ricinus communis</i> , <i>Phoenix canariensis</i> and <i>Washingtonia robusta</i> .
Southern Cottonwood- Willow Riparian Forest*	0.07	0.36	0.43	5.06	5.49	Similar to Southern Arroyo Willow Riparian Forest above, with the addition of <i>Populus fremontii</i> ssp. <i>fremontii</i> , more abundant <i>Platanus racemosa</i> , and progressively greater habitat stratification and diversity. Includes contiguous patches of <i>Anemopsis californica</i> herbaceous understory in the streambed and adjacent floodplain.
Southern Riparian Scrub*	-	0.01	0.01	0.45	0.46	A mixed assemblage of exotic and naturalized tree species, including <i>Eucalyptus</i> spp., <i>Fraxinus undei</i> , <i>Olea europaea</i> , <i>Schinus terebinthifolius</i> , <i>Robinia pseudoacacia</i> , <i>Washingtonia robusta</i> . Also includes scattered <i>Salix</i> spp.
Southern Willow Scrub*	-	0.01	0.01	0.12	0.13	Shrub-dominated habitat with little to no herbaceous understory, dominated by <i>Salix gooddingii</i> , <i>Salix laevigata</i> , <i>Salix lasiolepis</i> , and scattered <i>Platanus racemosa</i> . Also includes scattered exotics such as <i>Atlantithus altissima</i> .

Vegetation Community or Other Cover Type	Acres within Biological Study Area <sup>2</sup>					Composition within the Biological Study Area <sup>3</sup>
	Facility Footprints			100-foot Facility Buffers	Total	
	Serviceable Concrete Lining	Earthen or Non-Serviceable Concrete Lining	Subtotal Facility Footprints			
Unvegetated Channel*	≤ 0.01	0.08	0.08	0.09	0.17	Unvegetated (or less than 10 percent vegetated), with earthen-lined channel bottom. Concrete-lined channel bottoms were differentiated as Urban/Developed (see below). Widespread throughout the project study area as small v-ditches and intermittent channels.
Subtotal Riparian and Wetland =	2.28	1.15	3.43	13.69	17.12	
<b>Upland Communities</b>						
Coast Live Oak Woodland*	--	--	--	0.21	0.21	Dominated by <i>Quercus agrifolia</i> ssp. <i>agrifolia</i> , with sparse <i>Platanus racemosa</i> and a nonnative grass understorey of <i>Bromus</i> spp. Note: Coast Live Oak Woodland is an upland community, which may function as CDFG riparian extent when alongside jurisdictional waters.
Diegan Coastal Sage Scrub*	--	--	--	1.06	1.06	Scrublands, dominated by <i>Artemisia californica</i> , <i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i> , <i>Malacothamnus fasciculatus</i> , <i>Malosma laurina</i> , <i>Malvella leprosa</i> , and <i>Salvia mellifera</i> . Common exotics include <i>Bromus</i> spp. and <i>Hirschfeldia incana</i> .
Engelmann Oak Woodland*	--	0.03	0.03	0.60	0.63	Tree canopy dominated by <i>Quercus agrifolia</i> ssp. <i>agrifolia</i> , with scattered individuals of <i>Quercus engelmannii</i> (CNPS List 4.2). Herbaceous understorey dominated by <i>Bromus rubens</i> and <i>Avena barbata</i> . Note: Engelmann Oak Woodland is an upland community, which may function as CDFG riparian extent when alongside jurisdictional waters.

Vegetation Community or Other Cover Type	Acres within Biological Study Area <sup>2</sup>					Composition within the Biological Study Area <sup>3</sup>
	Facility Footprints		100-foot Facility Buffers	Total		
	Serviceable Concrete Lining	Earthen or Non-Serviceable Concrete Lining				
Eucalyptus Woodland	≤0.01	--	≤ 0.01	0.38	0.38	Tree canopy dominated by <i>Eucalyptus</i> spp. Little to no understory vegetation due to leaf litter. Note: <i>Eucalyptus</i> Woodland is an upland community, which may function as CDFG riparian extent when alongside jurisdictional waters.
Nonnative Grassland*	≤ 0.01	--	≤ 0.01	1.67	1.67	Grassland, dominated by exotic annual grasses including <i>Avena barbata</i> , and <i>Bromus</i> spp., along with a large nonnative forb component of <i>Centaurea melitensis</i> and <i>Raphanus sativus</i> . Scattered natives include <i>Artemisia californica</i> , <i>Croton setigerus</i> , <i>Distichlis spicata</i> , <i>Eriogonum fasciculatum</i> var. <i>fasciculatum</i> , and <i>Isocoma menziesii</i> .
Subtotal Upland =	≤ 0.01	0.03	0.03	3.92	3.95	
<b>Other Cover Types</b>						
Disturbed Habitat	0.16	0.39	0.54	7.98	8.52	Includes a mix of native, naturalized, and ornamental species, occurring in unpaved areas of severe and/or repeated soil disturbance. Observed species include <i>Alianthus altissimum</i> , <i>Anagallis arvensis</i> , <i>Brassica nigra</i> , <i>Bromus</i> spp., <i>Cynodon dactylon</i> , <i>Erodium cicutarium</i> , <i>Foeniculum vulgare</i> , <i>Helminthotheca echioides</i> , <i>Heterotheca grandiflora</i> , <i>Hirschfeldia incana</i> , <i>Lactuca serriola</i> , <i>Lolium multiflorum</i> , <i>Malva parviflora</i> , <i>Melilotus albus</i> , <i>Polygonum arenastrum</i> , <i>Quercus ilex</i> , <i>Ricinus communis</i> , <i>Salsola tragus</i> , <i>Schinus molle</i> , <i>Sonchus</i> spp., and <i>Washingtonia robusta</i> . Disturbed habitat occurs in both upland areas and nonwetland waters (e.g., ephemeral roadside v-ditches).

Vegetation Community or Other Cover Type	Acres within Biological Study Area <sup>2</sup>					Composition within the Biological Study Area <sup>3</sup>
	Facility Footprints		100-foot Facility Buffers	Subtotal Facility Footprints	Total	
	Serviceable Concrete Lining	Earthen or Non-Serviceable Concrete Lining				
Urban/Developed	71.86	0.07	310.21	71.94	382.14	Unvegetated hardscapes or ornamental landscapes. All facilities in the project study area are partially urban/developed due to their adjacency to paved roads, parking lots, and structures.
Subtotal Other =	72.02	0.46	318.18	72.48	390.66	
<b>TOTAL<sup>4</sup></b>	<b>74.30</b>	<b>1.54</b>	<b>335.79</b>	<b>75.94</b>	<b>411.73</b>	

<sup>1</sup> Asterisks denote a sensitive vegetation community, i.e., regulated by a resource agency or identified as warranting mitigation in the City's MHCP Subarea Plan.

<sup>2</sup> All acreages rounded to two decimal places after summation.

<sup>3</sup> Based on AECOM (2011) survey results

Most of the project facilities (47 facilities or 75 percent) occur in the Escondido HA, with 12 facilities (19 percent) occurring in the Hodges HA and four facilities (6 percent) occurring in the San Marcos HA. Facilities within the Escondido HA are hydrologically connected to the Pacific Ocean via Escondido Creek, facilities within the San Marcos HA are hydrologically connected to the Pacific Ocean via San Marcos Creek, and facilities within the San Dieguito HU are hydrologically connected to the Pacific Ocean via the San Dieguito River. Hydrology is further discussed in Section 2.3 of this document.

AECOM ecologists conducted a formal jurisdictional delineation for potential waters of the U.S. and state during summer and fall 2010 (AECOM 2011). AECOM had access to the project study area to sample vegetation, soils, and hydrology in support of the formal jurisdictional delineation for waters of the U.S. and state. The presence of wetlands and other waters was assessed based on pre-field surveys and ambient site conditions, along with the formal delineation of wetland and nonwetland waters pursuant to the guidance and criteria outlined in and in accordance with the following:

- 33 CFR 328 (Definition of Waters of the United States)
- Regulatory Guidance Letters (RGL) 07-02, 88-06, and 05-05
- *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) (1987 Manual)
- *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Version 2.0) (Environmental Laboratory 2008)<sup>6</sup> (2008 Supplement)
- *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual* (USACE 2008)

The type, location, and extent of potential jurisdictional waters occurring within the project study area at the time of these surveys are depicted in Table 4.

#### *Special-Status Species*

Species are given special consideration by resource agencies such as USFWS and CDFG due to limited distribution (i.e., rarity), local significance, and/or the threat of extinction by human activities. Special-status species are those protected under the federal ESA, CESA, and/or listed as sensitive by other state and local organizations or agencies such as the CNPS. For purposes of this analysis, a special-status species is broadly defined as a candidate, sensitive, or other species covered by local or regional plans, policies, or regulations, or by CDFG or USFWS.

---

<sup>6</sup> It should be noted that the 1987 Manual and 2008 Supplement are guidance documents for delineating waters in the form of wetlands only.

**Table 4: Potential Jurisdictional Waters of the U.S. and State Occurring within the Biological Study Area**

Type of Aquatic Feature	Cowardin Classification (per Cowardin 1979)	Vegetation Community or Other Cover Type (per Oberbauer et al. 2008)	Acres within Biological Study Area <sup>1</sup>					Total
			Serviceable Concrete Lining	Facility Footprints		100-foot Facility Buffers		
				Earthen or Non-Serviceable Concrete Lining	Subtotal Facility Footprints			
Potential Waters of the U.S. and State	Palustrine; Emergent, Persistent, Artificial (concrete bottom), Intermittently Exposed, Fresh	Coastal and Valley Freshwater Marsh	0.06	--	0.06	0.10	0.16	
		Disturbed Wetland	0.75	--	0.75	0.01	0.76	
	Riverine; Upper Perennial, Streambed, Artificial (concrete bottom), Permanently Flooded, Fresh	Emergent Wetland	≤0.01	--	≤0.01	--	≤0.01	
		Open Water	1.20	0.03	1.23	0.19	1.42	
	Riverine; Intermittent, Streambed, Unconsolidated Bottom, Sand, Intermittently Flooded, Fresh	Disturbed Habitat	≤0.01	0.06	0.06	0.01	0.08	
		Unvegetated Channel	≤0.01	0.08	0.08	0.09	0.17	
	Riverine; Artificial (concrete bottom), Intermittently Flooded, Fresh	Urban/Developed	68.55	0.02	68.57	0.11	68.68	
		<b>Subtotal Nonwetland Waters =</b>	<b>70.55</b>	<b>0.20</b>	<b>70.75</b>	<b>0.52</b>	<b>71.27</b>	
	Wetland (regulated under CWA Section 404 and 401, CFGC 1600-1616, and Porter-Cologne)	Palustrine; Emergent, Persistent, Permanently Flooded, Fresh	Alkali Seep	--	--	--	0.48	
			Coastal and Valley Freshwater Marsh	0.04	0.10	0.14	0.37	
Palustrine; Scrub/Shrub Broad-leaved Perennial, Seasonally Flooded, Fresh		Disturbed Wetland	--	0.25	0.25	0.16	0.41	
		Emergent Wetland	--	5	≤0.01	≤0.01	≤0.01	
Palustrine; Forested; Broad-leaved Deciduous, Seasonally Flooded/Saturated, Fresh		Mulefat Scrub	≤0.01	--	≤0.01	0.21	0.21	
		Southern Arroyo Willow Riparian Forest	0.01	0.20	0.21	2.10	2.31	
Palustrine; Forested; Broad-leaved Deciduous, Seasonally Flooded/Saturated, Fresh		Southern Cottonwood-Willow Riparian Forest	0.05	0.25	0.30	1.83	2.13	
		Southern Riparian Scrub	--	≤0.01	≤0.01	0.30	0.30	
<b>Subtotal Wetland Waters =</b>		<b>Subtotal Wetland Waters =</b>	<b>0.11</b>	<b>0.80</b>	<b>0.91</b>	<b>5.46</b>	<b>6.37</b>	

Type of Aquatic Feature	Cowardin Classification (per Cowardin 1979)	Vegetation Community or Other Cover Type (per Oberbauer et al. 2008)	Acres within Biological Study Area					Total
			Facility Footprints			100-foot Facility Buffers	Total	
			Serviceable Concrete Lining	Earthen or Non- Serviceable Concrete Lining	Subtotal Facility Footprints			
Subtotal Waters of the U.S. and State =			70.66	1.00	71.66	5.98	77.63	
<b>Potential Waters of the State Only</b>								
Channel Bank (regulated under CFGC 1600-1616 and Porter- Cologne)	Palustrine; Emergent, Persistent, above OHWM	Coastal and Valley Freshwater Marsh	--	≤0.01	≤0.01	0.10	0.10	
	Riverine; Intermittent, Streambed, above OHWM	Disturbed Wetland	0.14	--	0.14	0.01	0.15	
	Riverine; Artificial (concrete bottom), above OHWM	Disturbed Habitat	0.02	0.07	0.09	0.89	0.98	
		Nonnative Grassland	--	--	--	0.05	0.05	
Subtotal Channel Bank =		Urban/Developed	2.01	≤0.01	2.01	0.37	2.38	
Riparian Extent (regulated under CFGC 1600-1616 and Porter- Cologne)	Palustrine; Forested Broad- leaved Perennial, above OHWM	Engelmann Oak Woodland	2.16	0.07	2.23	1.42	3.65	
		Eucalyptus Woodland	--	0.03	0.03	0.60	0.63	
		Southern Arroyo Willow Riparian Forest	≤0.01	--	≤0.01	0.25	0.25	
		Palustrine; Forested; Broad- leaved Deciduous, above OHWM	0.01	0.11	0.12	3.77	3.88	
			0.02	0.11	0.14	3.22	3.36	
			--	0.01	0.01	0.15	0.16	
Subtotal Riparian Extent =		Southern Willow Scrub	--	--	--	0.12	0.12	
Swale (regulated under CFGC 1600-1616 and Porter-Cologne)	Riverine; Intermittent, Streambed, above OHWM	Disturbed Habitat	0.03	0.26	0.29	8.10	8.39	
			--	0.06	0.06	--	0.06	
Subtotal Swale =			--	0.06	0.06	--	0.06	
Subtotal Waters of the State Only =			2.19	0.39	2.58	9.52	12.10	
TOTAL			72.85	1.38	74.24	15.50	89.73	

<sup>1</sup> All acreages rounded to two decimal places after summation.

Based on AECOM field findings and the CNDDDB accuracy areas for historically documented species occurrences, 40 special-status plant and animal species are known to occur within 1 mile of the project study area; of these, 21 have the potential to occur within 100 feet of one or more of the 63 maintenance sites (four of which were observed within one or more 100-foot facility buffer[s] during AECOM field surveys [AECOM 2011]; see Appendix C).

Of these 21 species, three are federally listed (San Diego ambrosia, coastal California gnatcatcher, and least Bell's vireo; note that the least Bell's vireo is also listed by the state). No federally listed species were observed during general biological surveys and formal jurisdictional delineation of the project study area (AECOM 2011).

Sensitive plant species observed within one or more of the facility buffers (see Appendix C), with a high potential to occur within one or more facility footprint include San Diego sagewort, southern tarplant, San Diego marsh-elder, southwestern spiny rush, and Engelmann oak. Sensitive plant species with a low to moderate potential to occur within facility buffers, but not expected to occur in the facility footprint include San Diego ambrosia and smooth tarplant.

Sensitive wildlife species with a low to moderate potential to occur within one or more facility footprint include Orange-throated whiptail and least Bell's vireo. Sensitive wildlife species with a low to moderate potential to occur within facility buffers, but that are not expected to occur in the facility footprint itself include southern California rufous-crowned sparrow, burrowing owl, coastal cactus wren, white-faced ibis, coastal California gnatcatcher, pallid bat, Dulzura pocket mouse, hoary bat, western yellow bat, pocketed free-tailed bat, big free-tailed bat, and American badger.

A list of the special-status plant and animal species documented in CNDDDB within 1 mile of the RGP facilities is provided in Appendix C, and Figure 5 displays known locations of state- and/or federally-listed species along with USFWS-designated critical habitat.

#### *Migratory Birds, Wildlife Movement, and Migration Corridors*

In addition to the special-status species discussed above, as previously noted, migratory birds are protected under the MBTA. Under the act, most migratory birds are protected during the nesting season, as are the habitats in which they reside. Several species of migratory birds have the potential to use habitat within and adjacent to the RGP facilities during the nesting season.

More than half of the 63 maintenance sites are within highly urbanized concrete and earthen facilities supporting little or no native vegetation. These facilities provide little value as corridors for wildlife movement or nesting/foraging. Twenty-seven facilities occur in riparian and wetland habitats with potential connectivity to undeveloped expanses of natural habitats within the region (e.g., Daley Ranch, San Dieguito River Park Open Space Preserve). For example, facilities within the northern portion of Reidy Creek and Kit Carson Park are well connected to established riparian corridors; these habitats provide valuable movement corridors for fish and wildlife through otherwise highly developed City and private land. Additionally, two facilities occur near Lake Wohlford on the urban-wildland interface with adjacent Diegan coastal sage scrub and Engelmann oak woodland habitats.

## 2.1.2 Significance Criteria and Impact Analysis

*The effects of a project on biological resources are considered to be significant if the proposed project would:*

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

**Less Than Significant Impact With Mitigation Incorporated** – As summarized in Appendix C six special-status species have the potential to occur within at least one facility footprint (four of which were observed within one or more 100-foot facility buffer[s] during AECOM field surveys [AECOM 2011]), and an additional 15 species have the potential to occur within at least one 100-foot facility buffer (including three federally listed species: San Diego ambrosia, coastal California gnatcatcher, and least Bell's vireo; note that the least Bell's vireo is also listed by the state).

At each maintenance facility, the City made great efforts to constrain maintenance activities to the concrete-lined portions of channels, basins, and culverts. Where impacts to earthen channels within native vegetation communities are unavoidable, the City is proposing to limit impacts to 20 feet surrounding inlets and outlets, providing the minimal access necessary to keep the Municipal Separate Storm Sewer System (MS4) culverts unobstructed while leaving the larger reaches of earthen channel untouched. The City is also proposing to maintain minimal low-flow channels within unvegetated or disturbed earthen channels, or where such linear dredging can be limited to the herbaceous understory while leaving tree and shrub canopy intact. Even with the limitation of impact area, there is potential for significant impacts to sensitive species, from habitat modification or degradation, construction noise and lighting, and unauthorized trespass by O&M personnel.

Several species-specific mitigation measures have been identified to avoid and minimize otherwise potentially significant impacts to a level below significance. Of the measures listed in Section 2.1.3, several would be implemented to reduce impacts to special-status species to a level below significance. Biological monitors would be on-site during vegetation clearing and grubbing to flag sensitive resources for avoidance and halt work if necessary (BIO-1), and workers would be trained to identify key natural resources prior to starting work (BIO-2). Equipment staging would be located outside of sensitive habitats and limited to the project footprint (BIO-3); work areas would be fenced or flagged (BIO-4); trash and dust would be kept out of sensitive habitats (BIO-5 and BIO-7); use of night lighting would be avoided if at all possible, or the lights would be directed away from sensitive habitats (BIO-8). Erosion control measures would ensure sensitive habitats are not degraded through sedimentation and/or topsoil loss (BIO-10). Trespass into riparian vegetation would be prohibited, and impacts to riparian habitats would be minimized to the greatest extent possible (i.e., understory only within the confines of the project footprint) (BIO-14). Native riparian trees and shrubs would be avoided, with the exception of minor trimming of lower branches within the project footprints (BIO-14 through BIO-16). The nesting season would be avoided if at all possible (BIO-17), with applicable preconstruction surveys, flagging of environmentally sensitive avoidance buffers, and biological monitoring (BIO-16 through BIO-18). Pre-activity surveys would be performed in areas with potential for state-listed and/or federally listed plant species, and if detected, these species would be avoided (BIO-17 and BIO-18). Weed whipping activities will be restricted in areas with potential to support San Diego Ambrosia (BIO-21). Mature oak trees would be avoided per City guidelines, as well as the establishment of 50-foot oak root protection zones when heavy

equipment is to be used (BIO-16). The City's goal is 100 percent avoidance of any direct impacts to special-status species (BIO-23). In addition, impacts to habitats with potential to support sensitive species would be mitigated for, as described further under 2.1.2b (BIO-24 ).

Through the use of adequate avoidance and minimization measures, the proposed project would have a less than significant impact (direct and indirect) to special-status species.

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

**Less Than Significant Impact With Mitigation Incorporated** – Of the total 75.94 acres among the facility footprints, approximately 3.43 acres of the project impacts would occur within sensitive wetland/riparian habitats/land covers (Table 3). Of the total 3.43 acres, approximately 2.28 acres of those impacts would occur within serviceable concrete facilities and 1.15 acres would occur within earthen facilities or non-serviceable concrete facilities. Most of these impacts would occur in disturbed wetland (0.89 acre) and open water (1.20 acres) within serviceable concrete channels (Table 3).

The proposed project involves removal of silt and vegetation within these flood control facilities and does not propose removal, replacement, or other reconstruction of these facilities. In order to evaluate the relative sensitivity of these proposed impacts to riparian habitat or other sensitive natural communities, the 19 habitats/land cover types that occur within the BSA are designated as one of three categories (Table 5). Additionally, Resource Tiers (Tiers) were established for this analysis. These Tiers indicate the sensitivity of the resource. As summarized in Table 6, the most sensitive (native habitat areas) are designated as Tier 1, and Tier IV (unvegetated concrete channels) are the least sensitive. A summary of project impacts by Tier and watershed is provided in Table 7.

**Table 5: Proposed Vegetation Categories for Determining Resource Tiers**

Category	Description	Community
A	Native vegetation communities	Alkali Seep
		Cismontane Alkali Marsh
		Coast Live Oak Woodland
		Coastal and Valley Freshwater Marsh
		Diegan Coastal Sage Scrub
		Engelmann Oak Woodland
		Mulefat Scrub
		Southern Arroyo Willow Riparian Forest
		Southern Cottonwood-Willow Riparian Forest
		Southern Riparian Scrub
B	Disturbed wetland	Southern Willow Scrub
		Disturbed Wetland
		Emergent Wetland
		Nonnative Grassland
C	Disturbed, developed, or unvegetated land covers	Eucalyptus Woodland
		Disturbed Habitat
		Open Water
		Unvegetated Channel
		Urban/Developed

**Table 6: Resource Tiers for Jurisdictional Waters and Other Cover Types**

Resource Tier <sup>1</sup>	Description
Tier I	Includes native habitats (i.e., Category A vegetation communities per Table 5) growing within earthen facilities or non-serviceable concrete facilities. This includes wetland waters and riparian extent.
Tier II	Includes nonnative habitats and unvegetated areas (i.e., Category B vegetation communities and Category C land covers per Table 8) occurring within earthen facilities or non-serviceable concrete facilities. These are mostly nonwetland waters but may include disturbed wetland waters.
Tier III	Includes vegetated areas (i.e., Category A [herbaceous] and Category B vegetation communities per Table 5) occurring within serviceable concrete facilities. These are isolated, low-quality patches of opportunistic vegetation that are not likely to persist (e.g., flow associated with a storm event could easily blow out these habitat "islands"). Note that mature tree/shrub vegetation communities of Category A cannot occur on serviceable concrete lining by definition; if enough sediment is present to support native tree/shrub vegetation communities of Category A, the structure is non-serviceable by definition and the impacts would be elevated to Tier I.
Tier IV	Includes unvegetated areas (i.e., Category C per Table 5) occurring within serviceable concrete facilities.

<sup>1</sup> While these Resource Tiers have been established primarily for the purpose of classifying jurisdictional waters of the U.S. and State, they may also be applied to sensitive, non-jurisdictional habitat.

