

**BIOLOGICAL TECHNICAL REPORT**

**FOR**

**EAST END AVENUE PROJECT**

**LOCATED IN THE CITY OF CHINO**  
**SAN BERNARDINO COUNTY, CALIFORNIA**

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**April 30, 2020**

## INFORMATION SUMMARY

- A. Report Date:** April 30, 2020
- B. Report Title:** Biological Technical Report for the East End Avenue Project, San Bernardino County, California.
- C. Project Site Location:** The Project is located north of Interstate 60, south of Union Pacific Railroad, and is bisected by East End Avenue within the City of Chino, San Bernardino County, California. The Study Area occurs within an unsectioned portion of Township 2 South, and Range 8 West, as depicted on the USGS Ontario, California quadrangle. The Study Area is located at latitude 34.013739° N and longitude -117.433269° W (center reading).
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## **1.0 INTRODUCTION**

### **1.1 Background and Scope of Work**

The Applicant is proposing to construct four buildings, parking spaces and associated improvements on approximately 14.5 acres (13.03 acres impacted) of land for the East End Avenue Project [Project], located in the City of Chino, San Bernardino County, California. For this report, the term *Project Site* includes 14.49 acres of which 13.03 acres will be permanently impacted and 1.46 acres will be avoided. In addition, the term Study Area (Project) includes 17.32 acres and is defined as that area onsite (*Project site*) and also includes 2.96 acres of offsite areas of which 1.33 acres will be permanently impacted and 0.03 acre will be temporarily impacted. Ultimately, 1.50 acres will be avoided (but were still included in the general biological surveys).

The offsite impacts include proposed road improvements to both East End Avenue and County Road and would also involve the construction of a connection to the San Bernardino County Flood Control District (SBCFCD) Channel and to the existing public storm drain system located in East End Avenue and County Road in order to convey stormwater runoff captured on site.

This document provides the results of general biological surveys for the approximately 17.32-acre Study Area. This report identifies and evaluates impacts to biological resources associated with the proposed Project in the context of the California Environmental Quality Act (CEQA), and State and Federal regulations such as the Endangered Species Act (ESA), Clean Water Act (CWA), and the California Fish and Game Code.

The scope of this report includes a discussion of existing conditions for the Study Area, all methods employed regarding the general biological surveys, the documentation of botanical and wildlife resources identified (including special-status species), and an analysis of impacts to biological resources. Methods of the study include a review of relevant literature, field surveys, and a Geographical Information System (GIS)-based analysis of vegetation communities. As appropriate, this report is consistent with accepted scientific and technical standards and survey guideline requirements issued by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), and other applicable agencies/organizations.

The field study focused on a number of primary objectives that would comply with CEQA requirements, including (1) general reconnaissance survey and vegetation mapping; (2) general biological surveys; (3) habitat assessments for special-status plant species; and (4) habitat assessments for special-status wildlife species. Observations of all plant and wildlife species were recorded during the general biological surveys and are included as Appendix A: Floral Compendium and Appendix B: Faunal Compendium.

### **1.2 Project Location**

The Study Area comprises approximately 17.32 acres within the City of Chino, San Bernardino County, California [Exhibit 1 – Regional Map] and is located within an unsectioned portion of

Township 2 South, Range 8 West, of the U.S. Geological Survey (USGS) 7.5" quadrangle map Ontario (dated 1967 and photorevised in 1981)[Exhibit 2 – Vicinity Map]. The Study Area is bordered by Union Pacific Railroad to the north, Interstate 60 to the south, and is bisected by East End Avenue. Adjacent land uses include industrial buildings and Union Pacific railroad to the north, residential and Interstate 60 to the east, Interstate 60 and SBCFCD Channel to the south and commercial buildings to the west.

The Assessor's Parcel Numbers (APNs) for the Study Area include: 101-625-132, 101-627-103, 101-627-104, 101-627-115, 101-628-102, 101-628-103, 101-628-104, 101-628-105, 101-628-106, 101-628-107, 101-628-108, 101-628-109 [Exhibit 3-Site Plan Map].

### **1.3 Project Description**

The Project Applicant proposes to develop the Project site with four buildings that would provide up to 266,860 square feet (s.f.) of building floor area for fulfillment center warehouse and industrial park land uses. The proposed buildings would range in size from 15,252 s.f. up to 211,326 s.f. Improvements associated with the Project include the construction/installation of surface parking lots, drive aisles, utility infrastructure connections, landscaping, exterior lighting, and walls/fencing on-site, as well as improvements to County Road and East End Avenue along the Project site frontage.