**Table 7: Watershed-level Summary of Project Impacts by Resource Tier**

Resource Tier <sup>2</sup>	Resource Type	Habitat	Project Impacts by Hydrologic Subarea (Acres) <sup>1</sup>			
			Escondido	Hodges	San Marcos	Total
<b>Earthen or Non-Serviceable Concrete Lining (Mitigation Required)</b>						
Tier I	Potential Jurisdictional Waters of the U.S. and/or State	Coastal and Valley Freshwater Marsh	0.04	0.03	0.03	0.10
		Engelmann Oak Woodland	0.03	--	--	0.03
		Southern Arroyo Willow Riparian Forest	0.25	0.05	--	0.31
		Southern Cottonwood-Willow Riparian Forest	0.24	0.12	--	0.36
		Southern Riparian Scrub	≤0.01	0.01	--	0.01
		Southern Willow Scrub	--	≤0.01	--	≤0.01
		<b>Subtotal</b>	<b>0.56</b>	<b>0.21</b>	<b>0.03</b>	<b>0.81</b>
	Potentially Sensitive, Non-Jurisdictional Habitat <sup>3</sup>	Alkali Seep	≤0.01	--	--	≤0.01
		Cismontane Alkali Marsh	≤0.01	--	--	≤0.01
		<b>Subtotal</b>	<b>0.01</b>	<b>--</b>	<b>--</b>	<b>0.01</b>
<b>Subtotal Tier I</b>			<b>0.57</b>	<b>0.21</b>	<b>0.03</b>	<b>0.81</b>
Tier II	Potential Jurisdictional Waters of the U.S. and/or State	Disturbed Habitat	0.16	0.03	--	0.19
		Disturbed Wetland	0.22	0.03	--	0.25
		Emergent Wetland	≤0.01	--	--	≤0.01
		Open Water	0.02	0.01	--	0.03
		Unvegetated Channel	0.02	0.06	--	0.08
		Urban/Developed	0.01	0.01	0.01	0.02
		<b>Subtotal</b>	<b>0.43</b>	<b>0.14</b>	<b>0.01</b>	<b>0.58</b>
<b>Subtotal Tier II</b>			<b>0.43</b>	<b>0.14</b>	<b>0.01</b>	<b>0.58</b>
<b>Total Tier I and Tier II Impacts (Mitigation Required)</b>			<b>1.00</b>	<b>0.36</b>	<b>0.04</b>	<b>1.39</b>

Resource Tier <sup>2</sup>	Resource Type	Habitat	Project Impacts by Hydrologic Subarea (Acres) <sup>1</sup>			
			Escondido	Hodges	San Marcos	Total
<b>Jurisdictional Serviceable Concrete Lining (Mitigation Not Required)</b>						
Tier III	Potential Jurisdictional Waters of the U.S. and/or State	Coastal and Valley Freshwater Marsh	0.04	--	0.06	0.10
		Disturbed Wetland	0.89	--	--	0.89
		Emergent Wetland	≤0.01	--	--	≤0.01
		Eucalyptus Woodland	≤0.01	--	--	≤0.01
		Mulefat Scrub	≤0.01	--	--	≤0.01
		Southern Arroyo Willow Riparian Forest	0.02	--	--	0.02
		Southern Cottonwood-Willow Riparian Forest	0.07	--	--	0.07
		<b>Subtotal</b>	<b>1.02</b>	<b>--</b>	<b>0.06</b>	<b>1.08</b>
	Potentially Sensitive, Non-Jurisdictional Habitat <sup>3</sup>	Nonnative Grassland	≤0.01	--	--	≤0.01
	<b>Subtotal</b>	<b>≤0.01</b>	<b>--</b>	<b>--</b>	<b>≤0.01</b>	
<b>Subtotal Tier III</b>			<b>1.03</b>	<b>--</b>	<b>0.06</b>	<b>1.08</b>
Tier IV	Potential Jurisdictional Waters of the U.S. and/or State	Disturbed Habitat	0.02	≤0.01	--	0.02
		Open Water	1.20	--	--	1.20
		Unvegetated Channel	≤0.01	--	--	≤0.01
		Urban/Developed	70.32	0.24	≤0.01	70.56
		<b>Subtotal</b>	<b>71.54</b>	<b>0.24</b>	<b>≤0.01</b>	<b>71.77</b>
<b>Subtotal Tier IV</b>			<b>71.54</b>	<b>0.24</b>	<b>0.05</b>	<b>73.22</b>
<b>Total Tier III and Tier IV Impacts (Mitigation Not Required)</b>			<b>72.56</b>	<b>0.24</b>	<b>0.06</b>	<b>72.86</b>
<b>Non-Sensitive, Non-Jurisdictional Upland Impacts (Mitigation Not Required)</b>						
No Tier Assigned	Non-Sensitive, Non-Jurisdictional Land Cover	Disturbed Habitat	0.32	-	0.01	0.33
		Urban/Developed	1.14	0.12	0.10	1.36
		<b>Subtotal</b>	<b>1.46</b>	<b>0.12</b>	<b>0.11</b>	<b>1.69</b>
<b>Subtotal No Tier Assigned</b>			<b>1.46</b>	<b>0.12</b>	<b>0.11</b>	<b>1.69</b>
<b>Summary</b>						
Potential Jurisdictional Waters of the U.S. and/or State, All Resource Tiers			73.55	0.59	0.10	74.24
Potentially Sensitive, Non-Jurisdictional Habitat, All Resource Tiers			0.01	-	-	0.01
Non-Sensitive, Non-Jurisdictional Uplands (resource tiers do not apply)			1.46	0.12	0.11	1.69
<b>Total Project Impacts</b>			<b>75.02</b>	<b>0.72</b>	<b>0.20</b>	<b>75.94</b>

<sup>1</sup> All acreages rounded to two decimal places after summation.

<sup>2</sup> Resource tiers are defined in Table 6 and Mitigation Measure BIO-23.

<sup>3</sup> Non-jurisdictional uplands within the Project impact area consist primarily of disturbed habitat and urban/developed areas, with the exception of less than 0.01 acre of the following habitats: alkali seep (non-jurisdictional portion), cismontane alkali marsh (non-jurisdictional portion), and nonnative grassland (non-jurisdictional portion). Mitigation may be required for non-jurisdictional upland impacts in sensitive habitats. Mitigation is not required for upland impacts occurring in non-jurisdictional, non-sensitive disturbed/developed areas; these non-sensitive upland acreages are shown in the summary portion at the bottom of the table for continuity between this table (Table 7), Table 3 (which lists all acreages regardless of jurisdiction or sensitivity), and Table 4 (which lists acreages only for jurisdictional waters and the sensitive habitats contained therein). If comparing acreages in this table (Table 7) to acreages in Table 3, be sure to include the non-jurisdictional, non-sensitive upland acreages in your comparison; if comparing acreages in this Table (Table 7) to those in Table 4, be sure to omit the non-jurisdictional acreages (sensitive and non-sensitive) from your comparison.

Impacts to Tier I and II resources are considered significant, as removal of vegetation and silt would represent a substantial impact in these locations. Impacts to Tiers III and IV wetlands/waters and non-sensitive upland vegetation communities were considered less than significant. Based on the Tiers above, the project would result in approximately 1.39 acres of significant impacts.

At each facility, the City has made great efforts to constrain the impact area to existing concrete-lined features and otherwise developed/disturbed areas. In natural facilities with native vegetation growing in earthen-bottom or non-serviceable concrete channels, the City would limit impacts to the understory and would constrain the work area within riparian and other sensitive habitats to a 20-foot radius and/or minimal low-flow channel resulting in site-specific impacts of less than 0.1 acre. The City would avoid removal of native riparian trees and shrubs, with only minor trimming of lower branches where necessary to maintain access and flow. These project design features would provide the minimal access and work area necessary to keep the MS4 culverts unobstructed, while leaving the larger reaches of earthen channel untouched.

Several mitigation measures (see Table 9, Section 2.1.3) would be implemented to avoid and minimize significant impacts (direct and indirect) to jurisdictional waters to the greatest extent practicable. Equipment staging, stockpiling, and refueling would be located in upland areas away from wetlands, and project activities would be limited to the project footprint and surrounding developed access routes (BIO-3); trash and dust would be kept out of sensitive habitats (BIO-5 and BIO-7). Erosion control measures would ensure waters and wetlands are not degraded through sedimentation and/or topsoil loss (BIO-10). Dewatering would be conducted in accordance with water quality best management practices (BMPs) and under applicable permits (BIO-11), fires would be prevented through safe driving and smoking practices (BIO-12), and the spread of exotic weed species would be avoided by proper washing of vehicles on entry and exit (BIO-13).

Trespass into riparian vegetation would be prohibited, and impacts to riparian habitats would be minimized to the greatest extent possible (i.e., understory only within the confines of the project footprint) (BIO-14). Native riparian trees and shrubs would be avoided, with the exception of minor trimming of lower branches within the project footprints (BIO-14). Mature oak trees would be avoided per City guidelines, as well as the establishment of 50-foot oak root protection zones when heavy equipment is to be used (BIO-16).

Even with implementation of avoidance and minimization measures, significant impacts to 1.39 acres of sensitive habitat would remain with project implementation. However, with implementation of Mitigation Measure BIO-24, requiring compensatory mitigation for impacts to habitats through creation, restoration, and/or enhancement, impacts to sensitive habitats would be less than significant.

These unavoidable impacts would be mitigated to a level below significance through a combination of off-site restoration/creation and/or on-site enhancement.

These mitigation ratios are generally consistent with the guidelines of relevant regional conservation plans, including the Draft Escondido Subarea MHCP.

Mitigation ratios would be based on resource tiers, as described above. Table 8 summarizes the proposed mitigation types and impact thresholds subject to agency approval, which may change prior to final permit authorization.

**Table 8: Proposed Resource Tiers and Impact Thresholds  
for the Escondido Channel Maintenance Project**

<b>Resource Tier</b>	<b>Description</b>	<b>Proposed Mitigation</b>	<b>Proposed Impact Limit</b>
<b>Tier I</b>	Includes native habitats (i.e., Category A vegetation communities per Table 8) growing within earthen facilities or non-serviceable concrete facilities. This includes wetland waters and riparian extent.	2:1 through at least 1:1 creation/restoration, plus additional enhancement as needed to achieve overall 2:1 ratio.	Up to 0.1 acre per facility (understory only, with minor trimming of native trees/shrubs).
<b>Tier II</b>	Includes nonnative habitats and unvegetated areas (i.e., Category B vegetation communities and Category C land covers per Table 8) occurring within earthen facilities or non-serviceable concrete facilities. These are mostly nonwetland waters but may include disturbed wetland waters.	1.5:1 for wetland waters (i.e., Category B vegetation communities), through 1:1 on-site channel recontouring plus additional 0.5:1 habitat mitigation.  1:1 for nonwetland waters (i.e., Category C land covers) through on-site channel recontouring.	Up to 0.1 acre per facility.
<b>Tier III</b>	Includes vegetated areas (i.e., Category A [herbaceous] and Category B vegetation communities per Table 8) occurring within serviceable concrete facilities. These are isolated, low-quality patches of opportunistic vegetation that are not likely to persist (e.g., flow associated with a storm event could easily blow out these habitat "islands"). Note that mature tree/shrub vegetation communities of Category A cannot occur on serviceable concrete lining by definition; if enough sediment is present to support native tree/shrub vegetation communities of Category A, the structure is non-serviceable by definition and the impacts would be elevated to Tier I.	No mitigation	Up to 0.5 acre per facility.
<b>Tier IV</b>	Includes unvegetated areas (i.e., Category C per Table 8) occurring within serviceable concrete facilities.	No mitigation	Unlimited. Assuming incidental fallback only, dredge of concrete-lined facilities is unregulated by USACE. Applicable Waste Discharge Requirement measures from RWQCB would be adhered to.

The City is currently pursuing several mitigation options, including on-site enhancement and off-site restoration/creation/enhancement at several City-owned properties and preserves. The City would establish a mitigation bank, in-lieu fee program, or project specific mitigation program to comprehensively address mitigation. Once the City gains agency approval to move forward with one or more of the proposed options, a conceptual mitigation plan would be developed in coordination with USACE, CDFG, and RWQCB, and a final mitigation plan would be approved as a condition of the 404, 401, and 1602 authorizations, respectively.

- c. *Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;*

**Less Than Significant Impact With Mitigation Incorporated** – As summarized in Table 4, 74.24 acres of the project impacts would occur within potential jurisdictional waters. Of this, 72.85 acres occur in serviceable concrete-lined features. Within these serviceable concrete-lined features, 71.74 acres are unvegetated [i.e., Tier IV], and the remaining 1.10 acres are sparsely vegetated by opportunistic herbaceous plant species [i.e., Tier III]. Dredging within sparsely vegetated (Tier III) and unvegetated (Tier IV) concrete-lined channels would have no significant impact on federally protected wetland resources, as removal of sediment would be beneficial to these concrete water courses and would not result in hydrological interruption or filling of the channel.<sup>7</sup>

Impacts to Tier I (native riparian/wetland) and Tier II (nonnative riparian/wetland) are considered significant. Potentially significant project impacts would occur to 1.39 acres of Tier I and II wetland or riparian habitat (i.e., federal and/or state jurisdictional habitat, or sensitive non-jurisdictional habitat) (Table 7) from future facility maintenance and repair activities. These potentially significant impacts occur at facilities within the Carlsbad and San Dieguito HUs, spanning three HAs (San Marcos, Escondido, and Hodges). A watershed-level summary of the total impacts, nonsignificant impacts, and potentially significant impacts arising from the proposed facility maintenance is provided in Table 7.

At each facility, the City has made great efforts to constrain the impact area to existing concrete-lined features and otherwise developed/disturbed areas. In natural facilities with native vegetation growing in earthen-bottom channels, the City would limit impacts to the understory, and would constrain the work area within jurisdictional waters to a 20-foot radius and/or minimal low-flow channel resulting in site-specific impacts of less than 0.1 acre. The City would avoid removal of native riparian trees and shrubs, with only minor trimming of lower branches where necessary to maintain access and flow. These project design features would provide the minimal access and work area necessary to keep the MS4 culverts unobstructed, while leaving the larger reaches of earthen channel untouched.

Several mitigation measures (see Table 9, Section 2.1.3) would be implemented to avoid and minimize significant impacts (direct and indirect) to jurisdictional waters to the greatest extent practicable. Equipment staging, stockpiling, and refueling would be located in upland areas away from wetlands, and project activities would be limited to the project footprint and surrounding developed access routes (BIO-3); trash and dust would be kept out of sensitive habitats (BIO-5 and BIO-7). Erosion control measures would ensure waters and wetlands are not degraded through sedimentation and/or topsoil loss (BIO-10). Dewatering would be conducted in accordance with water quality BMPs and under applicable permits (BIO-11), fires would be prevented through safe driving and smoking practices (BIO-12), and the spread of exotic weed species would be avoided by proper washing of vehicles upon entry and exit (BIO-13). Trespass into riparian vegetation would be prohibited, and impacts to riparian habitats would be minimized to the greatest extent possible (i.e., understory only within the confines of the project footprint) (BIO-14). Native riparian trees and shrubs would be avoided, with the exception of minor trimming of lower branches within the project footprints (BIO-15).

---

<sup>7</sup> Due to the dynamic nature of riverine systems, it is possible that some of the areas now attributed as Tier III or Tier IV jurisdictional waters may accrue sediment/vegetation and transition to Tier I or II jurisdictional waters. The City has planned for this scenario and will evaluate site conditions as a part of preconstruction surveys to ensure accurate accounting of impacts (refer to BIO-1).

The proposed project necessitates work within and around jurisdictional waters. The City has made great efforts to minimize impacts to the greatest extent practicable, while also maintaining the objectives of the project; however, unavoidable impacts to potential jurisdictional waters remain a part of the proposed project.

Even with avoidance and minimization measures, significant impacts to 1.39 acres of jurisdictional waters, through loss of habitat would remain with project implementation. Implementation of Mitigation Measure BIO-23 requiring compensatory mitigation for impacts to habitats through creation, restoration, and/or enhancement, would reduce these impacts to less than significant.

- d. *Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;*

**Less Than Significant Impact** – The proposed project involves minimally invasive vegetation and sediment removal within maintenance facilities that are accessible primarily via urban hardscape. Maintenance activities would be timed to avoid significant impacts to special-status species, would be designed to avoid native riparian tree removal, and would not involve the permanent placement of obstructive apparatus or structures within native habitats. The small impact footprint and low invasiveness of maintenance at each facility, coupled with the urbanized setting of most facilities, would result in less than significant impacts to wildlife movement and habitat corridors from the project.

The NCMSCP identifies a key overland wildlife crossing along County Highway S6, which is within 1 mile of two facilities on Lake Wohlford Road. These facilities are located within City limits (and therefore outside of the NCMSCP Plan Area), and work at these facilities would not affect this key wildlife crossing or the associated movement corridor. No other resources specific to wildlife movement are identified in the NCMSCP or MHCP as occurring proximate to the project study area.

- e. *Conflict with any local policies/ ordinance that protect biological resources (e.g. tree preservation policy or ordinance); or,*

**Less Than Significant Impact** – The City defines protected trees as “any oak (*Quercus* sp.) which has a ten (10) inch or greater DBH, or any other species or individual specimen listed on the local historic register, or determined to substantially contribute to the historic character of a property or structure listed on the local historic register, pursuant to Article 40 of the Escondido Zoning Code (2001).” Several oak trees, both Engelmann oak (*Quercus engelmannii*) and coast live oak (*Quercus agrifolia*) are present at two facilities along Lake Wohlford Road. These protected trees would be avoided during project activities per BIO-18, and, therefore, impacts would be less than significant.

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

**Less Than Significant Impact** – The project study area occurs within one regional conservation planning area: the City of Escondido Subarea Plan under the MHCP. The project study area occurs within City limits and thus outside of the NCMSCP area.

The MHCP Escondido Subarea Plan documents core conservation areas, known as HMP areas. Sites E-11, E-12, E-13, and portions of E-29, E-37, and H-09 occur within HMP areas. The MHCP calls for conservation of between 90 and 100 percent of resources within preserve areas and no net loss of wetlands. Since the project would avoid take of special-status species and would result in no net loss of sensitive habitats or jurisdictional waters, the project is consistent with conservation measures defined in the MHCP.

### 2.1.3 Mitigation Measures for Biological Resources

**Table 9: Mitigation Measures for Biological Resources**

Measure	Description
<b>Biological Resources General Avoidance &amp; Minimization</b>	
BIO-1 <b>Biological Monitors + City Inspectors</b>	<p>The City will designate qualified biologist(s) and/or environmental monitor(s), as applicable, to oversee monitoring and compliance with protective measures for the biological resources. The biologist(s)/monitor will maintain communications with the appropriate personnel (project manager, resident engineer, project foreman) to ensure that issues relating to biological resources are appropriately and lawfully managed. The biologist(s)/monitor will also be present to verify compliance with all conservation measures. The monitoring biologists/environmental monitors will submit reports that document compliance with these measures to the wildlife agencies upon request or, at a minimum, are included in an end-of-the-year report. In addition, the biologists/monitors will perform the following duties.</p> <ol style="list-style-type: none"> <li>1. Prior to construction, verify site conditions have not changed from baseline data, with respect to natural resources.               <ol style="list-style-type: none"> <li>a. If site conditions are different than the established baseline (e.g., the conversion of a Tier IV concrete channel to a Tier II wetland due to sediment accumulation), the facility will be reevaluated for sensitive habitats, jurisdictional waters and wetlands, and special-status species. USACE, RWQCB, and CDFG will be notified of the new conditions prior to work, and will have 14 days to respond with amended permit conditions relevant to the facility. Otherwise, work will proceed using existing avoidance, minimization, and mitigation measures set forth in the permits, as applicable to the new site conditions.</li> </ol> </li> <li>2. Be on-site during all vegetation clearing and grubbing, and weekly during project construction in upland and riparian habitat to be impacted.               <ol style="list-style-type: none"> <li>a. If any state or federally listed species is detected by biological monitors during vegetation clearing, the resident engineer will be immediately notified to halt work, if necessary, and coordinate with USFWS and CDFG to ensure the proper implementation of species and habitat protection measures. The biologist/monitor will report any breach of the conservation measures within 24 hours of its occurrence.</li> </ol> </li> <li>3. Erosion control measures will be regularly checked by City inspectors, the biologist, resident engineer, and/or project foreman. Site-specific BMP plans will be reviewed by a qualified biologist and modified, if necessary, prior to implementation. Fencing and/or erosion control measures at maintenance facilities will be inspected a minimum of once per week until completion of the maintenance activity.</li> </ol>
BIO-2 <b>Worker Awareness</b>	Each employee will participate in a training/awareness program that will be presented by the qualified biologist, prior to working on the proposed project.
BIO-3 <b>Staging + Stockpiling</b>	The City will ensure that all work materials, staging, storage, dispensing, fueling, and equipment maintenance activities are located in upland areas outside of sensitive habitat, and that adequate measures are taken to prevent any potential runoff from entering waters of the U.S. Staging areas will be located within facility footprints or adjacent urban/developed hardscape.

Measure	Description
<b>BIO-4</b> <b>Fencing and Flagging</b>	<p>The City will temporarily fence (with silt barriers) the limits of project impacts (including staging areas and access routes) to prevent additional habitat impacts and prevent the spread of silt from the construction zone into adjacent habitats to be avoided. The limits of weed whipping and other ground disturbing activities, other than grading, may be flagged instead of fenced. Fencing will be installed in a manner that does not impact habitats to be avoided. If work occurs beyond the fenced or flagged limits of impact, all work will cease until the problem has been remedied to the satisfaction of the City. Temporary construction fencing will be removed upon project completion.</p>
<b>BIO-5</b> <b>Trash Removal</b>	<p>Spoils, trash, or any debris would be removed off-site to an approved disposal facility.</p>
<b>BIO-6</b> <b>Prohibition of Plant and Wildlife Collecting</b>	<p>Plant species will not be collected for any reason and no wildlife species, including rattlesnakes, will be collected or harmed except to prevent injury or death to workers.</p>
<b>BIO-7</b> <b>Dust Abatement</b>	<p>The project foreman and biological monitor (See BIO-1 for role of biological monitor) will periodically monitor the work area to ensure that maintenance-related activities do not generate excessive dust.</p>
<b>BIO-8</b> <b>Light and Glare</b>	<p>Maintenance activities will be conducted during normal business hours, and without the use of lighting whenever possible, excepting emergencies. If emergency maintenance activities occur at night, all project lighting (e.g., staging areas, equipment storage sites, roadway) will be directed onto the roadway or maintenance facility footprint and away from sensitive habitat. Light glare shields may also be used to reduce the extent of illumination into adjoining areas.</p>
<b>BIO-9</b> <b>Access</b>	<p>Vehicle traffic will be restricted to existing access roads.</p>
<b>BIO-10</b> <b>Post-Activity Erosion and Sediment Control</b>	<p>Post-maintenance activity erosion and sediment control will be implemented as applicable, including landscape planting and other biotic slope stabilization techniques (e.g., hydroseed and/or hydromulch). Erosion control blankets having plastic mesh with the potential to ensnare amphibians and reptiles will not be used in areas these animals inhabit.</p>
<b>BIO-11</b> <b>Water Diversion/ Dewatering</b>	<p>All surface waters, including ponded waters, will be diverted away from areas undergoing dredging or vegetation removal and/or any other activity that may result in a discharge to the receiving water. When water diversion is necessary, a structural BMP would be implemented to temporarily detain or reroute drainage around the work area based on field conditions, drainage characteristics, seasonal variation, maintenance duration, and practicability of application. The intent of the temporary BMP implementation would be to avoid or minimize water interference in the work area and water quality impacts to downstream receiving waters. When maintenance is completed, the flow diversion structure will be removed as soon as possible in a manner that allows flow to resume and prevent debris or sediment accumulated from returning to the stream.</p> <p>If dewatering is conducted, either a pump will move water to an upland disposal site, or a sediment basin or other structure will be used to collect and treat the water. If applicable, a National Pollutant Discharge Elimination System permit may be required. If not applicable, the water returned to the waterway should be equivalent in nature to pre-activity conditions.</p> <p>Additional water quality measures may arise as conditions of the 401 Water Quality Certification. The City will adhere to these conditions in addition to this avoidance measure.</p>
<b>BIO-12</b> <b>Fire Prevention</b>	<p>Wildfires will be prevented by exercising care when driving and by not parking vehicles where catalytic converters could ignite dry vegetation. In times of high fire hazard, trucks may need to carry water and shovels or fire extinguishers in the field. No smoking or disposal of cigarette butts will take place within vegetated areas.</p>
<b>BIO-13</b> <b>Minimizing Spread of Exotic Species</b>	<p>Tools and equipment will be washed in designated areas prior to entering and exiting work areas, to ensure no plant material is transported on- or off-site.</p> <p>The City will ensure that any planting stock to be brought onto the project site for habitat restoration is first inspected by a qualified pest inspector to ensure it is free of pest species that could invade natural areas, including but not limited to, Argentine ants (<i>Iridomyrmex</i></p>

Measure	Description
	<i>humil</i> ), fire ants ( <i>Solenopsis invicta</i> ) and other insect pests. Any planting stock found to be infested with such pests will not be allowed on the project site or within 300 feet of natural habitats. The stock will be quarantined, treated, or disposed of according to best management principles by qualified experts in a manner that precludes invasions into natural habitats.
<b>Riparian Vegetation &amp; Native Tree Avoidance &amp; Minimization</b>	
BIO-14 Riparian Vegetation Avoidance	Measures will be taken to avoid and minimize impacts to native riparian vegetation to the greatest extent possible. This includes unnecessary or unauthorized trespass by workers and equipment, staging and storage of equipment and materials, refueling activities, and littering or dumping debris in riparian areas.
BIO-15 Native Tree Avoidance	The City will not remove native trees, including but not limited to, willow ( <i>Salix</i> spp.), cottonwood ( <i>Populus</i> spp.), western sycamore ( <i>Platanus racemosa</i> ), and oak ( <i>Quercus</i> sp.). The City may trim these species up to a height of 7 feet, barring oaks and sycamores with a diameter breast-height (DBH) greater than 9.5 inches, which may not be pruned.  Trimming/pruning of native trees will be conducted outside the nesting season (February 15 through September 15), and will only be conducted if the absolute (bird's-eye) percent cover of tree/shrub canopy is not measurably reduced. Cutting of branches greater than 2 inches in diameter shall be done by a certified arborist.
BIO-16 Oak Trees	Oaks require special avoidance. Heavy equipment shall not encroach on the root protection zone (i.e., 50 feet from the drip line) within undeveloped areas, nor will equipment be staged/stockpiled in these areas. A qualified biologist shall flag root protection zones as off-limits at applicable facilities, prior to starting work.
<b>Migratory Bird &amp; Special Status Species Avoidance &amp; Minimization</b>	
BIO-17 Nesting Season Avoidance	Vegetation clearing shall occur outside of the typical breeding season for raptors and migratory birds (February 15 through September 15). However, if this is not possible, then a qualified biologist will conduct a raptor nesting survey prior to construction to determine the presence or absence of nests in the riparian habitat, and the potential need for additional project mitigation measures.
BIO-18 Nest Buffers	To the greatest extent feasible, vegetation clearing, dredging, and other mechanized activities within 500 feet of undeveloped vegetation communities will be conducted outside the breeding season for federally protected migratory and listed bird species. In situations where these types of maintenance activities will occur adjacent to undeveloped vegetation communities during the breeding season (February 15 through September 15), the following measures will be implemented:  <ol style="list-style-type: none"> <li>1. A preconstruction survey for migratory birds shall be performed by a qualified biologist within 3 days prior to any removal of trees, shrubs, or structures on the project site. If no active nests are found, then no further action will be warranted.</li> <li>2. If an active nest is detected on or within 300 feet of the project site (500 feet for raptors), no work shall be conducted within a 300-foot radius (500 feet for raptors) of the detected nest until a biological monitor determines the nest is no longer active.</li> </ol>
BIO-19 State- Listed and Federally Listed Bird Species	For those facilities where state-listed and/or federally listed bird species have potential to occur within the project footprint, a qualified biologist will make three separate visits (on separate days), with the final visit being not more than 3 days prior to the maintenance activity. These three survey visits will supersede the preconstruction surveys required under BIO-14.
BIO-20 Rare Plants	For those facilities where state-listed and/or federally listed plant species have the potential to occur within the project footprint (i.e., San Diego ambrosia), a qualified biologist will perform focused surveys prior to maintenance activities and will flag avoidance areas if the species are detected. If a facility has been surveyed three consecutive times with negative findings, focused surveys will no longer be required.  For other special-status plant species (e.g. oaks, See Bio-16), the biological monitor will flag occurrences immediately prior to starting work, and will ensure avoidance of these resources.