The Project Applicant proposes the development (construction and operation) of four industrial use buildings on the Project site. Three buildings (Buildings 1, 2, and 3) would be developed on the portion of the Project site located west of East End Avenue and one building (Building 4) would be developed on the portion of the Project site located east of East End Avenue. The Project Applicant expects that Building 1 would be used as a high-cube warehouse fulfillment center and that Buildings 2, 3, and 4 would be used as an industrial park (which are typically characterized by a mix of small manufacturing, service, and warehouse businesses).

Offsite Project impacts include constructing East End Avenue from the northern Project Boundary to County Road to its ultimate full-section width as a Secondary Arterial (88-foot ultimate right-of-way). Project impacts also include constructing the north side of East County Road from the western Project site boundary to East End Avenue to its ultimate half-section width as a Local Street (60-foot ultimate right-of-way). A southbound right turn lane (trap lane) will be constructed at the intersection of East End Avenue and County Road. Finally, stormwater runoff captured after the first flush would be discharged offsite via a proposed connection to the SBCFCD Channel at County Road and a connection to the existing public storm drain system located in East End Avenue.

## **2.0 METHODOLOGY**

In order to adequately identify biological resources in accordance with the requirements of CEQA, Glenn Lukos Associates (GLA) assembled biological data consisting of four main components:

- Delineation of aquatic resources (including wetlands and riparian habitat) subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and CDFW;
- Performance of general biological surveys; and
- Performance of vegetation mapping for the Project site; and
- Performance of habitat assessments to evaluate the potential for special-status species in accordance with the requirements of CEQA.

The focus of the biological surveys was determined through initial site reconnaissance, a review of the CNDDDB [CDFW 2020], CNPS 8<sup>th</sup> edition online inventory (CNPS 2020), Natural Resource Conservation Service (NRCS) soil data, other pertinent literature, and knowledge of the region. Site-specific general surveys within the Project site were conducted on foot in the proposed development areas for each target plant or animal species identified below.

Due to highly disturbed site conditions there are no natural vegetation alliances or associations fitting or approaching criteria for membership rules in A Manual of California Vegetation, Second Edition or MCVII (Baldwin et al. 2012), which is the California expression of the National Vegetation Classification. Vegetation present largely reflects ornamental plantings (e.g. nonnative trees) or spontaneous, herb-dominated species strongly adapted to anthropogenic disturbance. Vegetation present was mapped directly onto a 200-scale (1"=200') aerial photograph.

## **2.1 Summary of Surveys**

GLA conducted biological studies in order to identify and analyze actual or potential impacts to biological resources associated with development of the Project site. Observations of all plant and wildlife species were recorded during each of the above-mentioned survey efforts [Appendix A: Floral Compendium and Appendix B: Faunal Compendium]. The studies conducted include the following:

- Performance of vegetation mapping;
- Performance of site-specific habitat assessments and general biological surveys to evaluate the potential presence/absence of special-status species (or potentially suitable habitat) to the satisfaction of CEQA and federal and state regulations; and
- Delineation/evaluation of aquatic resources (including wetlands and riparian habitat) potentially subject to the jurisdiction of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and CDFW.

Table 2-1 provides a summary list of survey dates, survey types and personnel.

**Table 2-1. Summary of Biological Surveys for the Project Site.**

| <b>Survey Type</b>         | <b>Survey Dates</b> | <b>Biologists</b> |
|----------------------------|---------------------|-------------------|
| Jurisdictional Delineation | 9/19/19             | MR & LLG          |
| Habitat Assessment         | 10/15/19            | JA & DS           |
| General Biological Survey  | 10/15/19 & 01/15/20 | JA                |

JA = Jeff Ahrens, DS – David Smith, MR = Martin Rasnick, LLG = Lesley Lokovic Gamber

Individual plants and wildlife species are evaluated in this report based on their “special-status.” For the purpose of this report, plants were considered “special-status” based on one or more of the following criteria:

- Listing through the Federal and/or State Endangered Species Act (ESA);
- Occurrence in the CNPS Rare Plant Inventory (Rank 1A/1B, 2A/2B, 3, or 4); and/or
- Occurrence in the CNDDDB inventory.

Wildlife species were considered “special-status” based on one or more of the following criteria:

- Listing through the Federal and/or State ESA; and
- Designation by the State as a Species of Special Concern (SSC) or California Fully Protected (CFP) species.