Measure	Description
<b>BIO-21 San Diego Ambrosia</b>	<p>Weed whipping or other non-ground disturbing activities may occur in suitable habitat for San Diego ambrosia if the following measures are implemented:</p> <ol style="list-style-type: none"> <li>a. Conduct activities during the summer, fall, and early winter (i.e., generally from June to December) prior to any significant rain events (0.25 to 0.50 inch), when the soil is hard, and when no vegetative growth is visible. The growing season varies from year to year and will need to be determined by a qualified biologist and concurred with by the USFWS.</li> <li>b. Avoid the application of herbicide in areas where listed plant species occur (unless concurred with by the Agencies for specific problem plants such as artichoke thistle). If no listed plant species are present, herbicide application may occur under the direction of a licensed applicator and under the supervision of a qualified biologist.</li> <li>c. Use a machine mower only if soil is not wet or muddy.</li> <li>d. Remove weed thatch carefully so that soil is not disturbed (i.e., avoid disturbing the seed bank or corms).</li> </ol>
<b>BIO-22 Bat Species</b>	<p>For those facilities where special-status bat species have potential to occur within the project footprint, a qualified biologist will survey for roosting bats concurrently with the preconstruction surveys required under BIO-14. The same conditions identified in BIO-14 will apply to roosting bats.</p>
<b>BIO-23 Complete Avoidance of Special-Status Species</b>	<p>The City will strive for 100 percent avoidance of direct impacts to special-status plant and wildlife species and will use biological monitors and preconstruction surveys to ensure avoidance (per BIO-1, BIO-16, BIO-17, BIO-18, BIO-19, and BIO-20, BIO-21).</p>
<b>Biological Resources Compensatory Mitigation</b>	
<b>BIO-24 Compensatory Mitigation</b>	<p>All potentially significant, unavoidable project impacts will occur within habitats that are also potential jurisdictional waters. Compensatory mitigation for jurisdictional waters, as described below, will reduce potentially significant impacts to natural habitats to a level below significance. Since the project will avoid potentially significant impacts to special-status species and wildlife migration, no mitigation is necessary above and beyond the habitat-based compensatory mitigation for jurisdictional waters described below.</p> <p>The proposed project necessitates work within and around jurisdictional waters. As demonstrated in the previous section, the City has made great efforts to minimize impacts to the greatest extent practicable, while also maintaining the objectives of the project; however unavoidable impacts to potential jurisdictional waters remain a part of the proposed project.</p> <p>These unavoidable impacts will be mitigated to a level below significance through a combination of off-site restoration/creation and/or enhancement. The City is proposing to mitigate impacts within the City owned and managed Kit Carson Park (or other approved location, as determined by the USACE, CDFG, and RWQCB). A conceptual mitigation plan will be developed in coordination with USACE, CDFG, and RWQCB, and a final mitigation plan will be approved as a condition of the 404, 401, and 1602 authorizations, respectively. Final mitigation ratios will be generally consistent with the guidelines of relevant regional conservation plans, including the NCMSCP and Escondido Subarea MHCP.</p> <p>Mitigation ratios will be based on resource tiers, as defined below. The following mitigation ratios, proposed mitigation types, and impact thresholds are subject to agency approval and may change prior to final permit authorization.</p>

Measure	Description									
<b>Proposed Resource Tiers and Impact Thresholds for the Escondido Channel Maintenance Project</b>										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th data-bbox="496 289 626 344">Resource Tier</th> <th data-bbox="626 289 967 344">Description</th> <th data-bbox="967 289 1214 344">Proposed Mitigation</th> <th data-bbox="1214 289 1451 344">Proposed RGP Impact Threshold</th> </tr> </thead> </table>					Resource Tier	Description	Proposed Mitigation	Proposed RGP Impact Threshold		
Resource Tier	Description	Proposed Mitigation	Proposed RGP Impact Threshold							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td data-bbox="496 348 626 592" style="text-align: center; vertical-align: middle;"><b>Tier I</b></td> <td data-bbox="626 348 967 592">Includes native habitats (i.e., Category A vegetation communities) growing within earthen facilities or concrete facilities with greater than 6 inches of deposited sediment. This includes wetland waters and riparian extent.</td> <td data-bbox="967 348 1214 592">2:1 through at least 1:1 creation/restoration, plus additional enhancement as needed to achieve overall 2:1 ratio.</td> <td data-bbox="1214 348 1451 592">Up to 0.1 acre per facility (understory only, with minor trimming of native trees/shrubs).</td> </tr> </table>					<b>Tier I</b>	Includes native habitats (i.e., Category A vegetation communities) growing within earthen facilities or concrete facilities with greater than 6 inches of deposited sediment. This includes wetland waters and riparian extent.	2:1 through at least 1:1 creation/restoration, plus additional enhancement as needed to achieve overall 2:1 ratio.	Up to 0.1 acre per facility (understory only, with minor trimming of native trees/shrubs).		
<b>Tier I</b>	Includes native habitats (i.e., Category A vegetation communities) growing within earthen facilities or concrete facilities with greater than 6 inches of deposited sediment. This includes wetland waters and riparian extent.	2:1 through at least 1:1 creation/restoration, plus additional enhancement as needed to achieve overall 2:1 ratio.	Up to 0.1 acre per facility (understory only, with minor trimming of native trees/shrubs).							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td data-bbox="496 600 626 945" style="text-align: center; vertical-align: middle;"><b>Tier III</b></td> <td data-bbox="626 600 967 945">Includes vegetated areas (i.e., Category A and Category B vegetation communities) occurring within concrete channels (less than 6 inches of sediment). These are isolated, low-quality habitats that are not likely to persist (e.g., flow associated with a storm event could easily blow out these habitat "islands").</td> <td data-bbox="967 600 1214 945" style="text-align: center; vertical-align: middle;">No mitigation</td> <td data-bbox="1214 600 1451 945" style="text-align: center; vertical-align: middle;">Up to 0.5 acre per facility.</td> </tr> </table>					<b>Tier III</b>	Includes vegetated areas (i.e., Category A and Category B vegetation communities) occurring within concrete channels (less than 6 inches of sediment). These are isolated, low-quality habitats that are not likely to persist (e.g., flow associated with a storm event could easily blow out these habitat "islands").	No mitigation	Up to 0.5 acre per facility.		
<b>Tier III</b>	Includes vegetated areas (i.e., Category A and Category B vegetation communities) occurring within concrete channels (less than 6 inches of sediment). These are isolated, low-quality habitats that are not likely to persist (e.g., flow associated with a storm event could easily blow out these habitat "islands").	No mitigation	Up to 0.5 acre per facility.							
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td data-bbox="496 957 626 1302" style="text-align: center; vertical-align: middle;"><b>Tier IV</b></td> <td data-bbox="626 957 967 1302">Includes unvegetated areas (i.e., Category C) occurring within concrete channels.</td> <td data-bbox="967 957 1214 1302" style="text-align: center; vertical-align: middle;">No mitigation</td> <td data-bbox="1214 957 1451 1302">Unlimited. Assuming incidental fallback only, dredge of concrete-lined facilities is unregulated by USACE. Applicable Waste Discharge Requirement measures from RWQCB will be adhered to.</td> </tr> </table>					<b>Tier IV</b>	Includes unvegetated areas (i.e., Category C) occurring within concrete channels.	No mitigation	Unlimited. Assuming incidental fallback only, dredge of concrete-lined facilities is unregulated by USACE. Applicable Waste Discharge Requirement measures from RWQCB will be adhered to.		
<b>Tier IV</b>	Includes unvegetated areas (i.e., Category C) occurring within concrete channels.	No mitigation	Unlimited. Assuming incidental fallback only, dredge of concrete-lined facilities is unregulated by USACE. Applicable Waste Discharge Requirement measures from RWQCB will be adhered to.							
<b>Proposed Vegetation Categories for Determining Resource Tiers</b>										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th data-bbox="487 1398 639 1436">Category</th> <th data-bbox="639 1398 980 1436">Description</th> <th data-bbox="980 1398 1451 1436">Community</th> </tr> </thead> <tbody> <tr> <td data-bbox="487 1436 639 1866" style="text-align: center; vertical-align: middle;"><b>A</b></td> <td data-bbox="639 1436 980 1866" style="text-align: center; vertical-align: middle;">Native vegetation communities</td> <td data-bbox="980 1436 1451 1866"> <ul style="list-style-type: none"> <li>Alkali Seep</li> <li>Cismontane Alkali Marsh</li> <li>Coast Live Oak Woodland</li> <li>Coastal and Valley Freshwater Marsh</li> <li>Diegan Coastal Sage Scrub</li> <li>Engelmann Oak Woodland</li> <li>Mulefat Scrub</li> <li>Southern Arroyo Willow Riparian Forest</li> <li>Southern Cottonwood-Willow Riparian Forest</li> <li>Southern Riparian Scrub</li> <li>Southern Willow Scrub</li> </ul> </td> </tr> </tbody> </table>					Category	Description	Community	<b>A</b>	Native vegetation communities	<ul style="list-style-type: none"> <li>Alkali Seep</li> <li>Cismontane Alkali Marsh</li> <li>Coast Live Oak Woodland</li> <li>Coastal and Valley Freshwater Marsh</li> <li>Diegan Coastal Sage Scrub</li> <li>Engelmann Oak Woodland</li> <li>Mulefat Scrub</li> <li>Southern Arroyo Willow Riparian Forest</li> <li>Southern Cottonwood-Willow Riparian Forest</li> <li>Southern Riparian Scrub</li> <li>Southern Willow Scrub</li> </ul>
Category	Description	Community								
<b>A</b>	Native vegetation communities	<ul style="list-style-type: none"> <li>Alkali Seep</li> <li>Cismontane Alkali Marsh</li> <li>Coast Live Oak Woodland</li> <li>Coastal and Valley Freshwater Marsh</li> <li>Diegan Coastal Sage Scrub</li> <li>Engelmann Oak Woodland</li> <li>Mulefat Scrub</li> <li>Southern Arroyo Willow Riparian Forest</li> <li>Southern Cottonwood-Willow Riparian Forest</li> <li>Southern Riparian Scrub</li> <li>Southern Willow Scrub</li> </ul>								

Measure	Description		
	B	Disturbed wetland	Disturbed Wetland
			Emergent Wetland
			Nonnative Grassland
			Eucalyptus Woodland
	C	Disturbed, developed, or unvegetated land covers	Disturbed Habitat
			Open Water
			Unvegetated Channel
Urban/Developed			

## 2.2 CULTURAL RESOURCES

The following section provides a brief discussion of the cultural resources within the City of Escondido, including; a description of existing conditions, an outline of significance criteria and impact analysis of the potential effects the project could have on eligible or significant cultural resources, and proposed mitigation measures for the protection of these resources.

### 2.2.1 Existing Conditions

#### *Cultural Setting*

The sequence of human occupation of coastal southern California begins in the Paleoindian period (11,500-8500 B.P.), a time in which adaptations were formerly believed to be focused on the hunting of large game, but are now recognized to represent more generalized hunting and gathering, with considerable emphasis on marine resources (Erlandson and Colten 1991; Jones 1991). The following period, the Archaic (8500-1300 B.P.) is traditionally seen as encompassing both a coastal and an inland focus, with the coastal Archaic represented by the shell middens of the La Jolla complex and the inland Archaic represented by the Pauma complex. The Late Prehistoric period (1300-200 B.P.) is marked by the appearance of small projectile points indicating the use of the bow and arrow, the common use of ceramics, and the replacement of inhumations with cremations.

During the Spanish period (1769-1821), the San Diego region was subject to exploration and the establishment of permanent Spanish settlements. San Diego Presidio and the missions at San Diego and San Luis Rey were built and occupied during this period. Water has always been an important resource in the semiarid San Diego region and water projects began in the Spanish period with the construction of Padre (Mission) Dam and its appurtenant 6-mile flume. Agriculture and livestock grazing formed the basis of the economy. Aboriginal lifeways were increasingly modified, as more and more of the local natives came under the influence of the missions.

Many Spanish practices survived into the early part of the Mexican period (1821-1848). The secularization of the missions in 1834 brought notable changes to the land ownership in the region. Large tracts of land were granted to families and individuals. Cattle ranching was a major economic focus.

The American period (1848-present) began when Mexico ceded California to the United States as part of the Treaty of Guadalupe Hidalgo. While some of the previous land claims were validated, much of the land that was once part of the ranchos became available for settlement. Population movement into

California was an outgrowth of several events, including the discovery of gold, the conclusion of the Civil War, the passage of the Homestead Act, the construction of connecting railways, as well as both World War I and II.

#### *History of the Project Area*

After the arrival of Spanish explorers, the area that is now Escondido became part of the Spanish mission system. In 1843, the area was part of a rancho (El Rincon del Diablo) granted to Juan Bautista Alvarado, and in 1860, it was acquired by the Wolfskill brothers who planted vineyards and raised sheep (McGrew 1988). In 1883, much of the area was purchased by the Escondido Company, a group of Stockton speculators that subdivided the property three years later. In 1886, a 12,000-acre tract was purchased by a group of investors that formed the Escondido Land and Town Company, which platted the City of Escondido and lobbied for construction of a railroad connection to the coast. Aggressive land promotions during the latter half of the 1880s drew many people to the area, and although growth had slowed considerably during the 1890s, settlers continued to arrive in the back country, establishing small farms and ranches throughout the area. This migration took a sharp decline with the onset of the Depression during the 1930s, as many of the rural farmers abandoned their farms and moved to urban areas. The number of people living on farms fell 63 percent during the 1930s, while San Diego County's overall population increased by 38 percent (Van Wormer and Walter 1991). Nevertheless, farming and ranching continued to be the major focus of Escondido's economy until the 1960s.

#### *Cultural Resources within the Project Area*

Over the last decade, AECOM has conducted several cultural resources investigations near the project area. These investigations consisted of records searches, field surveys, and test excavations, the result of which, reveal that the City of Escondido contains both historical and archaeological resources.

Proposed activities taking place at the 63 maintenance sites would primarily involve removal of silt and vegetation from channels, basins, inlets and outlets. In most cases, this removal would be done with mechanized equipment (e.g., excavator or backhoe). In some locations, work would be restricted to use of hand tools (mechanical and manual). At 30 of the 63 maintenance sites, the proposed work would occur within channels that are lined with concrete and removal of silt and vegetation would not cause ground disturbance; therefore, no significant impacts to historic resources are expected. At the remaining 33 maintenance sites, the proposed work would occur within 26 earthen and seven earthen/concrete lined facilities where mechanical dredging and cleaning are expected to cause ground disturbance of an average of one foot deep. In some of those locations, there would also be road clearing which may disturb previously undisturbed areas. Work at these 33 maintenance sites and associated roads has the potential to cause impacts to significant historic resources. The Area of Potential Effects (APE) includes the 33 maintenance sites that are within earthen-lined facilities and associated roads that could be impacted by project activities.

#### *Record Search*

A cultural resources records search of the 33 maintenance sites was conducted on July 31, 2012 by the South Coastal Information Center (SCIC). A total of 101 previous investigations have been conducted within a 1/4-mile radius of the current project area. Of these, 57 are survey investigations, 23 are evaluation/assessment studies, six are Environmental Impact Reports, five are historical resources.

studies, four are data recovery efforts, three are testing reports, and three are monitoring reports. Twenty-seven investigations overlap with the project area and consist of 12 evaluation/assessment studies, 11 survey investigations, three environmental impact reports, and one data recovery effort. Thirty-four cultural resources have been previously recorded within a 1/4-mile radius of the project area, including: 11 bedrock milling stations, six lithic scatters, six historic residences or structures, three temporary camps, two historic irrigation resources, two multi-component sites, one habitation site, one shell scatter, one isolate, and one resources that has no description. The record search also indicated that two previously recorded sites are located within the project area, CA-SDI-5210B and P-37-030889. However, upon further research, CA-SDI-5210B was determined to be located in the buffer only.

Site P-37-030889 is the Vista Irrigation District Bench Flumes previously recorded by Van Wormer in 2009. The bench flumes were built as part of the water distribution system efforts of the 1920s that brought remarkable growth within the district. The flumes were constructed as above-ground gunite canals with a gunite domed cover, connected by steel and concrete pipe siphons (Robbins-Wade, Giletti and Van Wormer 2009). For the most part, the siphons are underground. The gunite bench flumes and above ground siphon segments have been evaluated as potentially eligible for the NRHP at a local level of significance as well as for designation on the California Register of Historical Resources (CRHR) (Robbins-Wade, Giletti and Van Wormer 2009). The bench flumes and siphons qualify for listing because they have been the main conduit for the Vista Irrigation District since the mid 1920s, assisting in the development of the area of over 85 years (Criteria A for NRHP, Criteria 1 for CRHR). The bench flumes also qualify for listing due to their unique design and construction technique (Criteria C for NRHP, Criteria 3 for CRHR).

#### *Field Survey*

AECOM conducted a pedestrian survey to identify cultural resources in the project area. The field efforts did not identify any cultural resources, or any surface evidence of the one previously recorded site (P-37-030889) within the project area. Therefore, for areas that were surveyed (a total of 15 facility locations), no known cultural resources will be affected by this project. Several of the facilities however, were inaccessible, and others could not be adequately investigated due to poor visibility during the survey. These 18 facility locations (E-02, E-03, E-05, E-06, E-12, E-17, E-18, E-19, E-20, E-21, E-29, E-30, E-40, H-08, H-09, H-10, H-11, and SM-03) have potential for archaeological resources to be present within these areas, and monitoring will be required for all maintenance activities proposed for these facilities. A Monitoring and Discovery Plan has been prepared to outline monitoring requirements and protocols in the event of an inadvertent discovery.

## **2.2.2 Significance Criteria and Impact Analysis**

### *Significance Criteria*

Under CEQA, the lead agency is responsible for determining whether a project may have a significant effect on historical and archaeological resources. Section 21083.2 of the *Public Resources Code* states that if the lead agency determines that the project may have a significant effect on "unique" archaeological resources, an environmental impact report shall address these resources. A unique archaeological resource is an artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets one of the following criteria:

1. Associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States.
2. Associated with the lives of persons important to local, California or national history.
3. Embodies the distinctive characteristics of a type, period, region or method of construction or represents the work of a master or possesses high artistic values.
4. Has yielded, or has the potential to yield, information important to the prehistory or history of the local area, California or the nation.

*The effects of a project on cultural resources are considered to be significant if the proposed project would:*

- a. *Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5;*

**Less Than Significant Impact With Mitigation Incorporated** – There is one potentially significant cultural resource located within the project area; however, it will not be affected by the proposed maintenance activities. Although no known cultural resources will be adversely affected by the project, 18 maintenance sites were not adequately surveyed due to access issues or poor visibility from dense vegetation. These facility locations (E-02, E-03, E-05, E-06, E-12, E-17, E-18, E-19, E-20, E-21, E-29, E-30, E-40, H-08, H-09, H-10, H-11, and SM-03) have the potential for resources to be present. Any adverse impacts to unknown archaeological resources will be mitigated to a less than significant level with the use of mitigation measures CR-2, CR-3, or CR-4 (see Table 10, Section 2.2.3) and the Monitoring and Discovery Plan.

- b. *Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5;*

**Less Than Significant Impact With Mitigation Incorporated** – There is one potentially significant cultural resource located within the project area; however, it will not be affected by the proposed maintenance activities. Although no known cultural resources will be adversely affected by the project, several facilities were not adequately surveyed due to access issues or poor visibility from dense vegetation, as described above. These facility locations have the potential for resources to be present. Any adverse impacts to unknown archaeological resources will be mitigated to a less than significant level with the use of mitigation measures CR-2, CR-3, or CR-4 (see Table 10, Section 2.2.3) and the Monitoring and Discovery Plan.

- c. *Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;*

**Less Than Significant Impact With Mitigation Incorporated** – No paleontological resources have been identified within the City of Escondido (Demere 2007) and of the 63 maintenance sites, 30 are concrete-lined and do not have the potential for discovery of paleontological resources. Of the 33 maintenance sites that are within earthen-lined facilities, 22 are located on soils that are not expected to contain paleontological resources. However, there are Jurassic marine terraces present at the remaining 11

earthen-lined facilities, and these locations have the potential to contain paleontological resources. These 11 locations include the following Facility Numbers: E-01 through E-03, E-19 through E-21, H-13, SM-02 and SM-03. Adverse impacts to undiscovered paleontological resources can be mitigated to a less than significant level with incorporation of mitigation measure CR-5 and/or CR-6.

d. *Disturb any human remains, including those interred outside of formal cemeteries.*

**Less Than Significant Impact With Mitigation Incorporated** – The SCIC record search and field survey of the 33 maintenance sites indicated that there are no human remains present in the project area. As such, there would be no impact to known human remains. In the event of an inadvertent discovery of human remains, mitigation measure CR-7 shall be followed.

### 2.2.3 Mitigation Measures for Cultural Resources

**Table 10: Mitigation Measures for Cultural Resources**

Measure	Description
<b>Mitigation</b>	
<b>Cultural Resources</b>	
CR-1 Archaeological Monitor	An archaeological monitor will be present during the first maintenance activity that involves ground disturbing activities at the 18 earthen facilities (E-02, E-03, E-05, E-06, E-12, E-17, E-18, E-19, E-20, E-21, E-29, E-30, E-40, H-08, H-09, H-10, H-11, and SM-03). Unanticipated archaeological discoveries made during monitoring will be addressed following procedures identified in the Monitoring and Discovery Plan. Mitigation measures CR-3 and/or CR-4 may be implemented if appropriate.
CR-2 Avoidance of Archaeological Resources	If an unanticipated archaeological resource is discovered during monitoring, if feasible, it will be avoided.
CR-3 Testing of Archaeological Resources	If an unanticipated archaeological discovery is potentially significant and cannot be avoided, an evaluation plan that identifies research topics and procedures for evaluation of the resource will be prepared. The evaluation plan will be a stand-alone document and will be implemented prior to ground-disturbing maintenance activities.
CR-4 Data Recovery of Archaeological Resources	If an unanticipated archaeological discovery is significant and cannot be avoided, a treatment plan will outline the procedures for conducting data recovery. The treatment plan will be a stand-alone document and will be implemented prior to any additional ground-disturbing maintenance activities.
CR-5 Paleontological Monitor	A paleontological monitor will be present during the first maintenance activity that involves ground disturbance of previously undisturbed deposits at 11 facilities (E-01 through E-03, E-19 through E-21, H-13, SM-02 and SM-03).  If a paleontological resource is significant or potentially significant, mitigation measure CR-6 will be followed.
CR-6 Paleontological Data Recovery	If a significant or potentially significant paleontological resource cannot be avoided, a treatment plan will outline procedures for data recovery. The treatment plan will be a stand-alone document and will be implemented prior to any additional ground-disturbing maintenance activities.
CR-7 Treatment of Human Remains	If human remains are inadvertently discovered, they shall be treated according to appropriate State (Public Resources Code Section 5097.98, 5097.99, 5097.991, 7050.5, 8010-8011 and AB 2641); or on federal land NAGPRA provisions, as outlined in the Monitoring and Discovery Plan.

## 2.3. HYDROLOGY AND WATER QUALITY

### 2.3.1 Existing Conditions

The following discussion briefly describes the watershed characteristics specific to the project study area, including the beneficial uses of surface water and groundwater, and impaired waters.

#### *Hydrologic Setting*

The project study area falls primarily within two major watersheds, or HUs: Carlsbad and San Dieguito. Approximately 75 percent of Escondido is located within the Carlsbad Watershed. The majority of the City's northern jurisdiction drains to Escondido Creek within the Escondido Creek HA. Reidy Creek, located mostly within the City, is a main tributary to Escondido Creek. Runoff from a very small portion of the City drains into the San Marcos Creek HA which ultimately flows to, and is contained in, Lake San Marcos. The Carlsbad Watershed drains to several coastal lagoons, including San Elijo Lagoon. Escondido Creek is tributary to San Elijo Lagoon. San Elijo Lagoon is listed as being impaired for eutrophic conditions, indicator bacteria, and sedimentation and/or siltation. Escondido Creek leaves the City's boundaries approximately 14 miles upstream of San Elijo Lagoon.

The southern part of Escondido is located within the San Dieguito Watershed. The major receiving water within the San Dieguito Watershed is the San Dieguito River. For the most part, the San Dieguito River is an ephemeral stream that flows into Lake Hodges during extreme wet weather. Additionally, except during extreme wet weather events, the water contained behind Lake Hodges Dam is rarely released and is allowed to proceed westerly to San Dieguito Lagoon. The majority of the City's area within this watershed drains to Felicita and Kit Carson creeks and ultimately Lake Hodges.

Table 11 below identifies the basins that encompass the project study area. The majority of the proposed maintenance sites (i.e., 47 sites or 75 percent) occur in the Escondido Creek HA of the Carlsbad HU, with 12 sites (19 percent) occurring in the Hodges HA of the San Dieguito HU and four sites (6 percent) occurring in the San Marcos HA of the Carlsbad HU.

**Table 11: Watersheds in Project Study Area**

Basin ID	Hydrologic Subarea	Hydrologic Area	Hydrologic Unit
904.62	Escondido	Escondido Creek	Carlsbad
904.52	Richland	San Marcos	Carlsbad
905.21	Del Dios	Hodges	San Dieguito

Figure 3 depicts the project sites in relation to the watersheds and surface waters within the City's jurisdiction.

#### *Water Quality*

Tables 12 and 13 list the beneficial uses of surface waters and groundwater within these basins as set forth in the Water Quality Control Plan for the San Diego Region (RWQCB 2004; Basin Plan) are as follows:

**Table 12: Beneficial Uses for Inland Surface Waters**

Water Body	Beneficial Use
<b>Carlsbad Hydrologic Unit</b>	
Escondido Creek (904.62)	MUN, AGR, REC1, REC2, WARM, COLD, WILD
Reidy Canyon Creek (904.62)	MUN, AGR, REC1, REC2, WARM, COLD, WILD
San Marcos Creek (904.52)	AGR, REC1, REC2, WARM, WILD
<b>San Dieguito Hydrologic Unit</b>	
San Dieguito River (905.21)	MUN, AGR, IND, PROC, REC1, REC2, WARM, WILD, RARE
Lake Hodges (905.21)	MUN, AGR, IND, PROC, REC1*, REC2, WARM, COLD, WILD, RARE
Kit Carson Creek (905.21)	MUN, AGR, IND, PROC, REC1, REC2, WARM, RARE

\*Fishing from shore or boat permitted, but other water contact recreational (REC-1) uses are prohibited.

**Table 13: Beneficial Uses for Groundwater**

Basin	Beneficial Use
<b>Carlsbad Hydrologic Unit</b>	
Richland HSA (904.52)	MUN, AGR, IND
Escondido HSA (904.62)	MUN, AGR, IND
<b>San Dieguito Hydrologic Unit</b>	
Hodges HA (905.20)	MUN, AGR, IND

Beneficial use designations are defined below. Additional detail is provided within the Basin Plan.

- MUN – Municipal and domestic supply
- AGR – Agricultural supply
- IND – Industrial service supply
- PROC – Industrial process supply
- REC1 – Contact water recreation
- REC2 – Non-contact water recreation
- WARM – Warm freshwater habitat
- COLD – Cold freshwater habitat
- WILD – Wildlife habitat
- RARE – Rare, threatened or endangered species

Receiving waters within the project study area that are listed as impaired on the 2010 CWA §303(d) List of Water Quality Limited Segments (SWRCB 2010) are provided in Table 14.

**Table 14: CWA 303(d) List of Water Quality Limited Segments within the City of Escondido**

Water Body	Impairment(s)
<b>Carlsbad Hydrologic Unit</b>	
Escondido Creek	DDT (Dichlorodiphenyltrichloroethane), <i>Enterococcus</i> , Fecal Coliform, Manganese, Phosphate, Selenium, Sulfates, Total Dissolved Solids, Total Nitrogen as N, and Toxicity
San Marcos Creek	Phosphorus, Sediment Toxicity and Selenium
<b>San Dieguito Hydrologic Unit</b>	
Kit Carson Creek	Pentachlorophenol (PCP) and Total Dissolved Solids
Felicita Creek	Aluminum and Total Dissolved Solids
Lake Hodges	Color, Manganese, Mercury, Nitrogen, Phosphorus, Turbidity and pH

Source: SWRCB 2010

### 2.3.2 Significance Criteria and Impact Analysis

*The effects of a project on hydrology and water quality are considered to be significant if the proposed project would:*

- a. *Violate any water quality standards or waste discharge requirements;*

**Less Than Significant Impact With Mitigation Incorporated** – The proposed project has the potential to discharge pollutants to receiving waters through the implementation of various storm drain maintenance activities. Potential pollutants include (1) sediment, siltation, and turbidity from ground-disturbing activities, vegetation removal, and/or dredging of concrete channels, (2) re-entrainment of pollutants in accumulated sediment that is disturbed/removed, and (3) pollutants from heavy equipment, which may consist of oil and grease, heavy metals, and various petroleum products. Table 15 lists specific water quality protection avoidance and minimization measures that would be implemented to reduce otherwise potentially significant impacts to a level below significance. Workers would be trained in incorporating appropriate and effective water protection measures (WQ-1). The City would minimize the area of land disturbance and preserve existing vegetation to the extent practical (WQ-2 and WQ-3). Earth-disturbing activities would be avoided during the wet season to prevent exposure of unprotected areas to rain (WQ-4). A combination of erosion and sediment control techniques would be implemented during and after maintenance activities to ensure waters are not degraded through sedimentation (WQ-5, WQ-6, WQ-7, and WQ-20). As necessary, runoff would be captured on-site (WQ-8). Land disturbance of 1 acre or greater would be conducted in accordance with the provisions of Order Number 2009-0009-DWQ [as amended by Order No. 2010-0014-DWQ], including development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) (WQ-20). Vehicles and equipment would be operated in a manner to prevent degradation of water quality (WQ-10, WQ-13, and WQ-18). Equipment, staging, stockpiling, and refueling would be located in upland areas away from receiving waters, and project activities would be limited to the project footprint and surrounding developed access routes (WQ-13); Trash would be disposed of properly to avoid discharge to receiving waters (WQ-14). Water diversion or dewatering would be done in a manner to protect water quality (WQ-15). Materials would be handled to prevent inadvertent discharge to receiving waters (WQ-12, WQ-17, and WQ-19). Minimization and avoidance measures for water quality protection (would be implemented to adequately control the potential discharge of pollutants during maintenance activities to a less than significant level. Due to the nature of the accumulated sediment/vegetation that would be proposed for removal (upgradient erosion of natural areas and roadway sediment), hazardous pollutant levels within the sediment would not be expected.

- b. *Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?*

**Less than Significant Impact** – The proposed project involves the routine removal of vegetation and/or sediment/silt from various storm drain facilities (constructed and natural) for the proper functioning of the storm drain system. The project does not propose the withdrawal of groundwater or interfere with groundwater recharge in such a manner that would affect the groundwater table level, and project activities would not cause any groundwater resource diversion to or from the existing watershed. In the

event dredging operations associated with the project encounter groundwater, compliance with RWQCB Order No. 2001-96, "General Waste Discharge Requirements for Groundwater Extraction" (WQ-16) would be required.

- c. *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river in a manner which would result in substantial/increased erosion or siltation on- or off-site;*

**No Impact** – The project serves to increase storm water conveyance capacity within the limits of the original design. Proposed activities would not substantially alter the existing drainage pattern of the sites or areas. For proposed maintenance activities within existing drainages, implementation of avoidance and minimization measures would reduce the potential for erosion or siltation impacts to a less than significant level.

- d. *Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;*

**No Impact** – The proposed project does not include activities that would alter the existing drainage pattern of the site or area in a manner that would result in substantial increase in the rate or amount of surface runoff. The proposed project purpose is to improve runoff conveyance and minimize flooding potential.

- e. *Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;*

**No Impact** – The project serves to increase storm water conveyance capacity within the limits of the original design. Proposed improvements would not create or contribute runoff water to existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

- f. *Otherwise substantially degrade water quality;*

**No Impact** – The project does not include activities that would otherwise substantially degrade water quality.

- g. *Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;*

**No Impact** – The project does not propose to construct any housing and would not alter the flood hazard area.

- h. *Place project within a 100-year flood hazard area structures which would impede or redirect flood flows;*

**No Impact** – The project does not propose to construct structures that would impede or redirect flows within a 100-year flood hazard area.

- i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or,

**No Impact** – The project does not propose to construct a levee or dam and would not otherwise expose people or structures to a significant risk of flooding.

- j. Inundate the site by seiche, tsunami, or mudflow.

**No Impact** – The project does not include activities that would increase the risk of inundation by seiche, tsunami, or mudflow.

*Additional Information*

Project activities that occur within or in the vicinity of surface waters have the potential to discharge pollutants resulting in impacts to surface water quality objectives and/or beneficial uses. As noted above, no impacts to groundwater resources would be expected. Beneficial uses associated with groundwater and surface waters within the City are provided in Tables 12 and 13. Implementation of the avoidance and minimization measures for maintenance activities as specified within Table 15 would reduce water quality impacts to a less than significant level.

Project activities would occur in areas tributary to receiving waters that are listed as impaired on the 2010 CWA Section 303(d) list of water quality limited segments (Table 14). Although several existing impairments would not be affected by proposed project activities, nutrients within accumulated sediment/vegetation could potentially impact receiving waters (Escondido and San Marcos creeks and Lake Hodges), as well as potential total dissolved solids additions (Escondido Creek, Kit Carson Creek, and Felicita Creek), and changes in color/turbidity (Lake Hodges).

Implementation of avoidance and minimization measures for erosion, sediment, and runoff control (WQ-5, WQ-6, WQ-7, WQ-9, and WQ-20) would reduce potential water quality impacts to a less than significant level.

**2.3.3 Mitigation Measures for Hydrology and Water Quality**

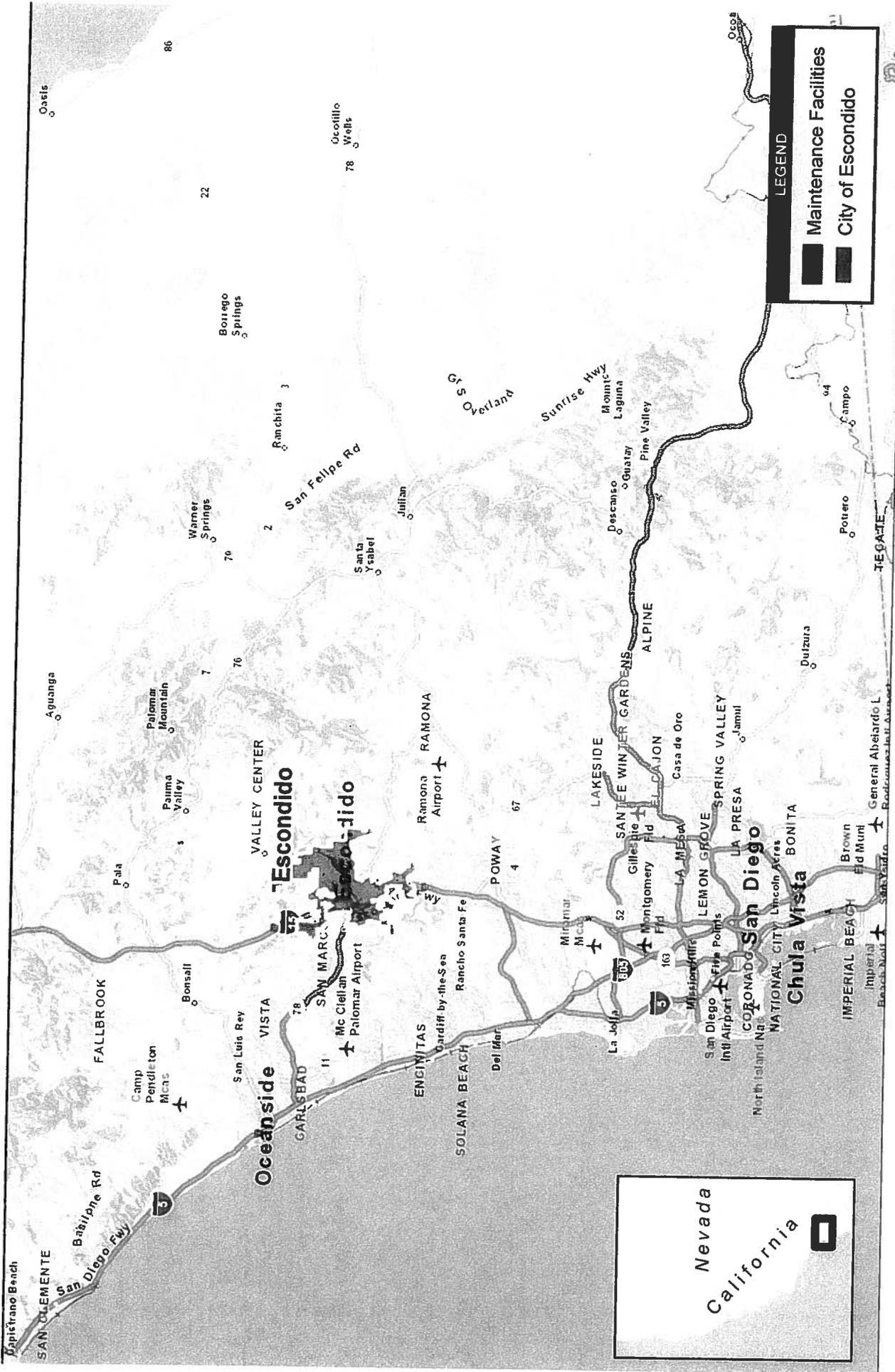
The City has made substantial efforts to avoid and minimize impacts. The City has incorporated numerous avoidance and minimization measures into the project. These measures are identified in Table 15 and would help prevent and reduce potential for impacts to hydrology and water quality. With implementation of these measures, the impacts of proposed project on hydrology and water quality would be less than significant.

**Table 15: Mitigation Measures for Hydrology and Water Quality**

Measure	Description
<b>Avoidance and Minimization Measures</b>	
WQ-1 <b>Worker Awareness</b>	Prior to the start of the project, and annually thereafter, the City will educate all personnel on these avoidance and mitigation measures and other project best management practices (BMPs).
WQ-2 <b>Minimization of Disturbance</b>	The City will ensure that activities and land disturbance are the minimum necessary to (1) remove sediment and debris for the proper functioning of the storm water conveyance system and (2) prevent stagnant and ponding water in areas that have

Measure	Description
	<p>been demonstrated to support mosquito breeding.</p> <p>Where vegetation removal is necessary, the removal of native trees will be restricted in accordance with BIO-15.</p>
<p>WQ-3 Preservation of Existing Vegetation</p>	<p>The City will preserve existing vegetation to the extent practicable and ensure implementation of BIO-14, riparian vegetation avoidance and BIO-14, native tree avoidance.</p>
<p>WQ-4 Scheduling of Maintenance Activities</p>	<p>Maintenance activities will be scheduled to avoid or minimize earth disturbance during the wet season to the maximum extent practicable.</p>
<p>WQ-5 Erosion and Sediment Control</p>	<p>Maintenance activities will include a combination of BMPs for soil erosion and sediment control depending on site conditions, which can include:</p> <p>Erosion control/slope stabilization/bank protection</p> <ul style="list-style-type: none"> <li>• erosion control blankets</li> <li>• soil stabilizers</li> <li>• organic mulch, such as wood chips and vegetation</li> <li>• riprap</li> </ul> <p>Temporary sediment controls:</p> <ul style="list-style-type: none"> <li>• silt fence</li> <li>• sediment/desilting basins</li> <li>• sediment traps</li> <li>• fiber rolls</li> <li>• gravel bag berm/barrier/dam</li> <li>• straw bale barrier</li> <li>• waterbag dams</li> <li>• filters/filter bags</li> </ul>
<p>WQ-6 Inspection of Erosion and Sediment Control</p>	<p>All erosion and sediment control measures will be inspected/maintained to ensure proper integrity and function during the duration of maintenance activities. All post-activity stabilization and structural controls would be inspected per project permits (e.g., monthly or after any significant storm event) for the duration of the maintenance activities and would be repaired or maintained for optimum performance.</p>
<p>WQ-7 Channel Alteration</p>	<p>If a stream channel, gradient, or lake margin have been temporarily altered during maintenance activities, the City will return the area to original design specifications or as closely as possible to pre-project conditions without creating a possible future bank erosion problem. Post-activity bank stabilization techniques (sediment and erosion control) will be implemented to further protect against bank erosion.</p>
<p>WQ-8 Runoff Control</p>	<p>During dredging activities, the City will capture and retain on-site runoff by creating perimeter ditches, trenches, siltation ponds, or similar depressions.</p> <p>Polyacrylamides or other suitably pervious hardscaping/soil stabilization techniques will be used to the maximum extent practicable.</p>
<p>WQ-9 Site Access Management</p>	<p>The City will ensure that access routes to maintenance areas are selected and designed to minimize impacts to receiving waters, in particular the discharge of identified pollutants to an already impaired water body.</p> <p>Soil-tracking BMPs will be implemented to limit off-site transport of sediment from vehicles by implementing measures and site access points such as metal corrugated shaker plates, gravel strips, and/or wheel-washing sites.</p>
<p>WQ-10 Vehicle/Equipment Operation</p>	<p>The City will not operate equipment or vehicles in ponded or flowing areas except as otherwise addressed in any of the project's applicable regulatory permits.</p> <p>If maintenance activities require moving equipment across a flowing stream, the City will implement/install measures to prevent an increase to stream turbidity.</p>
<p>WQ-11 CWA Compliance</p>	<p>Potential impacts to regulated waters and wetlands will be minimized through avoidance and minimization measures as stated in Section 2.1.3 of this IS/Draft MND. The City would review proposed actions and projects for potential impacts to jurisdictional waters/wetlands and obtain appropriate authorization under the CWA and provide compensatory mitigation as required. (Refer to Section 2.1.3 for compensatory mitigation for unavoidable project impacts.)</p>

Measure	Description
WQ-12 Site Spoil Management	The City will ensure that spoil sites shall not be located next to surface waters where spoil dewatering could potentially affect water quality, or where it will cover aquatic or riparian vegetation unless the site is specifically identified in the project's Notification of Lake or Streambed Alteration application.
WQ-13 Staging + Stockpiling	Work materials, staging, storage, dispensing, fueling, and equipment maintenance activities will be located in upland areas outside of sensitive habitat, and adequate measures will be taken to prevent any potential runoff from entering receiving waters. Staging areas will be located within facility footprints or adjacent urban/developed areas.
WQ-14 Trash Management	Spoils, trash, or any debris will be removed off-site to an approved disposal facility.
WQ-15 Water Diversion/Dewatering	<p>All surface waters, including ponded waters, will be diverted away from areas undergoing dredging or vegetation removal and/or any other activity that may result in a discharge to the receiving water. When water diversion is necessary, a temporary dam or other artificial obstruction will be constructed using materials that will cause little or no siltation and ensure water does not enter the work area. Water will be diverted around the maintenance facility without completely obstructing stream flow. When maintenance is completed, the flow diversion structure will be removed as soon as possible in a manner that allows flow to resume and prevent debris or sediment accumulated from returning to the stream.</p> <p>If dewatering is conducted, either a pump will move water to an upland disposal site, or a sediment basin or other structure will be used to collect and treat the water. If applicable, a National Pollutant Discharge Elimination System permit may be required. If not applicable, the water returned to the waterway should be equivalent in nature to pre-activity conditions.</p> <p>Additional water quality measures may arise as conditions of the 401 Water Quality Certification or Nationwide Permit #33 (if pursued) and applicable stipulations of a 1602 SAA, if applicable The City will adhere to these and any other applicable conditions and avoidance measures.</p>
WQ-16 Groundwater Extraction	<p>For those areas where the groundwater level is likely to be encountered during dredging activities, dewatering will be performed under a permit issued by the RWQCB. Disposal of groundwater would comply with RWQCB Order No. 2001-96, "General Waste Discharge Requirements for Groundwater Extraction."</p> <p>Stipulations under this permit (as well as those required of the RWQCB CWA 401 WQ Certification), would serve to avoid impacts to surface water or groundwater quality.</p>
WQ-17 Spill Control	The City will maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the U.S. and/or state.
WQ-18 Vehicle/Equipment Maintenance	The City will ensure that all vehicles and equipment utilized for maintenance activities are well maintained and not leaking fluids. Vehicle or equipment maintenance (including fueling) will not be performed on-site or in a manner that could contribute pollutants to receiving waters.
WQ-19 Post-Activity Erosion and Sediment Control	Post-maintenance activity erosion and sediment control will be implemented as applicable, including landscape planting and other slope stabilization techniques (i.e., hydroseed and/or hydromulch).
WQ-20 Construction General Permit Compliance	Should maintenance activities result in land disturbance of 1 acre or greater, compliance with Order No. 2009-0009-DWQ [as amended by Order No. 2010-0014-DWQ] would be required, including development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). In addition to identifying source, runoff, erosion, and sediment controls, the SWPPP would also need to include inspection and monitoring activities and practices to ensure the long-term stability of the disturbed area.



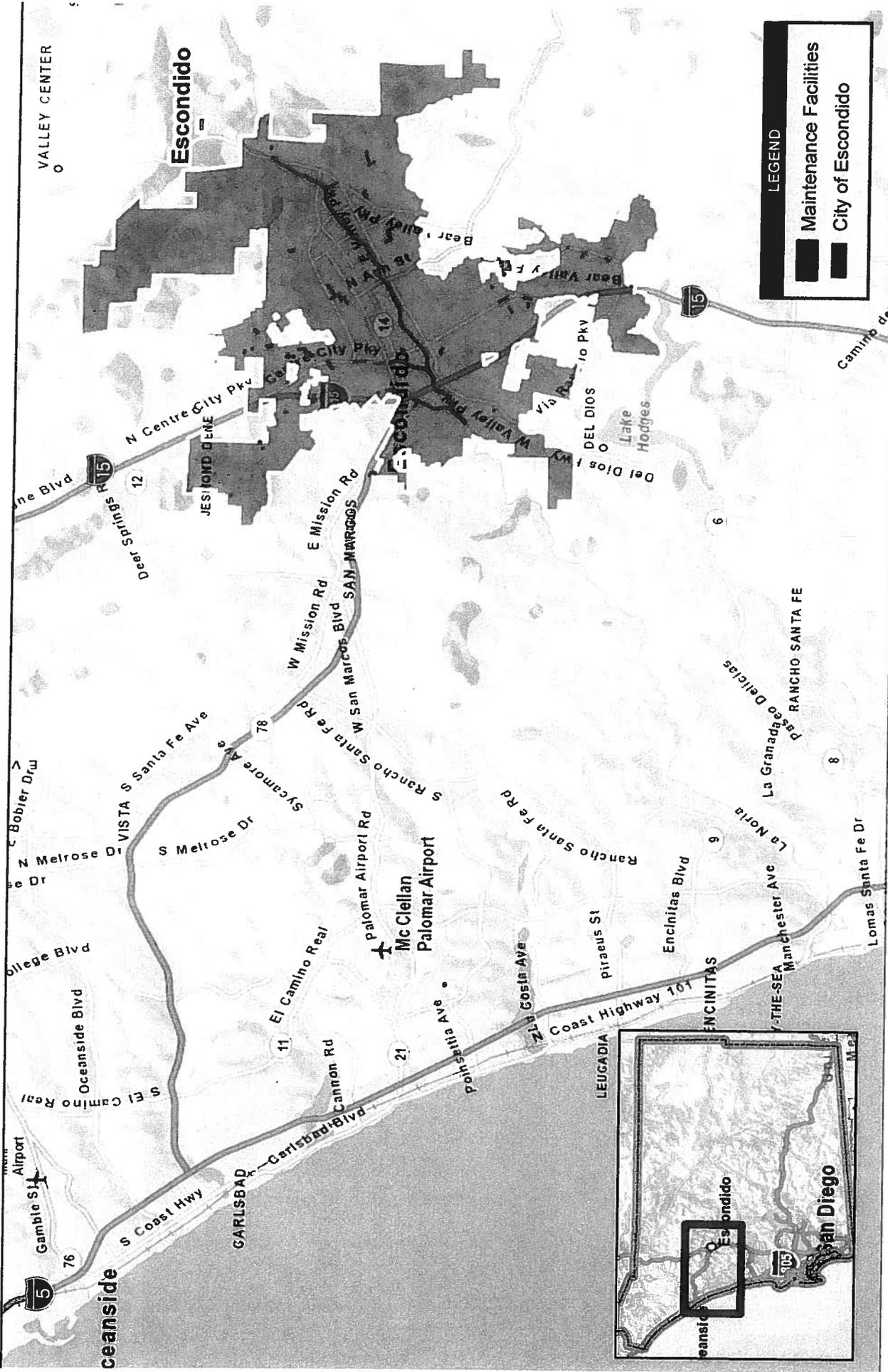
Source: ESRI 2011; SANGIS 2008; City of Escondido 2009



**Figure 1**  
**Regional Vicinity Map**

City of Escondido Channel Maintenance Activities; Mitigated Negative Declaration

Path: P:\2011\60223652\06GIS\6.3\_Localityfig\_1\_RegionalVicinityMap.mxd, 5/15/2012, sorenstny