Vegetation communities and habitats were considered of “special status” based on their occurrence in the CNDDDB inventory.

## **2.2 Botanical Resources**

A site-specific survey program was designed to accurately document the botanical resources within the Project site, and consisted of five components: (1) a literature search; (2) preparation of a list of target special-status plant species and sensitive vegetation communities that could occur within the Project site; (3) habitat assessments and general field reconnaissance surveys; and (4) vegetation mapping according to the List of Vegetation Alliances and Associations.

### **2.2.1 Literature Search**

Prior to conducting fieldwork, pertinent literature on the flora of the region was examined. A thorough archival review was conducted using available literature and other historical records. These resources included the following:

- California Native Plant Society, Rare Plant Program. 2020. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39) (CNPS 2020); and
- CNDDDB for the USGS 7.5’ quadrangles: Ontario, Cucamonga Peak, Eastvale, Glendora, Guasti, Mount Baldy, Prado Dam, San Dimas, and Yorba Linda (CNDDDB 2020).

### **2.2.2 Vegetation Mapping**

GLA evaluated the Study Area to determine if it contained any vegetation communities identified in the List of Vegetation Alliances and Associations (or Natural Communities List). The list is based on A Manual of California Vegetation, Second Edition or MCVII, which is the California expression of the National Vegetation Classification. However, since the Study Area does contain natural vegetation communities, or other communities from the list, GLA created vegetation/land use categories to describe the Study Area. Vegetation communities/land use types were mapped in the field directly onto a 200-scale (1"=200') aerial photograph. A vegetation map is included as Exhibit 4. Representative site photographs are included as Exhibit 5.

### **2.2.3 Special-Status Plant Species and Habitats Evaluated for the Project Site**

A literature search was conducted to obtain a list of special status plants with the potential to occur within the Project site. The CNDDDB was initially consulted to determine well-known occurrences of plants and habitats of special concern in the region. Other sources used to develop a list of target species for the survey program included the CNPS online inventory (2015).

Based on this information, vegetation profiles and a list of target sensitive plant species and habitats that could occur within the Project site were developed and incorporated into a mapping and survey program to achieve the following goals: (1) characterize the vegetation associations and land use; (2) prepare a detailed floristic compendium; (3) identify the potential for any special status plants that may occur within the Project site; and (4) prepare a map showing the distribution of any sensitive botanical resources associated with the Project site, if applicable.

### **2.2.5 Botanical Surveys**

GLA biologists Jeff Ahrens and David Smith conducted a general biological survey on October 15, 2019 and Mr. Ahrens conducted a second general biological survey on January 15, 2020. Focused plant surveys were not conducted due to a lack of suitable habitat for special-status plants; however, general botanical surveys were performed to document plants detected at the site. Surveys were conducted by following meandering transects within target areas of suitable habitat. All plant species encountered during the field surveys were identified and recorded following the above-referenced guidelines adopted by CNPS (2010) and CDFW by Nelson (1984). A complete list of the plant species observed is provided in Appendix A. Scientific nomenclature and common names used in this report follow Baldwin et al (2012), and Munz (1974).

## **2.3 Wildlife Resources**

Wildlife species were evaluated and detected during field surveys by sight, call, tracks, and scat. Site reconnaissance was conducted in such a manner as to allow inspection of the entire Project site by direct observation, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during the visit. A complete list of

wildlife species observed within the Project site is provided in Appendix B. Scientific nomenclature and common names for vertebrate species referred to in this report follow the Complete List of Amphibian, Reptile, Bird, and Mammal Species in California (CDFG 2008), Standard Common and Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians 6<sup>th</sup> Edition, Collins and Taggart (2009) for amphibians and reptiles, and the American Ornithologists' Union Checklist 7<sup>th</sup> Edition (2009) for birds. The methodology (including any applicable survey protocols) utilized to conduct general surveys, habitat assessments, and/or focused surveys for special-status animals are included below.

### **2.3.1 General Surveys**

#### ***Birds***

During the general biological and reconnaissance survey within the Project site, birds were detected incidentally by direct observation and/or by vocalizations, with identifications recorded in field notes.

#### ***Mammals***

During general biological and reconnaissance survey within the Project site, mammals were identified and detected incidentally by direct observations and/or by the presence of diagnostic sign (i.e., tracks, burrows, scat, etc.).

#### ***Reptiles and Amphibians***

During general biological and reconnaissance surveys within the Project site, reptiles and amphibians were identified incidentally during surveys. Habitats were examined for diagnostic reptile sign, which include shed skins, scat, tracks, snake prints, and lizard tail drag marks. All reptiles and amphibian species observed, as well as diagnostic sign, were recorded in field notes.

### **2.3.2 Special-Status Animal Species Reviewed**

A literature search was conducted in order to obtain a list of special-status wildlife species with the potential to occur within the Project site. Species were evaluated based on two factors: 1) species identified by the CNDDDB as occurring (either currently or historically) on or in the vicinity of the Project site, and 2) any other special-status animals that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs on the Project site.

### **2.3.3 Habitat Assessment for Special Status Animal Species**

GLA biologists Jeff Ahrens and David Smith conducted habitat assessments for special-status animal species on October 15, 2019. An aerial photograph, soil map and/or topographic map were used to determine the community types and other physical features that may support special-status and uncommon taxa within the Project site.

## **2.4 Jurisdictional Delineation**

Prior to beginning the field delineation, a 200-scale color aerial photograph and the previously cited USGS topographic maps were examined to determine the locations of potential areas of Corps/CDFW jurisdiction. Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. Potential wetland habitats at the subject site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual<sup>1</sup> (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement)<sup>2</sup>. The presence of an Ordinary High Water Mark (OHWM) was determined using the 2008 Field Guide to Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States<sup>3</sup> in conjunction with the Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.<sup>4</sup> While in the field the limits of the OHWM, wetlands, and CDFW jurisdiction were recorded using GPS technology and/or on copies of the aerial photography. Other data were recorded onto the appropriate datasheets. The results of the Jurisdictional Delineation are depicted on Exhibits 7A and 7B.

## **3.0 REGULATORY SETTING**

The proposed Project is subject to state and federal regulations associated with a number of regulatory programs. These programs often overlap and were developed to protect natural resources, including: state- and federally listed plants and animals; aquatic resources including rivers and creeks, ephemeral streambeds, wetlands, and areas of riparian habitat; other special-status species which are not listed as threatened or endangered by the state or federal governments; and other special-status vegetation communities.

### **3.1 State and/or Federally Listed Plants or Animals**

#### **3.1.1 State of California Endangered Species Act**

California's Endangered Species Act (CESA) defines an endangered species as "a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes,

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<sup>1</sup> Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

<sup>2</sup> U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Version 2.0). Ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-06-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

<sup>3</sup> Lichvar, R. W., and S. M. McColley. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. ERDC/CRREL TR-08-12. Hanover, NH: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory. (<http://www.crrel.usace.army.mil/library/technicalreports/ERDC-CRREL-TR-08-12.pdf>).

<sup>4</sup> Curtis, Katherine E. and Robert Lichevar. 2010. Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. ERDC/CRREL TN-10-1. Hanover, NH: U.S. Army Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory.



including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.” The State defines a threatened species as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an Endangered species in the foreseeable future in the absence of the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species.” Candidate species are defined as “a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list.” Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the Federal Endangered Species Act (FESA), CESA does not list invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened, endangered, or candidate species by stating “No person shall import into this state, export out of this state, or take, possess, purchase, or sell within this state, any species, or any part or product thereof, that the commission determines to be an endangered species or a threatened species, or attempt any of those acts, except as otherwise provided.” Under the CESA, “take” is defined as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” Exceptions authorized by the state to allow “take” require permits or memoranda of understanding and can be authorized for endangered species, threatened species, or candidate species for scientific, educational, or management purposes and for take incidental to otherwise lawful activities. Sections 1901 and 1913 of the California Fish and Game Code provide that notification is required prior to disturbance.

### **3.1.2 Federal Endangered Species Act**

The FESA of 1973 defines an endangered species as “any species that is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species that is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range.” Under provisions of Section 9(a)(1)(B) of the FESA it is unlawful to “take” any listed species. “Take” is defined in Section 3(18) of FESA: “...harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Further, the USFWS, through regulation, has interpreted the terms “harm” and “harass” to include certain types of habitat modification that result in injury to, or death of species as forms of “take.” These interpretations, however, are generally considered and applied on a case-by-case basis and often vary from species to species. In a case where a property owner seeks permission from a Federal agency for an action that could affect a federally listed plant and animal species, the property owner and agency are required to consult with USFWS. Section 9(a)(2)(b) of the FESA addresses the protections afforded to listed plants.