**LEGEND**

- Maintenance Facilities
- City of Escondido

Source: ESRI 2011; SANGIS 2008; City of Escondido 2009

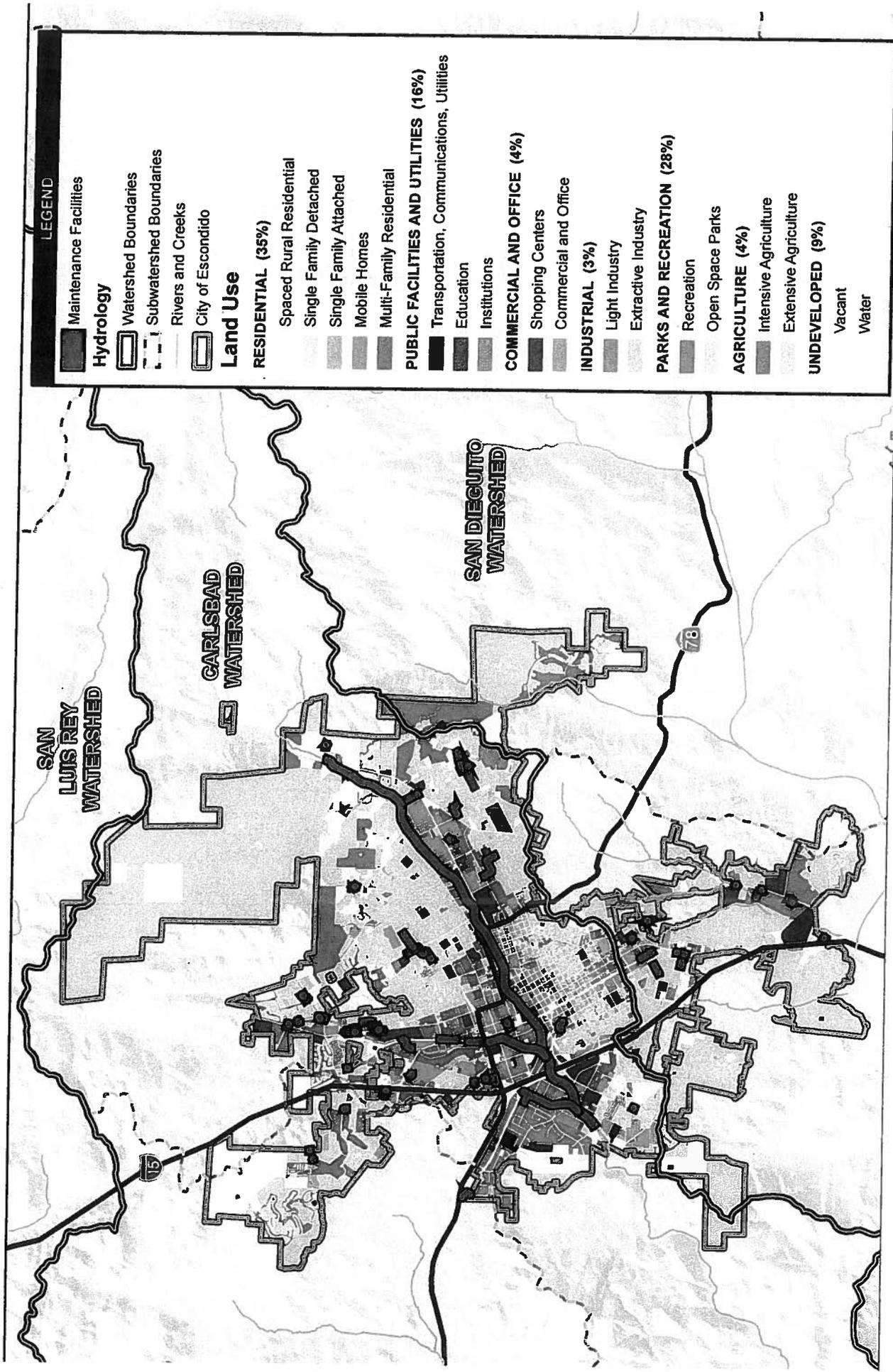
Scale: 1 = 158,400; 1 inch = 2.5 miles

2.5 1.25 0 2.5 Miles

**Figure 2**  
**Project Location Map**

City of Escondido Channel Maintenance Activities; Mitigated Negative Declaration

Path: P:\2017\60223562\06GIS\6.3\_Layout\fig 2\_ProjectLocation.mxd, 5/15/2012, sorenserj



**LEGEND**

Maintenance Facilities

**Hydrology**

Watershed Boundaries

Subwatershed Boundaries

Rivers and Creeks

City of Escondido

**Land Use**

**RESIDENTIAL (35%)**

Spaced Rural Residential

Single Family Detached

Single Family Attached

Mobile Homes

Multi-Family Residential

**PUBLIC FACILITIES AND UTILITIES (16%)**

Transportation, Communications, Utilities

Education

Institutions

**COMMERCIAL AND OFFICE (4%)**

Shopping Centers

Commercial and Office

**INDUSTRIAL (3%)**

Light Industry

Extractive Industry

**PARKS AND RECREATION (28%)**

Recreation

Open Space Parks

**AGRICULTURE (4%)**

Intensive Agriculture

Extensive Agriculture

**UNDEVELOPED (9%)**

Vacant

Water

Source: USGS 2000; SANDAG 2010; California Interagency Watershed Mapping Committee 2004; City of Escondido 2009



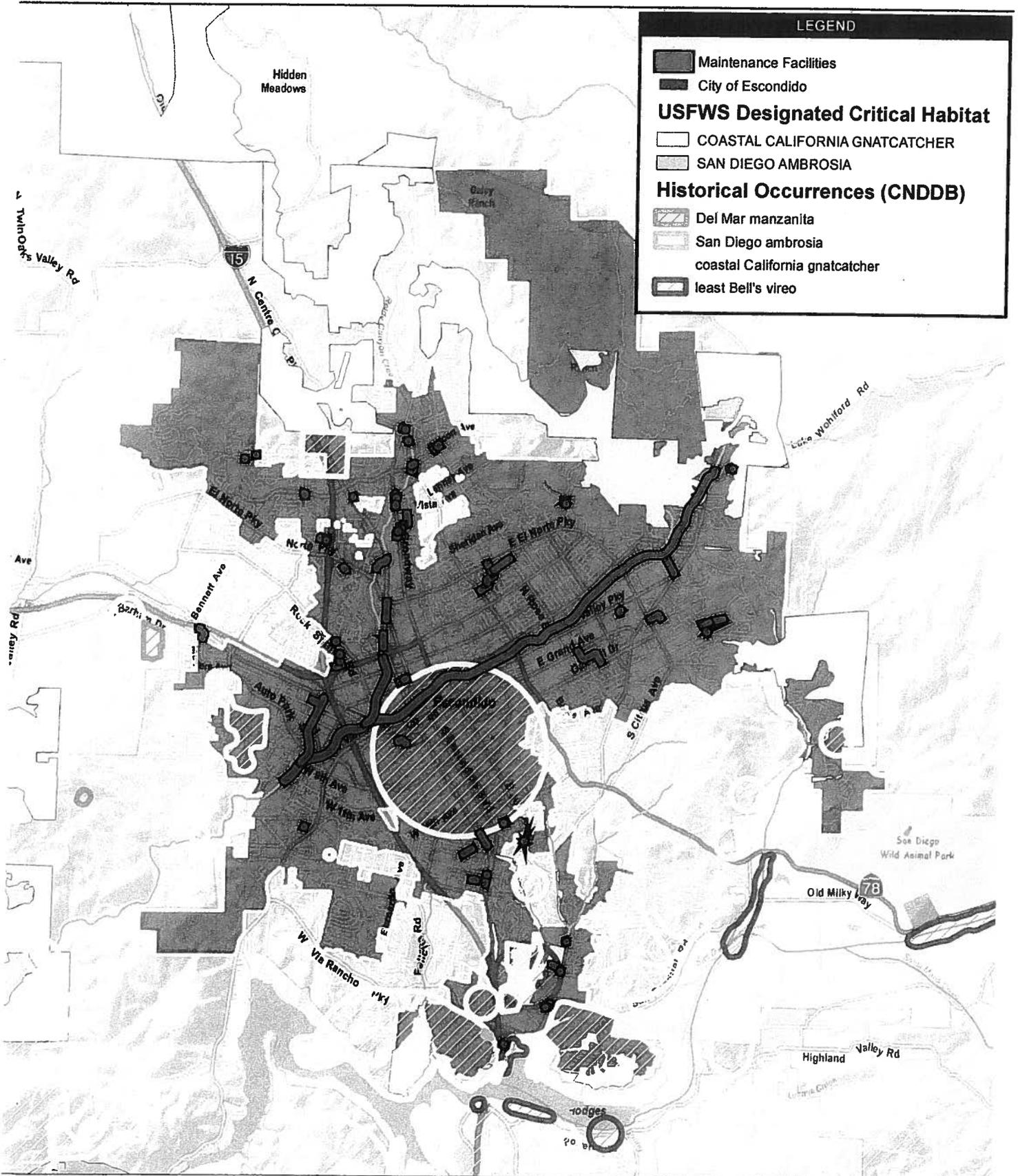
Scale: 1 = 114,000; 1 inch = 1.8 miles



**Figure 3**  
**Land Uses in Project Area**

City of Escondido Channel Maintenance Activities; Mitigated Negative Declaration  
 Path: P:\1201\160223652\06GIS\6.3\_Layoffs\fig 1-2\_LandUseDesignations.mxd, 5/15/2012, sorensej

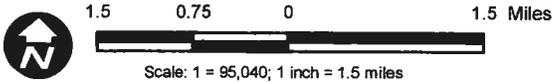




Source: USGS 2000; SANDAG 2010; California Interagency Watershed Mapping Committee 2004; City of Escondido 2009, CDFG 2012, USFWS 2012

**Figure 5**

**Critical Habitat and Historical Locations of Threatened and Endangered Species within 1 mile of Project Study Area**



City of Escondido Channel Maintenance Activities; Mitigated Negative Declaration

Path: P:\2011\60223652\06GIS\6.3\_Layout\fig x-x\_TE\_Species.mxd, 5/15/2012, sorensenj

This page intentionally left blank.

### **SECTION 3.0: MANDATORY FINDINGS OF SIGNIFICANCE**

Potential impacts to the environment as a result of this project are in the areas of Biological Resources, Cultural Resources, and Hydrology and Water Quality. With the implementation of the mitigation measures and conditions of approval, the project is not expected to have any significant impacts. The project would not degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, or cause the fish or wildlife population to drop below self-sustaining levels. The project would not threaten to eliminate a plant or animal community or substantially reduce the number or restrict the range of a rare or endangered plant or animal. The project would not eliminate important examples of the major periods of California history or pre-history. The project would not materially degrade levels of service of the adjacent streets, intersections, or utilities. The project would not have impacts that are cumulatively considerable, and would not have effects that would cause substantial adverse effects on human beings, either directly or indirectly. Therefore, in staff's opinion, the proposed project would not have a significant individual or cumulative impact to the environment.

This page intentionally left blank.

## SECTION 4.0: SUMMARY OF AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

Appropriate avoidance, minimization, and mitigation measures for the various resource areas are described in the project descriptions, individual resource area sections of this document, and below in Table 16.

**Table 16: Summary of Avoidance, Minimization, and Compensatory Mitigation Measures**

Biological Resources	
Biological Resources General Avoidance & Minimization	
<b>BIO-1 Biological Monitors + City Inspectors</b>	<p>The City will designate qualified biologist(s) and/or environmental monitor(s), as applicable, to oversee monitoring and compliance with protective measures for the biological resources. The biologist(s)/monitor will maintain communications with the appropriate personnel (project manager, resident engineer, project foreman) to ensure that issues relating to biological resources are appropriately and lawfully managed. The biologist(s)/monitor will also be present to verify compliance with all conservation measures. The monitoring biologists/environmental monitors will submit reports that document compliance with these measures to the wildlife agencies upon request or, at a minimum, are included in an end-of-the-year report. In addition, the biologist(s)/monitors will perform the following duties.</p> <ol style="list-style-type: none"> <li>4. Prior to construction, verify site conditions have not changed from baseline data, with respect to natural resources.               <ol style="list-style-type: none"> <li>a. If site conditions are different than the established baseline (e.g., the conversion of a Tier IV concrete channel to a Tier II wetland due to sediment accumulation), the facility will be reevaluated for sensitive habitats, jurisdictional waters and wetlands, and special-status species. USACE, RWQCB, and CDFG will be notified of the new conditions prior to work, and will have 14 days to respond with amended permit conditions relevant to the facility. Otherwise, work will proceed using existing avoidance, minimization, and mitigation measures set forth in the permits, as applicable to the new site conditions.</li> </ol> </li> <li>5. Be on-site during all vegetation clearing and grubbing, and weekly during project construction in upland and riparian habitat to be impacted.               <ol style="list-style-type: none"> <li>a. If any state or federally listed species is detected by biological monitors during vegetation clearing, the resident engineer will be immediately notified to halt work, if necessary, and coordinate with USFWS and CDFG to ensure the proper implementation of species and habitat protection measures. The biologist/monitor will report any breach of the conservation measures within 24 hours of its occurrence.</li> </ol> </li> <li>6. Erosion control measures will be regularly checked by City inspectors, the biologist, resident engineer, and/or project foreman. Site-specific BMP plans will be reviewed by a qualified biologist and modified, if necessary, prior to implementation. Fencing and/or erosion control measures at maintenance facilities will be inspected a minimum of once per week until completion of the maintenance activity.</li> </ol>
<b>BIO-2 Worker Awareness</b>	<p>Each employee will participate in a training/awareness program that will be presented by the qualified biologist, prior to working on the proposed project.</p>
<b>BIO-3 Staging + Stockpiling</b>	<p>The City will ensure that all work materials, staging, storage, dispensing, fueling, and equipment maintenance activities are located in upland areas outside of sensitive habitat, and that adequate measures are taken to prevent any potential runoff from entering waters of the U.S. Staging areas will be located within facility footprints or adjacent urban/developed hardscape.</p>

BIO-4 Fencing and Flagging	The City will temporarily fence (with silt barriers) the limits of project impacts (including staging areas and access routes) to prevent additional habitat impacts and prevent the spread of silt from the construction zone into adjacent habitats to be avoided. The limits of weed whipping and other ground disturbing activities, other than grading, may be flagged instead of fenced. Fencing will be installed in a manner that does not impact habitats to be avoided. If work occurs beyond the fenced or flagged limits of impact, all work will cease until the problem has been remedied to the satisfaction of the City. Temporary construction fencing will be removed upon project completion.
BIO-5 Trash Removal	Spoils, trash, or any debris would be removed off-site to an approved disposal facility.
BIO-6	Plant species will not be collected for any reason and no wildlife species, including rattlesnakes, will be collected or harmed except to prevent injury or death to workers.
BIO-7 Dust Abatement	The project foreman and biological monitor (See BIO-1 for role of biological monitor) will periodically monitor the work area to ensure that maintenance-related activities do not generate excessive dust.
BIO-8 Light and Glare	Maintenance activities will be conducted during normal business hours, and without the use of lighting whenever possible, excepting emergencies. If emergency maintenance activities occur at night, all project lighting (e.g., staging areas, equipment storage sites, roadway) will be directed onto the roadway or maintenance facility footprint and away from sensitive habitat. Light glare shields may also be used to reduce the extent of illumination into adjoining areas.
BIO-9 Access	Vehicle traffic will be restricted to existing access roads.
BIO-10 Post-Activity Erosion and Sediment Control	Post-maintenance activity erosion and sediment control will be implemented as applicable, including landscape planting and other biotic slope stabilization techniques (e.g., hydroseed and/or hydromulch). Erosion control blankets having plastic mesh with the potential to ensnare amphibians and reptiles will not be used in areas these animals inhabit.
BIO-11 Water Diversion/ Dewatering	All surface waters, including ponded waters, will be diverted away from areas undergoing dredging or vegetation removal and/or any other activity that may result in a discharge to the receiving water. When water diversion is necessary, a structural BMP would be implemented to temporarily detain or reroute drainage around the work area based on field conditions, drainage characteristics, seasonal variation, maintenance duration, and practicability of application. The intent of the temporary BMP implementation would be to avoid or minimize water interference in the work area and water quality impacts to downstream receiving waters. When maintenance is completed, the flow diversion structure will be removed as soon as possible in a manner that allows flow to resume and prevent debris or sediment accumulated from returning to the stream.  If dewatering is conducted, either a pump will move water to an upland disposal site, or a sediment basin or other structure will be used to collect and treat the water. If applicable, a National Pollutant Discharge Elimination System permit may be required. If not applicable, the water returned to the waterway should be equivalent in nature to pre-activity conditions.  Additional water quality measures may arise as conditions of the 401 Water Quality Certification. The City will adhere to these conditions in addition to this avoidance measure.
BIO-12 Fire Prevention	Wildfires will be prevented by exercising care when driving and by not parking vehicles where catalytic converters could ignite dry vegetation. In times of high fire hazard, trucks may need to carry water and shovels or fire extinguishers in the field. No smoking or disposal of cigarette butts will take place within vegetated areas.
BIO-13 Minimizing Spread of Exotic Species	Tools and equipment will be washed in designated areas prior to entering and exiting work areas, to ensure no plant material is transported on- or off-site.  The City will ensure that any planting stock to be brought onto the project site for habitat restoration is first inspected by a qualified pest inspector to ensure it is free of pest species that could invade natural areas, including but not limited to, Argentine ants ( <i>Iridomyrmex humil</i> ), fire ants ( <i>Solenopsis invicta</i> ) and other insect pests.

<b>Riparian Vegetation and Native Tree Avoidance &amp; Minimization</b>	
<b>BIO-14 Riparian Vegetation Avoidance</b>	Measures will be taken to avoid and minimize impacts to native riparian vegetation to the greatest extent possible. This includes unnecessary or unauthorized trespass by workers and equipment, staging and storage of equipment and materials, refueling activities, and littering or dumping debris in riparian areas.
<b>BIO-15 Native Tree Avoidance</b>	<p>The City will not remove native trees, including but not limited to, willow (<i>Salix</i> spp.), cottonwood (<i>Populus</i> spp.), western sycamore (<i>Platanus racemosa</i>), and oak (<i>Quercus</i> sp.). The City may trim these species up to a height of 7 feet, barring oaks and sycamores with a diameter breast-height (DBH) greater than 9.5 inches, which may not be pruned.</p> <p>Trimming/pruning of native trees will be conducted outside the nesting season (February 15 through September 15), and will only be conducted if the absolute (bird's-eye) percent cover of tree/shrub canopy is not measurably reduced. Cutting of branches greater than 2 inches in diameter shall be done by a certified arborist.</p>
<b>BIO-16</b>	Oaks require special avoidance. Heavy equipment shall not encroach on the root protection zone (i.e., 50 feet from the drip line) within undeveloped areas, nor will equipment be staged/stockpiled in these areas. A qualified biologist shall flag root protection zones as off-limits at applicable facilities, prior to starting work
<b>Migratory Bird and Special Status Species Avoidance &amp; Minimization</b>	
<b>BIO-17 Nesting Season Avoidance</b>	Vegetation clearing shall occur outside of the typical breeding season for raptors and migratory birds (February 15 through September 15). However, if this is not possible, then a qualified biologist will conduct a raptor nesting survey prior to construction to determine the presence or absence of nests in the riparian habitat, and the potential need for additional project mitigation measures.
<b>BIO-18 Nest Buffers</b>	<p>To the greatest extent feasible, vegetation clearing, dredging, and other mechanized activities within 500 feet of undeveloped vegetation communities will be conducted outside the breeding season for federally protected migratory and listed bird species. In situations where these types of maintenance activities will occur adjacent to undeveloped vegetation communities during the breeding season (February 15 through September 15), the following measures will be implemented:</p> <ol style="list-style-type: none"> <li>3. A preconstruction survey for migratory birds shall be performed by a qualified biologist within 3 days prior to any removal of trees, shrubs, or structures on the project site. If no active nests are found, then no further action will be warranted.</li> <li>4. If an active nest is detected on or within 300 feet of the project site (500 feet for raptors), no work shall be conducted within a 300-foot radius (500 feet for raptors) of the detected nest until a biological monitor determines the nest is no longer active.</li> </ol>
<b>BIO-19 State- Listed and Federally Listed Bird Species</b>	For those facilities where state-listed and/or federally listed bird species have potential to occur within the project footprint, a qualified biologist will make three separate visits (on separate days), with the final visit being not more than 3 days prior to the maintenance activity. These three survey visits will supersede the preconstruction surveys required under BIO-14.
<b>BIO-20 Rare Plants</b>	<p>For those facilities where state-listed and/or federally listed plant species have the potential to occur within the project footprint (i.e., San Diego ambrosia), a qualified biologist will perform focused surveys prior to maintenance activities and will flag avoidance areas if the species are detected. If a facility has been surveyed three consecutive times with negative findings, focused surveys will no longer be required.</p> <p>For other special-status plant species (e.g. oaks, see Bio-16), the biological monitor will flag occurrences immediately prior to starting work, and will ensure avoidance of these resources.</p>
<b>BIO-21 San Diego Ambrosia</b>	<p>Weed whipping or other non-ground disturbing activities may occur in suitable habitat for San Diego ambrosia if the following measures are implemented:</p> <ol style="list-style-type: none"> <li>e. Conduct activities during the summer, fall, and early winter (i.e., generally from June to December) prior to any significant rain events (0.25 to 0.50 inch), when the soil is hard, and when no vegetative growth is visible. The growing season varies from year to year and will</li> </ol>

	<p>need to be determined by a qualified biologist and concurred with by the USFWS.</p> <p>f. Avoid the application of herbicide in areas where listed plant species occur (unless concurred with by the Agencies for specific problem plants such as artichoke thistle). If no listed plant species are present, herbicide application may occur under the direction of a licensed applicator and under the supervision of a qualified biologist.</p> <p>g. Use a machine mower only if soil is not wet or muddy.</p> <p>h. Remove weed thatch carefully so that soil is not disturbed (i.e., avoid disturbing the seed bank or corns).</p>								
BIO-22	For those facilities where special-status bat species have potential to occur within the project footprint, a qualified biologist will survey for roosting bats concurrently with the preconstruction surveys required under BIO-14. The same conditions identified in BIO-14 will apply to roosting bats.								
BIO-23 Complete Avoidance of Special-Status Species	The City will strive for 100 percent avoidance of direct impacts to special-status plant and wildlife species and will use biological monitors and preconstruction surveys to ensure avoidance (per BIO-1, BIO-16, BIO-17, BIO-18, BIO-19, and BIO-20, BIO-21).								
<b>Biological Resources Compensatory Mitigation</b>									
BIO-24 Compensatory Mitigation	<p>All potentially significant, unavoidable project impacts will occur within habitats that are also potential jurisdictional waters. Compensatory mitigation for jurisdictional waters, as described below, will reduce potentially significant impacts to natural habitats to a level below significance. Since the project will avoid potentially significant impacts to special-status species and wildlife migration, no mitigation is necessary above and beyond the habitat-based compensatory mitigation for jurisdictional waters described below.</p> <p>The proposed project necessitates work within and around jurisdictional waters. As demonstrated in the previous section, the City has made great efforts to minimize impacts to the greatest extent practicable, while also maintaining the objectives of the project; however unavoidable impacts to potential jurisdictional waters remain a part of the proposed project.</p> <p>These unavoidable impacts will be mitigated to a level below significance through a combination of off-site restoration/creation and/or enhancement. The City is proposing to mitigate impacts within the City owned and managed Kit Carson Park (or other approved location, as determined by the USACE, CDFG, and RWQCB). A conceptual mitigation plan will be developed in coordination with USACE, CDFG, and RWQCB, and a final mitigation plan will be approved as a condition of the 404, 401, and 1602 authorizations, respectively. Final mitigation ratios will be generally consistent with the guidelines of relevant regional conservation plans, including the NCMSCP and Escondido Subarea MHCP.</p> <p>Mitigation ratios will be based on resource tiers, as defined below. The following mitigation ratios, proposed mitigation types, and impact thresholds are subject to agency approval and may change prior to final permit authorization.</p> <p style="text-align: center;"><b>Proposed Resource Tiers and Impact Thresholds for the Escondido Channel Maintenance Project</b></p> <table border="1"> <thead> <tr> <th>Resource Tier</th> <th>Description</th> <th>Proposed Mitigation</th> <th>Proposed RGP Impact Threshold</th> </tr> </thead> <tbody> <tr> <td>Tier I</td> <td>Includes native habitats (i.e., Category A vegetation communities) growing within earthen facilities or concrete facilities with greater than 6 inches of deposited sediment. This includes wetland waters and riparian extent.</td> <td>2:1 through at least 1:1 creation/restoration, plus additional enhancement as needed to achieve overall 2:1 ratio.</td> <td>Up to 0.1 acre per facility (understory only, with minor trimming of native trees/shrubs).</td> </tr> </tbody> </table>	Resource Tier	Description	Proposed Mitigation	Proposed RGP Impact Threshold	Tier I	Includes native habitats (i.e., Category A vegetation communities) growing within earthen facilities or concrete facilities with greater than 6 inches of deposited sediment. This includes wetland waters and riparian extent.	2:1 through at least 1:1 creation/restoration, plus additional enhancement as needed to achieve overall 2:1 ratio.	Up to 0.1 acre per facility (understory only, with minor trimming of native trees/shrubs).
Resource Tier	Description	Proposed Mitigation	Proposed RGP Impact Threshold						
Tier I	Includes native habitats (i.e., Category A vegetation communities) growing within earthen facilities or concrete facilities with greater than 6 inches of deposited sediment. This includes wetland waters and riparian extent.	2:1 through at least 1:1 creation/restoration, plus additional enhancement as needed to achieve overall 2:1 ratio.	Up to 0.1 acre per facility (understory only, with minor trimming of native trees/shrubs).						

Resource Tier	Description	Proposed Mitigation	Proposed RGP Impact Threshold
Tier IV	Includes unvegetated areas (i.e., Category C) occurring within concrete channels.	No mitigation	Unlimited. Assuming incidental fallback only, dredge of concrete-lined facilities is unregulated by USACE. Applicable Waste Discharge Requirement measures from RWQCB will be adhered to.

**Proposed Vegetation Categories for Determining Resource Tiers**

Category	Description	Community
A	Native vegetation communities	Alkali Seep
		Cismontane Alkali Marsh
		Coast Live Oak Woodland
		Coastal and Valley Freshwater Marsh
		Diegan Coastal Sage Scrub
		Engelmann Oak Woodland
		Mulefat Scrub
		Southern Arroyo Willow Riparian Forest
		Southern Cottonwood-Willow Riparian Forest
		Southern Riparian Scrub
B	Disturbed wetland	Southern Willow Scrub
		Disturbed Wetland
		Emergent Wetland
		Nonnative Grassland
C	Disturbed, developed, or unvegetated land covers	Eucalyptus Woodland
		Disturbed Habitat
		Open Water
		Unvegetated Channel
		Urban/Developed

**Cultural Resources Mitigation**

CR-1 <b>Avoidance of Historical Resources</b>	If historical resources are present, avoidance is the preferred mitigation measure.
CR-2 <b>Documentation of Historical Resources</b>	If historical resources are present, and cannot be avoided, documentation in a HABS/HAER will be conducted to reduce potentially significant impacts. The HABS/HAER will be prepared either following the guidelines from the National Park Service or as specified in a Programmatic Agreement.
CR-3 <b>Avoidance of Archaeological Resources</b>	If archaeological resources are present, avoidance is the preferred mitigation measure.
CR-4 <b>Monitoring of Archaeological Resources</b>	If cultural resources are adjacent to or in the proposed area of disturbance but can be avoided, a buffer area will be marked off and an archaeological monitor will be present to ensure with avoidance. Unanticipated discoveries made during monitoring will follow procedures identified in an Unanticipated Discovery Plan. The Unanticipated Discovery Plan may be a stand-alone document or specified under a Programmatic Agreement.
CR-5 <b>Testing of Archaeological Resources</b>	If a significant or potentially significant archaeological resource cannot be avoided, an evaluation plan will outline procedures in which testing may be required. The evaluation plan may be a stand-alone document or specified under a Programmatic Agreement.