### **3.1.3 State and Federal Take Authorizations for Listed Species**

Federal or state authorizations of impacts to or incidental take of a listed species by a private individual or other private entity would be granted in one of the following ways:

- Section 7 of the FESA stipulates that any federal action that may affect a species listed as threatened or endangered requires a formal consultation with USFWS to ensure that the action is not likely to jeopardize the continued existence of the listed species or result in destruction or adverse modification of designated critical habitat. 16 U.S.C. 1536(a)(2).
- In 1982, the FESA was amended to give private landowners the ability to develop Habitat Conservation Plans (HCP) pursuant to Section 10(a) of the FESA. Upon development of an HCP, the USFWS can issue incidental take permits for listed species where the HCP specifies at minimum, the following: (1) the level of impact that will result from the taking, (2) steps that will minimize and mitigate the impacts, (3) funding necessary to implement the plan, (4) alternative actions to the taking considered by the Applicant and the reasons why such alternatives were not chosen, and (5) such other measures that the Secretary of the Interior may require as being necessary or appropriate for the plan.
- Sections 2090-2097 of the CESA require that the state lead agency consult with CDFW on projects with potential impacts on state-listed species. These provisions also require CDFW to coordinate consultations with USFWS for actions involving federally listed as well as state-listed species. In certain circumstances, Section 2080.1 of the California Fish and Game Code allows CDFW to adopt the federal incidental take statement or the 10(a) permit as its own based on its findings that the federal permit adequately protects the species under state law.

### **3.2 California Environmental Quality Act**

#### **3.2.1 CEQA Guidelines Section 15380**

CEQA requires evaluation of a project's impacts on biological resources and provides guidelines and thresholds for use by lead agencies for evaluating the significance of proposed impacts. Sections 5.1.1 and 5.2.2 below set forth these thresholds and guidelines. Furthermore, pursuant to the CEQA Guidelines Section 15380, CEQA provides protection for non-listed species that could potentially meet the criteria for state listing. For plants, CDFW recognizes that plants on Lists 1A, 1B, or 2 of the CNPS *Inventory of Rare and Endangered Plants in California* may meet the criteria for listing and should be considered under CEQA. CDFW also recommends protection of plants, which are regionally important, such as locally rare species, disjunct populations of more common plants, or plants on the CNPS Lists 3 or 4.

#### **3.2.2 Special-Status Plants, Wildlife and Vegetation Communities Evaluated Under CEQA**

##### ***Federally Designated Special-Status Species***

Within recent years, the USFWS instituted changes in the listing status of candidate species. Former C1 (candidate) species are now referred to simply as candidate species and represent the only candidates for listing. Former C2 species (for which the USFWS had insufficient evidence to warrant listing) and C3 species (either extinct, no longer a valid taxon or more abundant than was formerly believed) are no longer considered as candidate species. Therefore, these species are no longer maintained in list form by the USFWS, nor are they formally protected. This term is employed in this document, but carries no official protections. All references to federally protected species in this report (whether listed, proposed for listing, or candidate) include the

most current published status or candidate category to which each species has been assigned by USFWS.

For this report the following acronyms are used for federal special-status species:

- FE                Federally listed as Endangered
- FT                Federally listed as Threatened
- FPE              Federally proposed for listing as Endangered
- FPT              Federally proposed for listing as Threatened
- FC                Federal Candidate Species (former C1 species)
- FSC              Federal Species of Concern (former C2 species)

### ***State-Designated Special-Status Species***

Some mammals and birds are protected by the state as Fully Protected (SFP) Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California SSC are designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's CNDDDB project. Informally listed taxa are not protected, but warrant consideration in the preparation of biotic assessments. For some species, the CNDDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites.

For this report the following acronyms are used for State special-status species:

- SE                State-listed as Endangered
- ST                State-listed as Threatened
- SR                State-listed as Rare
- SCE              State Candidate for listing as Endangered
- SCT              State Candidate for listing as Threatened
- SFP              State Fully Protected
- SP                State Protected
- SSC              State Species of Special Concern

### ***California Native Plant Society***

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. The CNPS's Eighth Edition of the *California Native Plant Society's Inventory of Rare and Endangered Plants of California* separates plants of interest into five ranks. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California. The list serves as the candidate list for listing as threatened and endangered by CDFW. CNPS has developed five categories of rarity that are summarized in Table 3-1.

**Table 3-1. CNPS Ranks 1, 2, 3, & 4, and Threat Code Extensions**

| <b>CNPS Rank</b>   | <b>Comments</b>  |
|--|--|
| Rank 1A – Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere  | Thought to be extinct in California based on a lack of observation or detection for many years.  |
| Rank 1B – Plants Rare, Threatened, or Endangered in California and Elsewhere             | Species, which are generally rare throughout their range that are also judged to be vulnerable to other threats such as declining habitat.   |
| Rank 2A – Plants presumed Extirpated in California, But Common Elsewhere                 | Species that are presumed extinct in California but more common outside of California  |
| Rank 2B – Plants Rare, Threatened or Endangered in California, But More Common Elsewhere | Species that are rare in California but more common outside of California  |
| Rank 3 – Plants About Which More Information Is Needed (A Review List)                   | Species that are thought to be rare or in decline but CNPS lacks the information needed to assign to the appropriate list. In most instances, the extent of surveys for these species is not sufficient to allow CNPS to accurately assess whether these species should be assigned to a specific rank. In addition, many of the Rank 3 species have associated taxonomic problems such that the validity of their current taxonomy is unclear.  |
| Rank 4 – Plants of Limited Distribution (A Watch List)                                   | Species that are currently thought to be limited in distribution or range whose vulnerability or susceptibility to threat is currently low. In some cases, as noted above for Rank 3 species, CNPS lacks survey data to accurately determine status in California. Many species have been placed on Rank 4 in previous editions of the “Inventory” and have been removed as survey data has indicated that the species are more common than previously thought. CNPS recommends that species currently included on this list should be monitored to ensure that future substantial declines are minimized. |
| <b>Extension</b>   | <b>Comments</b>  |
| .1 – Seriously endangered in California  | Species with over 80% of occurrences threatened and/or have a high degree and immediacy of threat.   |
| .2 – Fairly endangered in California   | Species with 20-80% of occurrences threatened.   |
| .3 – Not very endangered in California   | Species with <20% of occurrences threatened or with no current threats known.  |

### **3.3 Jurisdictional Waters**

#### **3.3.1 Army Corps of Engineers**

##### **A. Army Corps of Engineers**

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as:

- (1) *All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
- (2) *All interstate waters including interstate wetlands;*
- (3) *All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:*
  - (i) *Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*
  - (ii) *From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or*
  - (iii) *Which are used or could be used for industrial purpose by industries in interstate commerce...*
- (4) *All impoundments of waters otherwise defined as waters of the United States under the definition;*
- (5) *Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;*
- (6) *The territorial seas;*
- (7) *Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.*
- (8) *Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.*

*Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.*

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(e) as:

*...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*

# **1. Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.**

Pursuant to Article I, Section 8 of the U.S. Constitution, federal regulatory authority extends only to activities that affect interstate commerce. In the early 1980s the Corps interpreted the interstate commerce requirement in a manner that restricted Corps jurisdiction on isolated (intrastate) waters. On September 12, 1985, the U.S. Environmental Protection Agency (EPA)

asserted that Corps jurisdiction extended to isolated waters that are used or could be used by migratory birds or endangered species, and the definition of “waters of the United States” in Corps regulations was modified as quoted above from 33 CFR 328.3(a).

On January 9, 2001, the Supreme Court of the United States issued a ruling on *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.* (SWANCC). In this case the Court was asked whether use of an isolated, intrastate pond by migratory birds is a sufficient interstate commerce connection to bring the pond into federal jurisdiction of Section 404 of the Clean Water Act.

The written opinion notes that the court’s previous support of the Corps’ expansion of jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc.*) was for a wetland that abutted a navigable water and that the court did not express any opinion on the question of the authority of the Corps to regulate wetlands that are not adjacent to bodies of open water. The current opinion goes on to state:

*In order to rule for the respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. We conclude that the text of the statute will not allow this.*

Therefore, we believe that the court’s opinion goes beyond the migratory bird issue and says that no isolated, intrastate water is subject to the provisions of Section 404(a) of the Clean Water Act (regardless of any interstate commerce connection). However, the Corps and EPA have issued a joint memorandum which states that they are interpreting the ruling to address only the migratory bird issue and leaving the other interstate commerce clause nexuses intact.

## **2. Rapanos v. United States and Carabell v. United States**

On June 5, 2007, the EPA and Corps issued joint guidance that addresses the scope of jurisdiction pursuant to the Clean Water Act in light of the Supreme Court’s decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* (“Rapanos”). The chart below was provided in the joint EPA/Corps guidance.