<b>CR-6 Data Recovery of Archaeological Resources</b>	If a significant or potentially significant archaeological resource cannot be avoided, a treatment plan will outline both the circumstances in which data recovery may be required and the procedures for conducting data recovery. The treatment plan may be a stand-alone document or specified under a Programmatic Agreement.
<b>CR-7 Paleontological Monitor</b>	A paleontological monitor shall be present during ground disturbance of previously undisturbed deposits of moderate sensitivity geological deposits (Older [Pleistocene] alluvium).  If a paleontological resource is significant or potentially significant, mitigation measure CR-8 shall be followed.
<b>CR-8 Paleontological Data Recovery</b>	If a significant or potentially significant paleontological resource cannot be avoided, a treatment plan will outline procedures in which data recovery may be required.
<b>CR-9 Avoidance of Human Remains</b>	If human remains are present, avoidance is the preferred mitigation measure.  In the event of an inadvertent discovery of human remains, mitigation measure CR-10 shall be followed.
<b>CR-10 Treatment of Human Remains</b>	If human remains cannot be avoided, they shall be treated according to appropriate State (Public Resources Code Section 5097.98, 5097.99, 5097.991, 7050.5, 8010-8011 and AB 2641); or on federal land NAGPRA provisions.
<b>Hydrology and Water Quality Avoidance and Minimization Measures</b>	
<b>WQ-1 Worker Awareness</b>	Prior to the start of the project, and annually thereafter, the City will educate all personnel on these avoidance and mitigation measures and other project best management practices (BMPs).
<b>WQ-2 Minimization of Disturbance</b>	The City will ensure that activities and land disturbance are the minimum necessary to (1) remove sediment and debris for the proper functioning of the storm water conveyance system and (2) prevent stagnant and ponding water in areas that have been demonstrated to support mosquito breeding.  Where vegetation removal is necessary, the removal of native trees will be restricted in accordance with BIO-15.
<b>WQ-3 Preservation of Existing Vegetation</b>	The City will preserve existing vegetation to the extent practicable and ensure implementation of BIO-14, riparian vegetation avoidance and BIO-14, native tree avoidance.
<b>WQ-4 Scheduling of Maintenance Activities</b>	Maintenance activities will be scheduled to avoid or minimize earth disturbance during the wet season to the maximum extent practicable.
<b>WQ-5 Erosion and Sediment Control</b>	Maintenance activities will include a combination of BMPs for soil erosion and sediment control depending on site conditions, which can include:  Erosion control/slope stabilization/bank protection <ul style="list-style-type: none"> <li>• erosion control blankets</li> <li>• soil stabilizers</li> <li>• organic mulch, such as wood chips and vegetation</li> <li>• riprap</li> </ul> Temporary sediment controls: <ul style="list-style-type: none"> <li>• silt fence</li> <li>• sediment/desilting basins</li> <li>• sediment traps</li> <li>• fiber rolls</li> <li>• gravel bag berm/barrier/dam</li> <li>• straw bale barrier</li> <li>• waterbag dams</li> <li>• filters/filter bags</li> </ul>
<b>WQ-6 Inspection of Erosion and Sediment Control</b>	All erosion and sediment control measures will be inspected/maintained to ensure proper integrity and function during the duration of maintenance activities. All post-activity stabilization and structural controls would be inspected per project permits (e.g., monthly or after any significant storm event) for the duration of the maintenance activities and would be repaired or maintained for optimum performance.

<p><b>WQ-7 Channel Alteration</b></p>	<p>If a stream channel, gradient, or lake margin have been temporarily altered during maintenance activities, the City will return the area to original design specifications or as closely as possible to pre-project conditions without creating a possible future bank erosion problem. Post-activity bank stabilization techniques (sediment and erosion control) will be implemented to further protect against bank erosion.</p>
<p><b>WQ-8 Runoff Control</b></p>	<p>During dredging activities, the City will capture and retain on-site runoff by creating perimeter ditches, trenches, siltation ponds, or similar depressions.</p> <p>Polyacrylamides or other suitably pervious hardscaping/soil stabilization techniques will be used to the maximum extent practicable.</p>
<p><b>WQ-9 Site Access Management</b></p>	<p>The City will ensure that access routes to maintenance areas are selected and designed to minimize impacts to receiving waters, in particular the discharge of identified pollutants to an already impaired water body.</p> <p>Soil-tracking BMPs will be implemented to limit off-site transport of sediment from vehicles by implementing measures and site access points such as metal corrugated shaker plates, gravel strips, and/or wheel-washing sites.</p>
<p><b>WQ-10 Vehicle/Equipment Operation</b></p>	<p>The City will not operate equipment or vehicles in ponded or flowing areas except as otherwise addressed in any of the project's applicable regulatory permits.</p> <p>If maintenance activities require moving equipment across a flowing stream, the City will implement/install measures to prevent an increase to stream turbidity.</p>
<p><b>WQ-11 CWA Compliance</b></p>	<p>Potential impacts to regulated waters and wetlands will be minimized through avoidance and minimization measures as stated in Section 1.3 of this IS/Draft MND. The City would review proposed actions and projects for potential impacts to jurisdictional waters/wetlands and obtain appropriate authorization under the CWA and provide compensatory mitigation as required. (Refer to Section 2.1.3 for compensatory mitigation for unavoidable project impacts.)</p>
<p><b>WQ-12 Site Spoil Management</b></p>	<p>The City will ensure that spoil sites shall not be located next to surface waters where spoil dewatering could potentially affect water quality, or where it will cover aquatic or riparian vegetation unless the site is specifically identified in the project's Notification of Lake or Streambed Alteration application.</p>
<p><b>WQ-13 Staging + Stockpiling</b></p>	<p>Work materials, staging, storage, dispensing, fueling, and equipment maintenance activities will be located in upland areas outside of sensitive habitat, and adequate measures will be taken to prevent any potential runoff from entering receiving waters. Staging areas will be located within facility footprints or adjacent urban/developed areas.</p>
<p><b>WQ-14 Trash Management</b></p>	<p>Spoils, trash, or any debris will be removed off-site to an approved disposal facility.</p>
<p><b>WQ-15 Water Diversion/ Dewatering</b></p>	<p>All surface waters, including ponded waters, will be diverted away from areas undergoing dredging or vegetation removal and/or any other activity that may result in a discharge to the receiving water. When water diversion is necessary, a temporary dam or other artificial obstruction will be constructed using materials that will cause little or no siltation and ensure water does not enter the work area. Water will be diverted around the maintenance facility without completely obstructing stream flow. When maintenance is completed, the flow diversion structure will be removed as soon as possible in a manner that allows flow to resume and prevent debris or sediment accumulated from returning to the stream.</p> <p>If dewatering is conducted, either a pump will move water to an upland disposal site, or a sediment basin or other structure will be used to collect and treat the water. If applicable, a National Pollutant Discharge Elimination System permit may be required. If not applicable, the water returned to the waterway should be equivalent in nature to pre-activity conditions.</p> <p>Additional water quality measures may arise as conditions of the 401 Water Quality Certification or Nationwide Permit #33 (if pursued) and applicable stipulations of a 1602 SAA, if applicable The City will adhere to these and any other applicable conditions and avoidance measures.</p>

<p>WQ-16 <b>Groundwater Extraction</b></p>	<p>For those areas where the groundwater level is likely to be encountered during dredging activities, dewatering will be performed under a permit issued by the RWQCB. Disposal of groundwater would comply with RWQCB Order No. 2001-96, "General Waste Discharge Requirements for Groundwater Extraction."</p> <p>Stipulations under this permit (as well as those required of the RWQCB CWA 401 WQ Certification), would serve to avoid impacts to surface water or groundwater quality.</p>
<p>WQ-17 <b>Spill Control</b></p>	<p>The City will maintain appropriate types and sufficient quantities of materials on-site to contain any spill or inadvertent release of materials that may cause a condition of pollution or nuisance if the materials reach waters of the U.S. and/or state.</p>
<p>WQ-18 <b>Vehicle/Equipment Maintenance</b></p>	<p>The City will ensure that all vehicles and equipment utilized for maintenance activities are well maintained and not leaking fluids. Vehicle or equipment maintenance (including fueling) will not be performed on-site or in a manner that could contribute pollutants to receiving waters.</p>
<p>WQ-19 <b>Post-Activity Erosion and Sediment Control</b></p>	<p>Post-maintenance activity erosion and sediment control will be implemented as applicable, including landscape planting and other slope stabilization techniques (i.e., hydroseed and/or hydromulch).</p>
<p>WQ-20 <b>Construction General Permit Compliance</b></p>	<p>Should maintenance activities result in land disturbance of 1 acre or greater, compliance with Order No. 2009-0009-DWQ [as amended by Order No. 2010-0014-DWQ] would be required, including development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). In addition to identifying source, runoff, erosion, and sediment controls, the SWPPP would also need to include inspection and monitoring activities and practices to ensure the long-term stability of the disturbed area.</p>

## SECTION 5.0: REFERENCES

### AECOM

- 2008 Escondido Rapid Bus Project Final Environmental, Initial Study/Mitigated Negative Declaration. Report on file at the South Coastal Information Center, San Diego, CA.
- 2011 *Final Phase 1 Field Delineation Report Binder*. June.

### Bowden-Renna C., and R, Apple

- 2007 Archaeological and Historical Survey for the Citracado Parkway Extension Project, City of Escondido, San Diego County, California. Report of file at the South Coastal Information Center, San Diego, CA.

### California Consortium of Herbaria (CCH)

- 2012 Online database of herbaria voucher specimens within California. Accessed intermittently July 2010 through January 2012, from <http://ucjeps.berkeley.edu/consortium/>.

### California Department of Fish and Game (CDFG)

- 2012a California Department of Fish and Game. California Natural Diversity Database (CNDDDB) GIS Layer. Search for Escondido Channel Maintenance Project Study Area. California Department of Fish and Game, State of California Resources Agency. Sacramento, California.
- 2012b Vegetation Classification and Mapping Program. Online Natural Communities List. Accessed February 9, 2012 from [http://www.dfg.ca.gov/biogeodata/vegcamp/natural\\_comm\\_list.asp](http://www.dfg.ca.gov/biogeodata/vegcamp/natural_comm_list.asp).

### California Native Plant Society (CNPS)

- 2012 Inventory of Rare and Endangered Plants of California, California Native Plant Society, Sacramento, California. Accessed intermittently July 2010 through January 2012, from <http://www.rareplants.cnps.org/>.

City of Escondido. 2001. *Public Review Draft Escondido Subarea Plan Implementing the Multiple Habitat Conservation Program*. June.

### Cowardin, L., V. Carter, F. Golet, and E. LaRoe

- 1979 *Classification of Wetlands and Deepwater Habitats of the United States*. U.S. Department of Interior. U.S. Fish and Wildlife Service. FWS/OBS-79/31. December 1979.

### Demere, Tom

- 2007 Technical Report Paleontological Resource Assessment, Citracado Parkway Extension, City of Escondido, San Diego County, California. Report on file at the San Diego Natural History Museum, San Diego, California.

Environmental Laboratory

- 1987 *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.
- 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*. September.

Erlandson, Jon M., and Roger H. Colten (editors)

- 1991 *Hunter-Gatherers of Early Holocene Coastal California*. Perspectives in California Archaeology, Volume 1. Institute of Archaeology, University of California, Los Angeles.

Federal Transit Administration (FTA)

- 2006 Transit Noise and Vibration Impact Assessment. U.S. Department of Transportation, May.

Jones, Terry L.

- 1991 Marine-Resource Value and the Priority of Coastal Settlement: A California Perspective. *American Antiquity* 56:419-443.

Los Angeles Regulatory District; US Army Corps of Engineers

- 2012 Regulatory Division – Los Angeles. Accessed February 2012, from <http://www.spl.usace.army.mil/regulatory/>

McGrew, Alan B.

- 1988 *Hidden Valley Heritage: Escondido's First 100 years*. Blue-Ribbon Centennial History Committee, Escondido. L&W Printery, Inc.

Natural Resource Conservation Service (NRCS)

- 2008a Web Soil Survey. Accessed intermittently July 2010 through January 2012, from <http://websoilsurvey.nrcs.usda.gov/app/>.

Oberbauer, Thomas, Meghan Kelly, and Jeremy Buegge.

- 2008 *Draft Vegetation Communities of San Diego County*. March. Based on "Preliminary Descriptions of the Terrestrial Natural Communities of California," Robert F. Holland, Ph.D., October 1986.)

Regional Water Quality Control Board (RWQCB)

- 1994 *Water Quality Control Plan for the San Diego Basin (9)*. September, with amendments adopted through February 8, 2006.
- 2010 2008–2010 Clean Water Act Section 303(d) List of Water Limited Segments. USEPA Approved November 12. Available at [http://www.waterboards.ca.gov/sandiego/water\\_issues/programs/303d\\_list/index.shtml](http://www.waterboards.ca.gov/sandiego/water_issues/programs/303d_list/index.shtml).

Rimpo and Associates

- 2008 URBEMIS Air Emissions Modeling software version 9.2.4. Available <http://www.urbemis.com>. Sacramento, CA. February.

Salinas, Julio

- 2004 Staff Toxicologist. Office of Health Hazard Assessment, Sacramento, CA. Telephone conversation with Kurt Legleiter of EDAW regarding exposure period for determining health risk. August 3.

San Diego Association of Governments (SANDAG)

- 2003 Final MHC Plan for the Cities of Carlsbad, Encinitas, Escondido, Oceanside, San Marcos, Solana Beach, and Vista. March 2003.

San Diego Natural History Museum (SDNHM)

- 2012 Online database of plant distributions within San Diego County. Accessed intermittently July 2010 through January 2012, from [http://sdplantatlas.org/GMap/GMapSpeciesMap\\_Eco.htm](http://sdplantatlas.org/GMap/GMapSpeciesMap_Eco.htm).

State of California Department of Toxic Substances Control, Envirostor

- 2012 Envirostor, Facility Detail Report. Accessed February 2012 from [http://www.envirostor.dtsc.ca.gov/public/profile\\_report.asp?global\\_id=37490029](http://www.envirostor.dtsc.ca.gov/public/profile_report.asp?global_id=37490029).

State Water Resources Control Board (SWRCB)

- 2010 Waste Discharge Requirements For Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities. (Order No. 2009-0009-DWQ [as amended by Order No. 2010-0014-DWQ]). November 16.

U.S. Army Corps of Engineers (USACE)

- 2008 *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States: A Delineation Manual*. ERDC/CRREL TR-08-12.

U.S. Environmental Protection Agency Envirofacts Facility Registry System

- 2012 Facility Detail Report Chatham Brothers Barrel Yard. Accessed February 2012 from [http://iaspub.epa.gov/enviro/fii\\_query\\_detail\\_disp\\_program\\_facility?p\\_registry\\_id=110002611219](http://iaspub.epa.gov/enviro/fii_query_detail_disp_program_facility?p_registry_id=110002611219).

U.S. Fish and Wildlife Service (USFWS)

- 2012 National Wetlands Inventory Interactive Wetlands Mapper. Accessed intermittently July 2010 through January 2012, from <http://www.nwi.fws.gov>.

Van Wormer, Stephen, and Susan Walters

- 1991 *Historical and Architectural Assessment of the Soledad Schoolhouse*. Prepared by Walter Enterprises. Submitted to the San Diego Department of Planning and Land Use, San Diego, California.

Wahoff, T., C. Tuthill, and A. York

- 2005 *Archaeological Testing of CA-SDI-8280/H Hale Avenue Resource Recovery Facility Expansion Project, Escondido, California*. Report on file at the South Coastal Information Center, San Diego, CA.

York, Andrew

1996 *Archaeological Survey for Proposed Expansion to the Hale Avenue Resource Recovery Facility, Escondido, California*. Submitted to the City of Escondido. Unpublished report on file at the South Coastal Information Center, San Diego, CA.

Zhu, Y., W. C. Hinds, S. Kim, and S. Shen

2002 Study of Ultrafine Particles Near a Major Highway with Heavy-duty Diesel Traffic. In *Atmospheric Environment* 36:4323–4335.

**APPENDIX A**

**CEQA ENVIRONMENTAL CHECKLIST**

**APPENDIX A  
ENVIRONMENTAL CHECKLIST FORM**

1. Project title: *City of Escondido Regional General Permit for Channel Maintenance Activities*
2. Lead agency name and address: *City of Escondido, 201 N. Broadway, Escondido, CA 92025*
3. Contact persons and phone numbers:  
*Jay Paul, Planning Division, (760) 839-4537  
201 North Broadway, Escondido, CA 92025-2798*
4. Project location: *City of Escondido, San Diego County, CA*
5. Project sponsor's name and address:  
*City of Escondido  
Cheryl Filar, Environmental Programs Manager, (760) 839-6315  
Jeff Warner, Environmental Programs Specialist, (760) 839-4528  
201 North Broadway, Escondido, CA 92025-2798*
6. General plan designation: *Please refer to the attached project description.*
7. Zoning: *Please refer to the attached project description.*
8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)  
*Please refer to the attached project description.*
9. Surrounding land uses and setting: Briefly describe the project's surroundings:  
*Please refer to the attached project description.*
10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)  
*U.S. Army Corps of Engineers – Regional General Permit  
U.S. Fish and Wildlife Service – Biological Opinion  
Regional Water Quality Control Board – Water Quality Certification  
California Department of Fish and Game – 2080.1 Consistency Determination  
California Department of Fish and Game – Streambed Alteration Agreement  
State Historic Preservation Officer – Executed Programmatic Agreement*

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

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

**DETERMINATION: (To be completed by the Lead Agency)**

On the basis of this initial evaluation:

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

Signature 

Date 12-20-12

Signature \_\_\_\_\_

Date \_\_\_\_\_

## EVALUATION OF ENVIRONMENTAL IMPACTS:

- 1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- 2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- 3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
- 4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
- 5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
  - a) Earlier Analysis Used. Identify and state where they are available for review.
  - b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
  - c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- 6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- 7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- 8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- 9) The explanation of each issue should identify:
  - a) the significance criteria or threshold, if any, used to evaluate each question; and
  - b) the mitigation measure identified, if any, to reduce the impact to less than significance

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b><u>I. AESTHETICS.</u> Would the project:</b>				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The project would not construct structures or modify the existing land form in a way that would cause an adverse effect on a scenic vista, and the project does not propose activities that would damage scenic resources or degrade the existing visual character. The project would not significantly alter the developed character of the site nor adversely impact any scenic views through and across the property.</i>				
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The project does not propose activities that would damage scenic resources or degrade the existing visual character. The project would not damage any significant scenic resources within a designated state scenic highway or create an aesthetically offensive site open to the public since the site is not located along a state scenic highway.</i>				
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The project does not propose activities that would damage scenic resources or degrade the existing visual character of the site or the surroundings.</i>				
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>O&amp;M activities are not scheduled to occur at night and the project would not create a new source of light or glare that would affect daytime or nighttime views of the area. Although no impacts are anticipated, compliance with the City's Outdoor Lighting Ordinance would ensure that any impacts related to light and glare, resulting from the project, are less than significant.</i>				

**II. AGRICULTURE AND FORESTRY RESOURCES.** In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The majority of the project site is within urban and suburban areas, and does not involve changes to the existing environment that would result in conversion of Farmland to a nonagricultural use.</i>				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The proposed Operation and Maintenance(O&amp;M) activities are routine in nature and would not conflict with existing agricultural zoning or a Williamson Act contract.</i>				
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The proposed project does not conflict with existing zoning for forest land and does not propose to rezone existing forest land or timberland.</i>				
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The proposed project consists of routine O&amp;M activities and would not result in the loss of forest land and does not propose to convert forest land to a nonforest use.</i>				
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The proposed project does not involve any other changes to the existing environment that would result in conversion of Farmland to a nonagricultural use, or forest land to a nonforest use.</i>				

**III. AIR QUALITY.** Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.

*The City of Escondido has adopted quantitative thresholds for determining significance of impact under CEQA. These maximum daily thresholds are 55 pounds per day (lbs/day) of volatile organic compounds (VOC), 55 lbs/day of oxides of nitrogen (NO<sub>x</sub>), 550 lbs/day of carbon monoxide (CO), and 150 lbs/day of particulate matter of 10 microns or less (PM<sub>10</sub>). The project would have a significant adverse effect on air quality if any of the following would occur as a result of a project-related component.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>The proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation or obstruct implementation of applicable air quality plans.</i>				
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<i>The proposed project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.</i>				
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*Construction emissions are described as "short-term" or temporary in duration and have the potential to represent a significant impact with respect to air quality, especially fugitive dust emissions (PM<sub>10</sub> and PM<sub>2.5</sub>). Fugitive dust emissions are associated primarily with heavy site preparation activities and vary as a function of such parameters as soil silt content, soil moisture, wind speed, acreage of disturbance area, and miles traveled by construction vehicles on- and off-site. VOC and NO<sub>x</sub> emissions are associated primarily with gas and diesel equipment exhaust. With respect to the proposed project, dredging, clearing of vegetation, and cleaning of culverts would result in the temporary generation of VOC, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. At the peak of construction, it is assumed that two teams would be using the maximum amount of equipment simultaneously (e.g. two loaders, two excavators, and two backhoes).*

*Short-term construction-generated emissions of VOC, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> were modeled using the California Air Resource Board (ARB)-recommended URBEMIS 2007, Version 9.2.4, computer program (Rimpo 2008). Input parameters were based on default model settings and project-specific information where available (e.g., number and type of equipment).*

*Based on the modeling conducted, project construction would result in worst-case maximum daily emissions of approximately 3.9 lbs/day of VOC, 24.4 lbs/day of NO<sub>x</sub>, and 1.8 lbs/day of PM<sub>10</sub>. Daily construction-generated emissions would not exceed the City's significance threshold of 55 lbs/day for reactive organic gas and NO<sub>x</sub>, and 150 lbs/day of PM<sub>10</sub>. Because the project would not exceed significance thresholds, it would not conflict with or obstruct implementation of the applicable air quality plan, violate any air quality standard or contribute substantially to an existing or projected air quality violation, nor result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard. This impact would be less than significant.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
--	--------------------------------	--	------------------------------	-----------

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) Expose sensitive receptors to substantial pollutant concentrations? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

*The proposed project would not increase traffic volumes on local streets and intersections, as indicated in the Traffic/Transportation Section, and the proposed project would not result in a substantial increase in the number of vehicles operating in cold start mode or substantially increase the number of vehicles on local roadways. Based on modeling conducted for the project, CO emissions would be 19.8 lbs/day which is less than the City's threshold of 550 lbs/day. Therefore, the project would not cause an unacceptable concentration of CO at any project-affected intersection.*

*Project construction, including site preparations and building construction, would result in short-term generation of diesel exhaust emissions from the use of off-road diesel equipment required for construction activities. Particulate exhaust emissions from diesel-fueled engines (diesel PM) were identified as a toxic air contaminant (TAC) by ARB in 1998. The potential cancer risk from the inhalation of diesel PM, as discussed below, outweighs the potential for all other health impacts. The dose to which the receptors are exposed (a function of concentration and duration of exposure) is the primary factor used to determine health risk (i.e., potential exposure to TAC emission levels that exceed applicable standards). According to the Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project (Salinas, pers. comm., 2004).*

*The possible sensitive receptor exposure period for the proposed project is short (less than 45 days). In addition, diesel PM is highly dispersive and studies have shown that measured concentrations of vehicle-related pollutants, including ultra-fine particles, decrease dramatically within approximately 300 feet of the source (Zhu et al. 2002). Because the use of mobilized equipment would be temporary, in combination with the dispersive properties of diesel PM, and because primary construction activities would not be active within 300 feet of any sensitive receptors for any substantial length of time (70 years), construction-related TAC emissions would not be anticipated to expose sensitive receptors to substantial pollutant concentrations. Therefore, this impact from diesel exhaust and CO emissions would be **less than significant**.*

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| f) Create objectionable odors affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

*During construction, diesel equipment operating at the site may generate some nuisance odors. However, due to the temporary nature of construction (less than 45 days in any one location), odors associated with project construction would not be considered significant.*

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------------	--	------------------------------------	--------------

**IV. BIOLOGICAL RESOURCES:**

Would the project:

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

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------	--------------------------

*Six special status species have the potential to occur within at least one facility footprint, and an additional 15 species have the potential to occur within at least one 100-foot facility buffer. With the use of adequate mitigation measures, the proposed project would avoid adverse effects (direct and indirect) to special status species. These impacts are further discussed in the Mitigated Negative Declaration (MND).*

- b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------	--------------------------

*Of the total 75.94 acres among the facility footprints, the project would have the potential to result in significant impacts to 1.39 acres of sensitive riparian and wetland habitats. At each facility, the City has made great efforts to constrain the impact area to existing serviceable concrete-lined features and otherwise developed/disturbed areas. In natural facilities with native vegetation growing in earthen-bottom channels, the City would limit impacts to the understory and would constrain the work area within riparian and other sensitive habitats to a 20-foot radius and/or minimal low-flow channel resulting in site-specific impacts of less than 0.1 acre. The City would avoid removal of native riparian trees and shrubs, with only minor trimming of lower branches where necessary to maintain access and flow. These project design features would provide the minimal access and work area necessary to keep the MS4 culverts unobstructed, while leaving the larger reaches of earthen channel untouched.*

*Several measures would be implemented to avoid and minimize significant impacts (direct and indirect) to jurisdictional waters to the greatest extent practicable. These measures are further described in the MND. Even with implementation of avoidance and minimization measures, significant impacts to 1.39 acres of sensitive habitat would remain with project implementation. However, with implementation of Mitigation Measure BIO-23, requiring compensatory mitigation for impacts to habitats through creation, restoration, and/or enhancement, impacts to sensitive habitats would be less than significant.*