For sites that include waters other than Traditional Navigable Waters (TNWs) and/or their adjacent wetlands or Relatively Permanent Waters (RPMs) tributary to TNWs and/or their adjacent wetlands, as set forth in the chart below, the Corps must apply the “significant nexus” standard.

For “isolated” waters or wetlands, the joint guidance also requires an evaluation by the Corps and EPA to determine whether other interstate commerce clause nexuses, not addressed in the SWANCC decision are associated with isolated features on project sites for which a jurisdictional determination is being sought from the Corps.

The Corps and EPA will assert jurisdiction over the following waters:

- Traditional navigable waters.
- Wetlands adjacent to traditional navigable waters.
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).
- Wetlands that directly abut such tributaries.

The Corps and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:

- Non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent or short duration flow).
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters.
- Significant nexus includes consideration of hydrologic and ecologic factors.

### **3. Wetland Definition Pursuant to Section 404 of the Clean Water Act**

The term “wetlands” (a subset of “waters of the United States”) is defined at 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions.” In 1987 the Corps published the Wetland Manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the Wetland Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the Wetland Manual and Arid West Supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- More than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the Arid West 2016 Regional Wetland Plant List<sup>5, 6</sup>);
- Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Whereas the Wetland Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with “problematic hydrophytic vegetation”, which require a minimum of 14 days of ponding to be considered a wetland.

### 3.3.2 Regional Water Quality Control Board

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States<sup>7</sup> and waters of the state. Waters of the United States are defined above in Section II.A and waters of the state are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code 13050[e]).

Section 401 of the CWA requires certification for any federal permit or license authorizing impacts to waters of the U.S. (i.e., waters that are within federal jurisdiction), such as Section 404 of the CWA and Section 10 of the Safe Rivers and Harbors Act, to ensure that the impacts do not violate state water quality standards. When a project could impact waters outside of federal jurisdiction, the Regional Board has the authority under the Porter-Cologne Water Quality Control Act to issue Waste Discharge Requirements (WDRs) to ensure that impacts do not violate state water quality standards. Clean Water Act Section 401 Water Quality Certifications, WDRs, and waivers of WDRs are also referred to as orders or permits.

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<sup>5</sup> Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. Arid West 2016 Regional Wetland Plant List. Phytoneuron 2016-30: 1-17. Published 28 April 2016.

<sup>6</sup> Note the Corps also publishes a National List of Plant Species that Occur in Wetlands (Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016.); however, the Regional Wetland Plant List should be used for wetland delineations within the Arid West Region.

<sup>7</sup> Therefore, wetlands that meet the current definition, or any historic definition, of waters of the U.S. are waters of the state. In 2000, the State Water Resources Control Board determined that all waters of the U.S. are also waters of the state by regulation, prior to any regulatory or judicial limitations on the federal definition of waters of the U.S. (California Code of Regulations title 23, section 3831(w)). This regulation has remained in effect despite subsequent changes to the federal definition. Therefore, waters of the state includes features that have been determined by the U.S. Environmental Protection Agency (U.S. EPA) or the U.S. Army Corps of Engineers (Corps) to be “waters of the U.S.” in an approved jurisdictional determination; “waters of the U.S.” identified in an aquatic resource report verified by the Corps upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of “waters of the U.S.” or any current or historic federal regulation defining “waters of the U.S.” under the federal Clean Water Act.



## 1. State Wetland Definition

The Water Boards define an area as wetland<sup>8</sup> as follows: *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.*

The following wetlands are waters of the state:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;<sup>9</sup> and*
3. *Artificial wetlands<sup>10</sup> that meet any of the following criteria:*
  - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;*
  - b. Specifically identified in a water quality control plan as a wetland or other water of the state;*
  - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or*
  - d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):*
    - i. Industrial or municipal wastewater treatment or disposal,*
    - ii. Settling of sediment,*
    - iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,*
    - iv. Treatment of surface waters,*
    - v. Agricultural crop irrigation or stock watering,*
    - vi. Fire suppression,*
    - vii. Industrial processing or cooling,*
    - viii. Active surface mining – even if the site is managed for interim wetlands functions and values,*

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<sup>8</sup> State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. [For Inclusion in the Water Quality Control Plans for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California].

<sup>9</sup> “Created by modification of a surface water of the state” means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically, but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.

<sup>10</sup> Artificial wetlands are wetlands that result from human activity.

- ix. Log storage,
- x. Treatment, storage, or distribution of recycled water, or
- xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or
- xii. Fields flooded for rice growing.<sup>11</sup>

*All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.*

### **3.3.3 California Department of Fish and Wildlife**

Pursuant to Division 2, Chapter 6, Sections 1600-1603 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a stream (including creeks and rivers) 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 surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW also defines a stream as "a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators."

It is important to note that the Fish and Game Code defines fish and wildlife to include: all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities including the habitat upon which they depend for continued viability (FGC Division 5, Chapter 1, section 45 and Division 2, Chapter 1 section 711.2(a) respectively). Furthermore, Division 2, Chapter 5, Article 6, Section 1600 et seq. of the California Fish and Game Code does not limit jurisdiction to areas defined by specific flow events, seasonal changes in water flow, or presence/absence of vegetation types or communities.

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<sup>11</sup> Fields used for the cultivation of rice (including wild rice) that have not been abandoned due to five consecutive years of non-use for the cultivation of rice (including wild rice) that are determined to be a water of the state in accordance with these Procedures shall not have beneficial use designations applied to them through the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, except as otherwise required by federal law for fields that are considered to be waters of the United States. Further, agricultural inputs legally applied to fields used for the cultivation of rice (including wild rice) shall not constitute a discharge of waste to a water of the state. Agricultural inputs that migrate to a surface water or groundwater may be considered a discharge of waste and are subject to waste discharge requirements or waivers of such requirements pursuant to the Water Board's authority to issue or waive waste discharge requirements or take other actions as applicable.

## **4.0 RESULTS**

This section provides the results of habitat assessments for special-status plants and animals, general biological surveys, vegetation mapping, and a jurisdictional delineation for Waters of the United States (including wetlands) subject to the jurisdiction of the Corps and Regional Board, and streams (including riparian vegetation) and lakes subject to the jurisdiction of CDFW.

### **4.1 Existing Conditions**

Historic aerial photography shows that the Study Area and environs have been highly disturbed since at least 1938, where the majority of the Study Area and surrounding area was planted with row tree crops, presumable citrus trees. Since that time, the landscape within the Study Area has been continuously altered throughout the years including dry farming activities occurring within the northern portion of the Study Area and the southern portion of the Study Area was subdivided into rural residential/commercial properties beginning in the 1950's.

The northern half and eastern extent of the Study Area is comprised of vacant land that predominantly contains disturbed/ruderal areas with some ornamental vegetation. These areas are mowed and/or disked on a regularly basis for weed abatement and fire protection purposes. The southern half of the Study area formerly contained vacant and dilapidated structures, including several single-family residences and outbuildings. All of the structures on-site contained boarded up doors and windows and had been vandalized. To address the blighted conditions on the Project site, the property owner demolished all structures on the Project site in December 2019 under approved City of Chino Demolition Permit Nos. B19-2552 through B19-2557.

San Antonio Wash enters the Project site at the northwestern boundary and was converted into a concrete-sided and concrete bottomed SBCFCD channel in the early 1970's. Drainage A is a concrete-sided and concrete-bottomed trapezoidal SBCFCD channel that is located just south of the southeastern boundary of the Project site.

Elevation on site ranges from approximately 735 to 765 feet above mean sea level (AMSL).

Soils on site consists of Grangeville fine sandy loam and Hilmar loamy fine sand [Exhibit 6 – Soils Map].

### **4.2 Vegetation/Land Use Types**

The Study Area supports the following four vegetation/land use types: Developed/Flood Control Channel, Disturbed/Developed, Disturbed/Ruderal, and Ornamental. Table 4-1 provides a summary of the vegetation types and their corresponding acreage. Descriptions of each vegetation type follow the table. A Vegetation Map is attached as Exhibit 4. Photographs depicting the Study Area are shown in Exhibit 5.

**Table 4-1. Summary of Vegetation/Land Use Types for the Study Area**

| <b>Vegetation Type</b>          | <b>Onsite</b> | <b>Offsite</b> | <b>Study Area Totals (Acres)</b> |
|---------------------------------|---------------|----------------|----------------------------------|
| Developed/Flood Control Channel | 0.44          | 1.25           | 1.69                             |
| Disturbed/Developed             | 5.72          | 1.58           | 7.30                             |
| Disturbed/Ruderal               | 7.68          | 0              | 7.68                             |
| Ornamental                      | 0.65          | 0              | 0.65                             |
| <b>Total</b>                    | <b>14.49</b>  | <b>2.83</b>    | <b>17.32</b>                     |

#### **Developed/Flood Control Channel**

San Antonio Wash is a SBCFCD concrete lined channel that traverses through the western portion of the