*Given the riparian and other sensitive habitats occurring within the project study area are also considered jurisdictional waters, impacts and associated compensatory mitigation are addressed further in the response to question 'c,' below.*

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------------	--	------------------------------------	--------------

- c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------	-------------------------------------	--------------------------	--------------------------

*Of the total 75.94 acres among the facility footprints, 74.24 acres of the project impacts would occur within potential jurisdictional waters. Of this area, 72.84 acres occur in serviceable concrete-lined features. Within these serviceable concrete-lined features, 71.74 acres are unvegetated [i.e., Tier IV], and the remaining 1.10 acres are sparsely vegetated by opportunistic herbaceous plant species [i.e., Tier III]. These are further described in the MND. Dredging within Tier III and Tier IV concrete-lined channels would have no significant impact on federally protected wetland resources, as removal of sediment would be beneficial to these concrete water courses and would not result in hydrological interruption or filling of the channel.*

*Potentially significant project impacts of up to 1.39 acres of wetland or riparian habitat (i.e., federal and/or state jurisdictional habitat) would occur from future facility maintenance and repair activities. These potentially significant impacts occur at facilities within the Carlsbad and San Dieguito HUs, spanning three HAs (San Marcos, Escondido, and Hodges).*

*Without compensatory mitigation, impacts to jurisdictional waters (and the sensitive habitats encompassed therein) would be considered significant. Adherence to project design, avoidance, and minimization measures are described in the MND, and would result in project impacts that are less than significant.*

- d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

*The proposed project involves minimally invasive vegetation and sediment removal within maintenance facilities that are accessible primarily via urban hardscape. Maintenance activities would be timed to avoid significant impacts to special status species, would be designed to avoid native riparian tree removal, and would not involve the permanent placement of obstructive apparatus or structures within native habitats. The small impact footprint and low invasiveness of maintenance at each facility, coupled with the urbanized setting of most facilities, would result in less than significant impacts to wildlife movement and habitat corridors from the project. These impacts are further discussed in the MND.*

*The North County Multiple Species Conservation Plan (NCMSCP) identifies a key overland wildlife crossing along County Highway S6, which is within 1 mile of two facilities on Lake Wohlford Road. These facilities are located within City limits (and therefore outside of the NCMSCP Plan Area), and work at these facilities would not affect this key wildlife crossing or the associated movement corridor. No other resources specific to wildlife movement are*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<i>identified in the NCMSCP or Multiple Habitat Conservation Program (MHCP) as occurring proximate to the project study area</i>				
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

*The City defines protected trees as "any oak (Quercus sp.) which has a ten (10) inch or greater DBH, or any other species or individual specimen listed on the local historic register, or determined to substantially contribute to the historic character of a property or structure listed on the local historic register, pursuant to Article 40 of the Escondido Zoning Code (2001)." Several oak trees, both Engelmann oak (Quercus engelmannii) and coast live oak (Quercus agrifolia) are present at two facilities along Lake Wohlford Road. These protected trees would be avoided during project activities. Impacts and further discussed in the MND and would be less than significant.*

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	--------------------------	-------------------------------------	--------------------------

*The project study area occurs within one regional conservation planning area: the City of Escondido Subarea Plan under the MHCP. The project study area occurs within City limits and thus outside of the NCMSCP Area.*

*The MHCP Escondido Subarea Plan documents core conservation areas, known as Habitat Management Plan (HMP) areas. Five of the 63 proposed project facilities occur within HMP areas. The MHCP calls for conservation of between 90 and 100 percent of resources within preserve areas and no net loss of wetlands. Since the project would avoid take of special status species and would result in no net loss of sensitive habitats or jurisdictional waters, the project is consistent with conservation measures defined in the MHCP.*

**V. CULTURAL RESOURCES. Would the project:**

a) Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	-------------------------------------	--------------------------	--------------------------

*There are many historic properties present throughout the City of Escondido and there is potential that historical resources are located within the project area. Impacts and further discussed in the MND and would be less than significant with mitigation incorporated.*

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	--------------------------	-------------------------------------	--------------------------	--------------------------

*Previous investigations indicate that both prehistoric and historic archaeological resources are present throughout the City of Escondido, thus, it is likely that archaeological resources would be present within the project area. Any adverse impacts to unknown archaeological resources can be mitigated to less than significant with incorporation of appropriate mitigation measures. Impacts are further discussed in the MND.*

- |   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact                |
|---|--------------------------------|--|------------------------------|--------------------------|
| c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature? | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>     | <input type="checkbox"/> |

*Although paleontological resources have not been identified within the City of Escondido, there are older [Pleistocene] alluvium deposits present. These older deposits have a moderate paleontological sensitivity rating and hold the potential to contain paleontological resources. Adverse impacts to undiscovered paleontological resources would be mitigated to a less than significant level, as described further in the MND.*

- |  |                          |                                     |                          |                          |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
| d) Disturb any human remains, including those interred outside of formal cemeteries? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|

*Previous investigations have uncovered human remains in Escondido, so it is possible that remains may be present within the project area. Impacts would be mitigated to a less than significant level with the incorporation of the mitigation measures described in the MND.*

**VI. GEOLOGY AND SOILS.** Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

*Although Escondido is located within a Seismic Zone 4, the project site is not located within proximity to active faults as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. The closest known active faults are the Rose Canyon Fault and the Elsinore Fault. Due to the distance of the project sites from these faults, fault surface rupture is not likely at the project sites. In the event of a major earthquake on these faults or other faults within the Southern California region, the site could be subjected to moderate to severe ground shaking. However, the site is not considered to possess a significantly greater seismic risk than that of the surrounding area in general.*

- |                                    |                          |                          |                          |                                     |
|------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|
| ii) Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|------------------------------------|--------------------------|--------------------------|--------------------------|-------------------------------------|

*As stated above, in the event of a major earthquake on these faults or other faults within the Southern California region, the site could be subjected to moderate to severe ground shaking. However, the site is not considered to possess a significantly greater seismic risk than that of the surrounding area in general.*

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| iii) Seismic-related ground failure, including liquefaction?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| iv) Landslides?   | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

*The proposed O&M activities are routine in nature and would not result in any substantial soil erosion or the loss of topsoil because all areas are developed with structures, paving, or hardscape.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslides, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*Potential geologic hazards such as tsunamis, seiches, liquefaction, or collapse should be considered to be negligible or nonexistent.*

g) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	-------------------------------------

*The proposed project consists of routine O&M activities on existing structures throughout San Diego County. The project would not create a substantial risk to life or property.*

h) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	-------------------------------------

*Although the project would not require a permanent water supply or source, the project site would be served by an existing wastewater/sewer pipeline system within the City of Escondido when necessary. No septic tanks or alternative wastewater disposal system would be utilized as part of the project.*

**VII. GREENHOUSE GAS EMISSIONS.** Would the project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
---	--------------------------	--------------------------	-------------------------------------	--------------------------

*Greenhouse gas (GHG) emissions associated with the proposed project would predominantly be in the form of carbon dioxide (CO<sub>2</sub>) from heavy equipment related to construction. Although emissions of other GHGs, such as methane and nitrous oxide (N<sub>2</sub>O), are important with respect to global climate change, the emission levels of these GHGs are relatively small compared with CO<sub>2</sub> emissions, even considering their higher global warming potential. Therefore, all GHG emissions for construction and operation are reported as CO<sub>2</sub>.*

*Construction would occur in separate phases for each different area, with each section taking approximately 1 to 45 days to complete. During this time, a net increase in GHG emissions would result from various construction activities. Construction-related GHG emissions would be associated with engine exhaust from heavy-duty construction equipment, material (e.g., building materials, soil) transport trucks, and worker commute trips. Although any increase in GHG emissions would add to the quantity of emissions that contribute to global climate change, it is noteworthy that emissions associated with construction of the proposed project would occur over a finite period. Following completion of the project, all construction emissions would cease. Despite the intensity and duration of construction activities and the lack of available mitigation measures to abate GHG emissions from heavy-duty construction equipment, the incremental contribution to climate change by the project's construction*

	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Potentially Significant Impact			

*emissions would be minimal and would not be a considerable contribution to the cumulative global impact.*

*To establish additional context in which to consider the order of magnitude of project-generated construction GHG emissions, it may be noted that facilities (i.e., stationary, continuous sources of GHG emissions) that generate greater than 25,000 metric tons of CO<sub>2</sub> per year are mandated to report their GHG emissions to the ARB pursuant to Assembly Bill (AB) 32. The Bay Area Air Quality Management District has not established a GHG threshold methodology for construction activities. As modeled for air quality emissions using URBEMIS2007 v9.2.4, estimated GHG emissions associated with construction of the entire project would be a maximum of approximately 430 metric tons of CO<sub>2</sub> for the entire project. Absent any air quality regulatory agency-adopted threshold for GHG emissions for construction, it is notable that the proposed project would generate substantially fewer emissions than the AB 32 reporting threshold of 25,000 metric tons CO<sub>2</sub> per year. This information is presented for informational purposes only, and it is not the intention of the City of Escondido to adopt 25,000 metric tons of CO<sub>2</sub> per year as a numeric threshold. Rather, the intention is to put project-generated GHG emissions in the appropriate statewide context in order to evaluate whether the project's contribution to the global impact of climate change is considered significant. Because construction-related emissions would be temporary and finite in nature and would be below the minimum standard for reporting requirements under AB 32, the project's GHG emissions would not be a considerable contribution to the cumulative global impact and therefore would be less than significant.*

- b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

*The proposed project would not generate any long-term sources of GHG and short-term construction generated GHG emissions would be finite in nature and below ARB-reporting levels. As such, the proposed project would not conflict with the successful implementation of AB 32, the AB 32 Scoping Plan, and Executive Order S 14 08. Similarly, the proposed project would not conflict with any other applicable plan, policy, or regulation adopted for reducing GHG emissions. Because the project would not conflict with any applicable plan, policy, or regulation for GHG reduction or managing global climate change, this impact would be less than significant.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
<b>VIII. HAZARDS AND HAZARDOUS MATERIALS.</b> Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>Due to the nature of the project and the lack of hazardous materials associated with the proposed O&amp;M activities, the project would not result in the creation of any health hazards to the public through transport, use, or disposal of hazardous materials.</i>				
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The project would not result in the creation of any health hazards nor would it involve a risk of an explosion or the release of hazardous substances. The project does not involve the use or storage of hazardous materials that would result in a reasonably foreseeable upset or accident conditions.</i>				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school.</i>				
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>No significant odors, pools of liquid, significantly stained soils, indicators of underground storage tanks, pits, or ponds have been observed at the sites. No evidence or indication of releases of petroleum hydrocarbons, heavy metals, hazardous chemicals, or other "recognized environmental conditions" have been revealed at the sites in present or previous conditions. According to the California Department of Toxic Substances Control Hazardous Waste and Substances Site List (Envirostor 2007), only one active Hazardous Waste and Substances Site is located in Escondido. This site is known as the Chatham Brothers Barrel Yard and is located at 2257 Bernardo Ave, Escondido, CA. This site is approximately 1 mile from the closest structure/channel (H-07) and would therefore not create or contribute to a significant hazard to the public or environment.</i>				
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The proposed project is not located within 2 miles of a public airport or public use airport and would not result in a safety hazard for people residing or working in the area.</i>				

- |   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|---|--------------------------------|--|------------------------------|-------------------------------------|
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

*The proposed project is not located within the vicinity of a private airstrip and would not result in a safety hazard for people residing or working in the area.*

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

*The proposed project consists of routine O&M activities and does not include activities or structures that would impair the implementation of, or physically interfere with, an adopted emergency response plan or evacuation plan. The proposed O&M activities are not expected to result in the need for additional emergency and fire facilities.*

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

*The proposed project would not expose people or structures to wildland fires as the majority of the O&M activities would be completed in an urban or suburban setting. The project does not include activities that would increase the risk of fires, so in areas where residences are intermixed with wildlands there would be no increased risks. The proposed O&M activities are not expected to result in the need for additional emergency and fire facilities.*

**IX. HYDROLOGY AND WATER QUALITY.** Would the project:

- |   |                          |                                     |                          |                          |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|

*The proposed project has the potential to discharge pollutants to receiving waters through the implementation of various storm drain maintenance activities. Potential pollutants include (1) sediment, siltation, and turbidity from ground-disturbing activities, vegetation removal, and/or dredging of concrete channels, (2) re-entrainment of pollutants in accumulated sediment that are disturbed/removed, and (3) pollutants from heavy equipment, which may consist of oil and grease, heavy metals, and various petroleum products.*

*BMPs for water quality protection (including erosion and sediment control measures) would be implemented to adequately control the potential discharge of pollutants during maintenance activities to a less than significant level. These mitigation measures are detailed in the MND. With implementation of these measures, impacts to water quality from maintenance activities would be less than significant. Due to the nature of the accumulated sediment/vegetation that would be proposed for removal (upgradient erosion of natural areas and roadway sediment) hazardous pollutant levels within the sediment would not be expected.*

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------------	--	------------------------------------	--------------

- b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
--------------------------	--------------------------	-------------------------------------	--------------------------

*The proposed project involves the routine removal of vegetation and/or sediment/silt from various storm drain facilities (constructed and natural) for the proper functioning of the storm drain system. The project does not propose the withdrawal of groundwater or interfere with groundwater recharge in such a manner that would affect the groundwater table level and project activities would not cause any groundwater resource diversion to or from the existing watershed. In the event dredging operations associated with the project encounter groundwater, compliance with Regional Water Quality Control Board (RWQCB) Order No. 2001-96, "General Waste Discharge Requirements for Groundwater Extraction" would be required.*

- c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

*The project serves to increase storm water conveyance capacity within the limits of the original design. Proposed activities would not substantially alter the existing drainage pattern of the sites or areas. For proposed maintenance activities within existing drainages, implementation of avoidance and minimization measures would reduce the potential for erosion or siltation impacts to a less than significant level.*

- d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

*The proposed project does not include activities that would alter the existing drainage pattern of the site or area in a manner that would result in substantial increase in the rate or amount of surface runoff. The proposed project purpose is to improve runoff conveyance and minimize flooding potential.*

- e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--------------------------	--------------------------	--------------------------	-------------------------------------

*The project serves to increase storm water conveyance capacity within the limits of the original design. Proposed improvements would not create or contribute runoff water to existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The project does not include activities that would otherwise substantially degrade water quality.</i>				
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The project does not propose to construct any housing and would not alter the flood hazard area.</i>				
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The project does not propose to construct structures that would impede or redirect flows within a 100-year flood hazard area.</i>				
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The project does not propose to construct a levee or dam and would not otherwise expose people or structures to a significant risk of flooding.</i>				
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The project does not include activities that would increase the risk of inundation by seiche, tsunami, or mudflow.</i>				
<b>X. LAND USE AND PLANNING.</b> Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>The proposed project would not create any new land use barriers, or otherwise divide or disrupt the physical arrangement of the surrounding community because the proposed project does not propose the construction of any new structures that might divide an established area.</i>				
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<i>From a land use perspective, no adverse impacts from the proposed project are anticipated because O&amp;M activities would be conducted in existing channels and structures and would not alter existing uses or conflict with local land use planning policies.</i>				
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------------	--	------------------------------------	--------------

**XI. MINERAL RESOURCES.** Would the project:

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

*The proposed project consists of routine O&M activities and would not change the existing availability of mineral resources that would be of value to the region and residents of the state.*

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

*No known locally important mineral resource recovery site is located on the project site or within the vicinity of the project site.*

**XII. NOISE** – Would the project result in:

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

*The Escondido Noise Ordinance is contained in Chapter 17, Article 12, Noise Abatement and Control, of the City Municipal Code (Code). Noise level limits between adjacent properties are governed by Section 17-229 of the Code. Fixed-location public utility distribution or transmission facilities located on or adjacent to a property line are subject to the noise level limits in Section 17-229 of the Code, measured at or beyond six (6) feet from the boundary of the easement upon which the equipment is located. General construction noise is governed by Section 17-234 of the Code, which limits construction operations to 7:00 a.m. through 6:00 p.m., Monday through Friday, and on Saturdays between the hours of 9:00 a.m. through 5:00 p.m. and prohibits construction on Sundays and City holidays. Noise generated by grading activities is governed by Section 17-238 of the Code, which limits grading operations to 7:00 a.m. to 6:00 p.m., Monday through Friday and prohibits grading on Saturdays, Sundays, and City holidays. A variance for grading may be issued by the City Manager to allow grading operations on Saturdays between 10:00 a.m. to 5:00 p.m., if it can be demonstrated that it would serve the community good. Both Code Sections 17-234 and 17-238 limit noise generated by construction equipment to a maximum of 75 A-weighted decibels (dBA) for a 1-hour noise level equivalence (L<sub>eq</sub>) at the property line of any property developed for residential purposes, unless a variance is obtained from the City Manager (pursuant to Code Sections 17-249 through 17-257).*

*In general, construction activities are carried out in phases and each phase has its own noise characteristics based on the mix of construction equipment in use. Typical maximum noise levels from O&M equipment would range from 55 to 85 dBA L<sub>max</sub> (FTA 2006) at a distance of 50 feet from the noise source.*

*Typical construction projects, with equipment moving from one point to another, work breaks, and idle time, have long-term noise averages that are lower than loud short-term noise events. For purposes of analysis of this project, a maximum 1-hour average*

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------------	--	------------------------------------	--------------

noise level, of 70 dBA  $L_{eq}$  at a distance of 50 feet from the construction area is assumed to occur. As the areas where these activities would occur are considered acoustically soft, noise levels would drop off at a rate of 7.5 dBA per doubling of distance. Thus, construction-related noise levels are not anticipated to exceed the noise level limits identified in Sections 17-234 and 17-238. The project does not contain operational components that would be subject to Section 17-229. Therefore, the proposed project would not result in noise levels in excess of standards established in the local general plan or noise ordinance, or other applicable standards.

Habitat Noise

While there are no specific noise level limits for threatened or endangered species, noise levels of 60 dBA  $L_{eq}$  or greater are generally considered to negatively affect the nesting and mating habits of threatened or endangered avian species. Based on the proposed efforts, construction noise levels would attenuate to 60 dBA  $L_{eq}$  or less at a distance greater than 125 feet from the center of construction. The determination of the significance of impacts to threatened or endangered species is provided in the biological resources section of this Initial Study.

- |   |                          |                          |                                     |                          |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|
| c) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|--------------------------|-------------------------------------|--------------------------|

Human and structural response to different vibration levels is influenced by a number of factors, including ground type, distance between source and receptor, duration, and the number of perceived vibration events. No pile driving or explosives blasting is anticipated as a result of the project. Thus, the most substantial vibration sources associated with the proposed project would be the O&M equipment used during vegetation clearing and dredging activities. Vibration levels, reported as the peak particle velocity in inches per second (PPV in/sec) from equipment proposed would be 0.1 PPV in/sec or less at distances of 30 feet or more. This level is well below the thresholds that would cause annoyance to people or damage structures. Therefore, less than significant vibration and groundborne noise impacts would be associated with the proposed project.

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| d) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

O&M activities would not cause a permanent increase in ambient noise levels since the activities would be temporary and limited by the City's Noise Ordinance (Sections 17-234 and 17-238 of the Code) to hours of less noise sensitivity. Upon completion of the project, all O&M activity noise would cease. The project consists of temporary O&M activities and by nature would not result in operational noise or any other permanent source of noise.

- |  |                          |                          |                                     |                          |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|
| e) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|--------------------------|-------------------------------------|--------------------------|

Noise impacts from a project are a function of the noise generated by the O&M equipment, the location and sensitivity of nearby land

	<b>Less Than Significant with Mitigation Incorporated</b>	<b>Less Than Significant Impact</b>	<b>No Impact</b>
<b>Potentially Significant Impact</b>			

uses, and the timing and duration of the noise-generating activities. As indicated, O&M equipment is anticipated to generate noise levels of approximately 70 dBA  $L_{eq}$  at 50 feet. Noise levels on this order are considered acceptable by the City Noise Ordinance. Thus, while noise levels within and adjacent to the specific O&M activity sites would increase during the O&M period due to the use of graders, backhoes, excavators, front end loaders, and other equipment, the increase would not be considered substantial. Additionally, O&M activities would be temporary and limited by the City's Noise Ordinance (Sections 17-234 and 17-238 of the Code) to hours of less noise sensitivity. Therefore, temporary or periodic increase in ambient noise levels associated with the proposed project would be less than significant.

- f) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

*The project is not located within an airport land use plan or within 2 miles of a public airport or public use airport, and would not expose people residing or working in the area to excessive noise levels.*

- g) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

*No private airstrips are located within 2 miles of the proposed project site; thus, people residing or working in the project area would not be exposed to excessive noise levels due to airport operations.*

**XIII. POPULATION AND HOUSING.** Would the project:

- a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

*Population within the surrounding area and Escondido would not incrementally increase as a result of this proposed project. The proposed O&M activities would not alter the location, distribution, or population density within the area, nor would it adversely impact the City's housing demand. The project does not propose to create or expand infrastructure that would induce population growth.*

- b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

*The locations of structures requiring O&M activities do not contain any existing housing or rental units that would be displaced. The proposed project would not add any units to the existing housing stock and would not create a demand for additional housing or necessitate the construction of housing elsewhere.*

- |   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|---|--------------------------------|--|------------------------------|-------------------------------------|
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

*The proposed project consists of routine O&M activities, which would not displace any people or necessitate the construction of replacement housing.*

**XIV. PUBLIC SERVICES.**

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

Fire protection?

- |                          |                          |                          |                                     |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

*Escondido is currently served by seven fire stations, located throughout the City. The proposed project would not impact fire protection services and would not result in the need for expanded fire protection services.*

Police protection?

- |                          |                          |                          |                                     |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

*No significant impacts to police services are anticipated, and the proposed project would not result in the need for expanded police protection services.*

Schools?

- |                          |                          |                          |                                     |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

*The site is within the Escondido Union School District and the Escondido Union High School District. The proposed project would not result in additional elementary and high school students, and would not result in the need for construction of additional schools.*

Parks?

- |                          |                          |                          |                                     |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

*The project would not result in an incremental increase in demand on the City's recreational facilities, and would not result in the need for additional parks. The project would not affect existing recreational opportunities since the site currently is not used for recreational activities and is not listed as a potential park site in the City's Master Plan of Parks, Trails and Open Space. No significant impact to recreational resources would occur as a result of the project.*

Other public facilities?

- |                          |                          |                          |                                     |
|--------------------------|--------------------------|--------------------------|-------------------------------------|
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--------------------------|--------------------------|--------------------------|-------------------------------------|

*The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities or staff. The project would not result in a significant increase in demand on library services, or the development of additional library spaces. The project would not result in substantial adverse physical impacts associated with the provision of new or physically altered San Diego Gas and Electric facilities. The project would not impact or affect any other public facilities in a manner that would result in the need for additional or expanded public facilities.*

Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
--------------------------------------	--	------------------------------------	--------------

**XV. RECREATION.**

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

*The O&M activities associated with the project would not increase the use of existing neighborhood parks and regional parks or other recreational facilities. No impact to recreational resources is anticipated.*

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

*The proposed project does not include any recreational facilities or require the construction or expansion of recreational facilities. No impacts to recreational resources are expected.*

**XVI. TRANSPORTATION/TRAFFIC. Would the project:**

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

*The proposed project would not conflict with adopted policies, plans, or programs related to the performance of the circulation system or supporting alternative transportation. The proposed project would not impact any proposed bus routes or stops, or require the development of new or relocated bus stops.*

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

*The proposed project consists of routine O&M activities. Vehicle trips would be associated with the proposed project, but would not substantially increase congestion or affect the level of service. The proposed project would not conflict with an applicable congestion management program or any other standards established by the county congestion management agency.*

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

*The proposed project consists of routine O&M activities and would not result in a change in air traffic patterns.*

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

*The proposed project consists only of routine O&M activities and does not propose any changes to existing design features or any incompatible uses.*

e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	-------------------------------------

*The proposed project would not result in inadequate emergency access, as all O&M activities would be completed off of the roadways and would not block roadway or impede traffic in any way. Emergency and nonemergency response times of the Escondido Fire Department would remain the same with the proposed project.*

f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	-------------------------------------

*The proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation.*

**XVII. UTILITIES AND SERVICE SYSTEMS.**

Would the project:

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	-------------------------------------

*The project would not discharge effluent that would exceed wastewater treatment requirements of the San Diego RWQCB.*

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	-------------------------------------

*The proposed project includes the maintenance of existing structures and does not include expansion of the system or require construction of a new wastewater treatment facility or new storm water facilities.*

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	--------------------------	-------------------------------------

*The proposed project includes the maintenance of existing structures and does not include expansion of the system or require construction of new storm water facilities.*

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
--	--------------------------	--------------------------	--------------------------	-------------------------------------

*The proposed project does not require a permanent source of water supply and would not require additional water entitlements.*

- |   | Potentially Significant Impact | Less Than Significant with Mitigation Incorporated | Less Than Significant Impact | No Impact                           |
|---|--------------------------------|--|------------------------------|-------------------------------------|
| e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

*The proposed project would not require wastewater treatment services or the expansion of a wastewater treatment facility.*

- |  |                          |                          |                          |                                     |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|
| f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|--|--------------------------|--------------------------|--------------------------|-------------------------------------|

*Escondido Disposal, Inc. (EDI) currently provides solid waste removal service for the Escondido area. EDI also operates a solid waste transfer station at their Washington Avenue site where solid waste is consolidated into larger transfer trucks and taken to a class III landfill for disposal. Solid waste pick-up would be available for the project by EDI for all O&M activities. The project's solid waste disposal needs would be minimal and could be adequately served by the landfill.*

- |   |                          |                          |                          |                                     |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| g) Comply with federal, state, and local statutes and regulations related to solid waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|

*Maintenance personnel would dispose of solid waste in accordance with applicable solid waste regulations. All O&M activities would comply with all federal, state, and local statutes and regulation related to solid waste.*

**XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.**

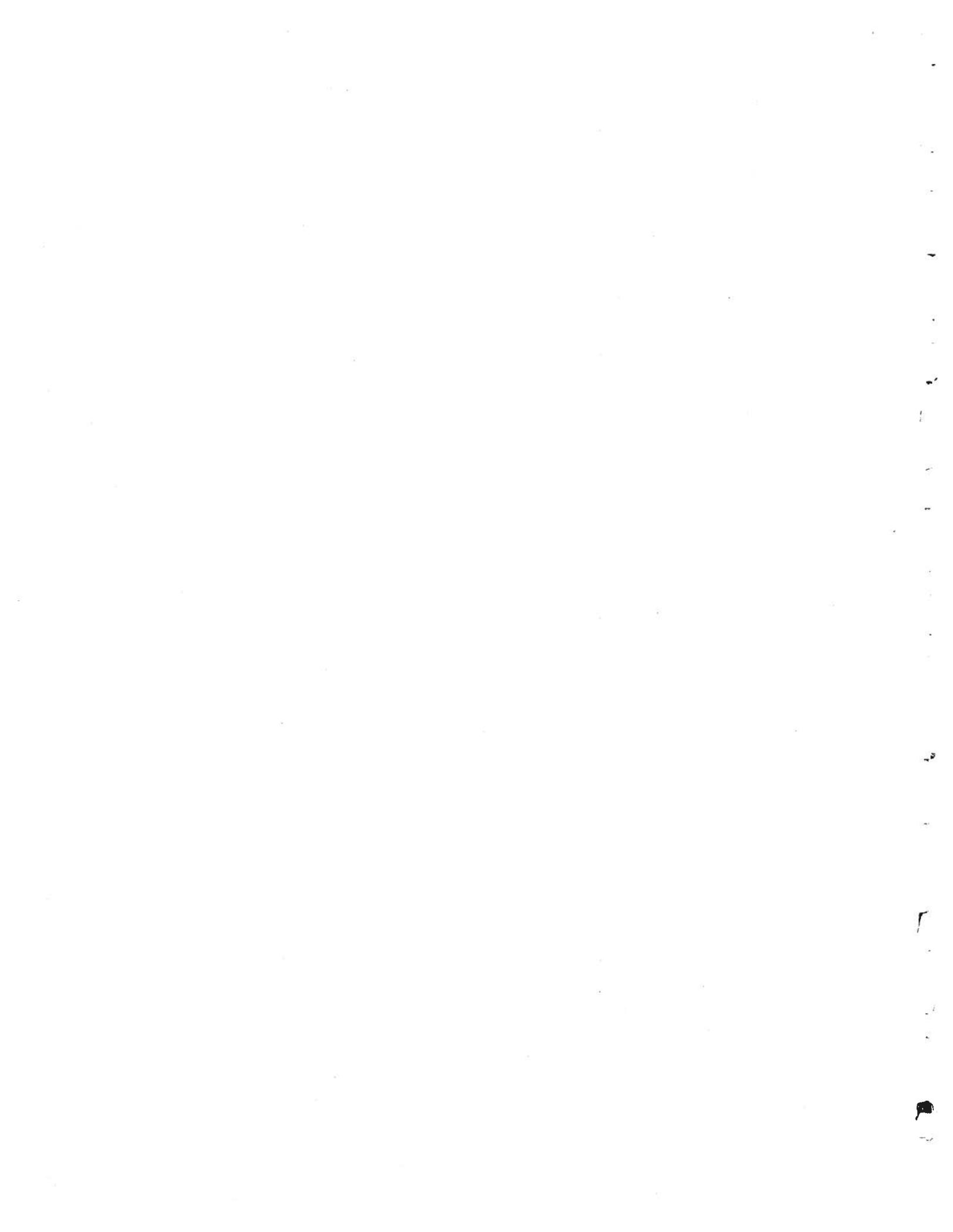
- |  |                          |                          |                                     |                                     |
|--|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?   | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?  | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

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

Revised 2009

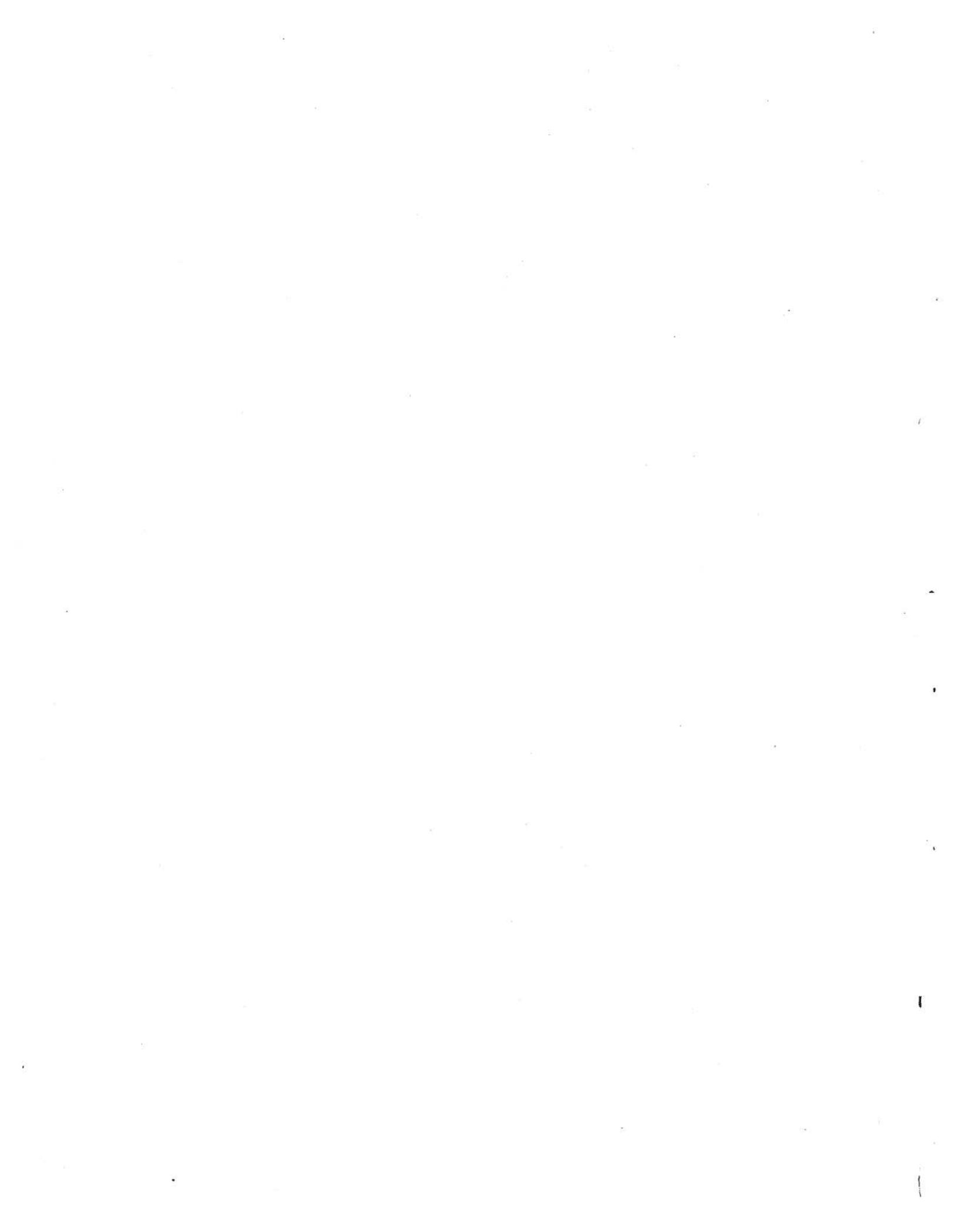
**APPENDIX B**

**FACILITY SUMMARY TABLE**



## **APPENDIX C**

### **SPECIAL-STATUS SPECIES DOCUMENTED WITHIN 1-MILE OF THE PROJECT STUDY AREA**



**Appendix C**  
**Special-Status Species Documented within 1 mile of the Project Study Area**

Scientific Name Common Name	Protective Status/ Policy <sup>1</sup>	Habitat	Potential for Occurrence <sup>2</sup>		Distribution and Potential to Occur within the Study Area
			Facility Footprints	100-foot Facility Buffers	
<b>Plants</b>					
<i>Acanthomintha ilicifolia</i> San Diego thorn-mint	FT, CE, CNPS List 1B.1, NCMSCP (SAP), MHCP	Clay soils, openings in shrub canopy within chaparral, coastal scrub, valley and foothill grassland, and vernal pools.	NE	NE	Not documented within the project study area, and not expected to occur. Known from within a mile of the project study area according to CNDDB accuracy areas (applies to facilities SM-02, SM-03 and SM-04).
<i>Ambrosia pumila</i> San Diego ambrosia	FE, CNPS List 1B.1, NCMSCP (SAP), MHCP	Sandy loam or clay soils, often in disturbed areas (sometimes with alkaline conditions) within chaparral, coastal scrub, valley and foothill grassland, and vernal pools.	NE	L	Not documented within the project study area. Known from within a mile of the project study area according to CNDDB accuracy areas (applies to facilities H-08, H-09, H-10, H-11, H-12, and H-13). Other earthen-lined facilities with suitable sandy soils also have low potential to support this species. <b>Note: The study area contains USFWS-designated critical habitat for this species occurs within the 100-foot buffer of facility H-13 (the critical habitat does not extend into the facility footprint).</b>
<i>Arctostaphylos glandulosa</i> ssp. <i>crassifolia</i> Del Mar manzanita	FE, CNPS List 1B.1, NCMSCP (SAP), MHCP	Sandy soils within maritime chaparral.	NE	NE	Not documented within the project study area, and not expected to occur. Known from within a mile of the project study area according to CNDDB accuracy areas (applies to facility SM-04).
<i>Arctostaphylos rainbowensis</i> Rainbow manzanita	CNPS List 1B.1, NCMSCP (SAP)	Chaparral.	NE	NE	Not documented within the project study area, and not expected to occur. Known from within a mile of the project study area according to CNDDB accuracy areas (applies to facilities SM-01, SM-02, and SM-03).
<i>Artemisia palmeri</i> San Diego sagewort	CNPS List 4.2	Sandy soils and mesic conditions within chaparral, coastal scrub, riparian forest, riparian scrub, and riparian woodland.	H	P	Detected during 2010 AECOM biological surveys within the 100-foot facility buffers of facilities E-05, E-06, and E-07. High potential to occur in riparian habitats within the project study area.
<i>Brodiaea orcuttii</i> Orcutt's brodiaea	CNPS List 1B.1, NCMSCP (SAP, Wetland, VP)	Clay (sometimes serpentinite) soils within closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and	NE	NE	Not documented within the project study area, and not expected to occur. Known from within a mile of the project study area according to CNDDB accuracy areas (applies to facilities E-35, E-36, and E-37).

Scientific Name Common Name	Protective Status/ Policy <sup>1</sup>	Habitat	Potential for Occurrence <sup>2</sup>		Distribution and Potential to Occur within the Study Area
			Facility Footprints	100-foot Facility Buffers	
		foothill grassland, and vernal pools.			
<i>Ceanothus verrucosus</i> wart-stemmed ceanothus	CNPS List 2.2, NCMSCP, MHCP	Chaparral.	NE	NE	Not documented within the project study area, and not expected to occur. Known from within a mile of the project study area according to CNDDDB accuracy areas (applies to facilities E-37, E-47, and H-13).
<i>Centromadia parryi</i> ssp. <i>australis</i> southern tarplant	CNPS List 1B.1, NCMSCP (SAP)	Margins of marshes and swamps, vernal mesic valley and foothill grassland (vernal mesic), and vernal pools.	NE	M	Not documented within the project study area. Potentially documented within the 100-foot facility buffer of facilities E-37, E-46, H-01, H-02, and H-13 based on CNDDDB accuracy areas. Has a moderate potential to occur within facility buffers with suitable mesic conditions; however, the facility footprints are too wet to support this species. Known from within a mile of the project study area according to CNDDDB accuracy areas (widespread distribution).
<i>Centromadia pungens</i> ssp. <i>laevis</i> smooth tarplant	CNPS List 1B.1	Alkaline areas within chenopod scrub, meadows and seeps, playas, riparian woodland, and valley and foothill grassland.	NE	L	Not documented within the project study area, and very low potential to occur in alkaline habitats within the 100-foot facility buffers. Known from within a mile of the project study area according to CNDDDB accuracy areas.
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i> summer holly	CNPS List 1B.2, NCMSCP, MHCP	Chaparral and cismontane woodland.	NE	NE	Not documented within the project study area, and not expected to occur. Known from within a mile of the project study area according to CNDDDB accuracy areas (applies to facilities E-10, E-11, E-12, E-13, E-14, E-15, SM-01, SM-02, and SM-03).
<i>Iva hayesiana</i> San Diego marsh-elder	CNPS List 2.2	Marshes, swamps, and playas.	H	P	Detected during 2010 AECOM biological surveys within the 100-foot facility buffers of facility E-17. High potential to occur in riparian habitats within the project study area.
<i>Juncus acutus</i> ssp. <i>leopoldii</i> southwestern spiny rush	CNPS List 4.2	Mesic coastal dunes, alkali meadows and seeps, coastal salt marshes and swamps.	H	P	Detected during 2010 AECOM biological surveys within the 100-foot facility buffers of facilities E-05, E-06, and E-07. High potential to occur in riparian habitats within the project study area.
<i>Quercus engelmannii</i> Engelmann oak	CNPS List 4.2, NCMSCP, MHCP	Chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland.	H	P	Detected during 2010 AECOM biological surveys within the 100-foot facility buffers of facilities E-35 and E-36. High potential to occur in oak woodland habitats within the project study area.

Scientific Name Common Name	Protective Status/ Policy <sup>1</sup>	Habitat	Potential for Occurrence <sup>2</sup>		Distribution and Potential to Occur within the Study Area
			Facility Footprints	100-foot Facility Buffers	
<i>Tetracoccus dioicus</i> Parry's tetracoccus	CNPS List 1B.2, NCMSCP (SAP), MHCP	Chaparral and coastal scrub.	NE	NE	Not documented within the project study area, and not expected to occur. Known from within a mile of the project study area according to CNDDDB accuracy areas (applies to facilities SM-01 and SM-02).
<b>Reptiles &amp; Amphibians</b>					
<i>Actinemys marmorata</i> southwestern pond turtle	SSC, NCMSCP (Wetland), MHCP	Both permanent and intermittent waters, including marshes, streams, rivers, ponds, and lakes.	NE	NE	Not documented within the project study area, and not expected to occur. AECOM conducted focused trapping surveys for this species in 2011 in Kit Carson Park (San Lake), with negative results. Known from within a mile of the project study area according to CNDDDB accuracy areas (applies to facility E-36).
<i>Aspidoscelis hyperythra</i> orange-throated whiptail	SSC, NCMSCP, MHCP	Semi-arid brushy areas typically with loose soil and rocks, including washes, streamsides, rocky hillsides, and coastal chaparral.	L	L	Not documented within the project study area. Potentially documented within the 100-foot facility buffer of facilities H-01, H-02, E-37, and E-46 based on CNDDDB accuracy areas. Known from within a mile of the project study area according to CNDDDB accuracy areas (widespread distribution).
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	L	Found in a variety of ecosystems, primarily hot and dry open areas with sparse foliage - chaparral, woodland, and riparian areas.	NE	NE	Not documented within the project study area, and not expected to occur. Known from within a mile of the project study area according to CNDDDB accuracy areas (applies to facilities E-08, E-09, E-37, and E-47).
<i>Eumeces skiltonianus interparietalis</i> Coronado Island skink	SSC	Grassland, woodlands, pine forests, chaparral, especially in open sunny areas such as clearings and the edges of creeks and rivers. Prefers rocky areas near streams with lots of vegetation. Also found in areas away from water.	NE	NE	Not documented within the project study area, and not expected to occur. Known from within a mile of the project study area according to CNDDDB accuracy areas (applies to facilities H-02, H-04, H-06, and H-07).
<i>Spea hammondi</i> western spadefoot	SSC, NCMSCP (Wetland, VP), MHCP	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, coastal sage scrub, chaparral, sandy washes, lowlands,	NE	NE	Not documented within the project study area, and not expected to occur. Known from within a mile of the project study area according to CNDDDB accuracy areas (applies to facilities E-08, E-09, and E-37).

Scientific Name Common Name	Protective Status/ Policy <sup>1</sup>	Habitat	Potential for Occurrence <sup>2</sup>		Distribution and Potential to Occur within the Study Area
			Facility Footprints	100-foot Facility Buffers	
		river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains.			
<b>Birds</b>					
<i>Aimophila ruficeps canescens</i> southern California rufous-crowned sparrow	WL, NCMSCP, MHCP	Sparsely vegetated scrubland on hillsides and canyons. Prefers coastal sage scrub, coastal bluff scrub, low-growing serpentine chaparral, and along the edges of tall chaparral habitats. Thrives in areas recently burned.	NE	L	Not documented within the project study area, with low potential to occur in the 100-foot facility buffers. Known from within a mile of the project study area according to CNDDDB accuracy areas (widespread).
<i>Amphispiza belli belli</i> Bell's sage sparrow	WL, NCMSCP, MHCP	Chaparral and sage scrub.	NE	NE	Not documented within the project study area, and not expected to occur due the urbanized setting. Known from within a mile of the project study area according to CNDDDB accuracy areas (applies to facilities SM-02, SM-03, and SM-04).
<i>Athene cunicularia</i> burrowing owl	SSC, NCMSCP	Dry, open areas such as grasslands, prairies, savannas, deserts, farmlands, golf courses and other urban areas.	NE	L	Not documented within the project study area. Potentially documented within the 100-foot facility buffers of facilities E-37, E-46, H-01, and H-02 based on CNDDDB accuracy areas. Known from within a mile of the project study area according to CNDDDB accuracy areas (widespread distribution).
<i>Campylorhynchus brunneicapillus sandiegensis</i> coastal cactus wren	SSC, NCMSCP (SAP), MHCP	Coastal sage scrub in which cacti are prominent. Suitable conditions are found on south-facing slopes, at bases of hillsides, or in dry washes.	NE	L	Not documented within the project study area. Potentially documented within the 100-foot facility buffers of facilities H-08, H-09, H-10, H-11, and H-12 based on CNDDDB accuracy areas. Known from within a mile of the project study area according to CNDDDB accuracy areas (widespread distribution).
<i>Plegadis chihi</i> white-faced ibis	WL, NCMSCP (Wetland), MHCP	Freshwater wetlands, including ponds, swamps and marshes with pockets of emergent vegetation. They also use flooded hay meadows and agricultural fields as feeding locations.	NE	M	Not documented within the project study area. Potentially documented within the 100-foot facility buffers of facilities E-37, E-46, H-01, and H-02 based on CNDDDB accuracy areas. Known from within a mile of the project study area according to CNDDDB accuracy areas (widespread distribution).

Scientific Name Common Name	Protective Status/ Policy <sup>1</sup>	Habitat	Potential for Occurrence <sup>2</sup>		Distribution and Potential to Occur within the Study Area
			Facility Footprints	100-foot Facility Buffers	
<i>Poliophtila californica californica</i> coastal California gnatcatcher	FT, SSC, NCMSCP, MHCP	Coastal sage scrub.	NE	L	Not documented within the project study area. Potentially documented within the 100-foot facility buffer of facilities E-37, E-46, H-01, and H-02, based on CNDDDB accuracy areas. Known from within a mile of the project study area according to CNDDDB accuracy areas (applies to facilities H-08, H-09, H-10, H-11, H-12, and H-13). The 100-foot facility buffers with suitable coastal sage scrub habitat have low potential to support this species. <b>Note: The study area contains USFWS-designated critical habitat for this species at facilities E-29, E-37, and H-9; critical habitat for this species also occurs within the 100-foot buffer of facilities E-28, E-30, and E-36 (the critical habitat does not extend into the facility footprint at these last three facilities).</b>
<i>Vireo bellii pusillus</i> least Bell's vireo	FE, CE, NCMSCP (Wetland), MHCP	Riparian and oak woodland habitats supporting a dense, shrubby understory of mulefat or willows.	M	M	Not documented within the project study area. Potentially documented within the 100-foot facility buffer of facility H-9 based on CNDDDB accuracy areas. Known from within a mile of the project study area according to CNDDDB accuracy areas (widespread distribution).
<b>Mammals</b>					
<i>Antrozous pallidus</i> pallid bat	SSC, NCMSCP (Wetland)	Arid regions with rocky outcroppings, to open, sparsely vegetated grasslands with water nearby.	NE	L	Not documented within the project study area. Potentially documented within the 100-foot facility buffers of facilities E-37, E-46, H-01, and H-02 based on CNDDDB accuracy areas. Known from within a mile of the project study area according to CNDDDB accuracy areas (widespread distribution).
<i>Chaetodipus californicus femoralis</i> Dulzura pocket mouse	SSC	Coastal sage scrub, chaparral, woodlands and grasslands, often at the scrub-grassland interface.	NE	M	Not documented within the project study area. Potentially documented within the 100-foot facility buffers of facilities E-37, E-38, E-39, E-40, E-41, E-42, E-43, E-44, E-45, E-46, H-01, and H-02 based on CNDDDB accuracy areas. Known from within a mile of the project study area according to CNDDDB accuracy areas (widespread distribution).
<i>Lasiurus cinereus</i> hoary bat	L	Evergreen forests and wooded areas.	NE	L	Not documented within the project study area. Potentially documented within the 100-foot facility buffers of facilities E-37, E-46, H-01, and H-02 based on CNDDDB accuracy areas. Known from within a mile of

Scientific Name Common Name	Protective Status/ Policy <sup>1</sup>	Habitat	Potential for Occurrence <sup>2</sup>		Distribution and Potential to Occur within the Study Area
			Facility Footprints	100-foot Facility Buffers	
					the project study area according to CNDDDB accuracy areas (widespread distribution).
<i>Lasiurus xanthinus</i> western yellow bat	SSC	Wooded areas and desert scrub.	NE	L	Not documented within the project study area. Potentially documented within the 100-foot facility buffers of facilities E-37, E-46, H-01, and H-02 based on CNDDDB accuracy areas. Known from within a mile of the project study area according to CNDDDB accuracy areas (widespread distribution).
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	SSC, MHCP	Open land but requires some shrubs for cover. Typical habitats include early stages of chaparral, open coastal sage scrub, and grasslands near the edges of brush.	NE	NE	Not documented within the project study area, and not expected to occur due the urbanized setting. Known from within a mile of the project study area according to CNDDDB accuracy areas (applies to facilities H-08, H-09, H-10, H-11, and H-12).
<i>Neotoma lepida intermedia</i> San Diego desert woodrat	SSC	A variety of shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth.	NE	NE	Not documented within the project study area, and not expected to occur due the urbanized setting. Known from within a mile of the project study area according to CNDDDB accuracy areas (applies to facilities H-08, H-09, H-10, H-11, and H-12).
<i>Nyctinomops femorosaccus</i> pocketed free-tailed bat	SSC	Pinyon-juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oasis.	NE	L	Not documented within the project study area. Potentially documented within the 100-foot facility buffers of facilities E-37, E-46, H-01, and H-02 based on CNDDDB accuracy areas. Known from within a mile of the project study area according to CNDDDB accuracy areas (widespread distribution).
<i>Nyctinomops macrotis</i> big free-tailed bat	SSC	Rocky areas of desert scrub or coniferous forests.	NE	L	Not documented within the project study area. Potentially documented within the 100-foot facility buffers of facilities E-37, E-46, H-01, and H-02 based on CNDDDB accuracy areas. Known from within a mile of the project study area according to CNDDDB accuracy areas (widespread distribution).
<i>Taxidea taxus</i> American badger	SSC, NCMSCP	Level, open areas in grasslands, agricultural areas, and open shrub habitats.	NE	L	Not documented within the project study area. Potentially documented within the 100-foot facility buffers of facilities E-37, E-46, H-01, and H-02 based on CNDDDB accuracy areas. Known from within a mile of the project study area according to CNDDDB accuracy areas (widespread distribution).

<sup>1</sup> Protective Status/Policy Codes:

**FESA** Federal Endangered Species Act

**FE:** Federally Endangered

**FT:** Federally Threatened

**CESA** California Endangered Species Act

**CE:** State Endangered

**SSC:** State Species of Special Concern

**WL:** State Watch List

**L:** Listed on CDFG Special Animals List

**CNPS** California Native Plant Society Lists

**1B:** Considered rare, threatened, or endangered in California and elsewhere

**2:** Plants rare, threatened, or endangered in California, but more common elsewhere

**3:** Plants for which we need more information -- review list

**4:** Plants of limited distribution a watch list

Decimal notations: .1 - Seriously endangered in California, .2 – Fairly endangered in California, .3 – Not very endangered in California

Regional Conservation Plans

**NCMSCP:** North County MSCP Covered Species

**SAP:** Species Avoidance Policy (requires at least 80% conservation)

**Wetland:** Wetland Avoidance Policy (requires no-net-loss)

**VP:** Vernal Pool Policy

**MHCP:** City of Escondido Multiple Habitat Conservation Subarea Plan

<sup>2</sup> Potential for Occurrence:

**P:** Present. Species detected during AECOM environmental surveys (AECOM 2011).

**H:** High potential to occur. Suitable habitat present, and species known to occur within the vicinity. Species not detected during AECOM environmental surveys (AECOM 2011).

**M:** Moderate potential to occur. Suitable habitat present. Species not detected during AECOM environmental surveys (AECOM 2011).

**L:** Low potential to occur. Suitable habitat present, but of marginal quality. Species not detected during AECOM environmental surveys (AECOM 2011).

**NE:** Not expected to occur. Suitable habitat for species does not occur. Species not detected during AECOM environmental surveys (AECOM 2011).

This page intentionally left blank.

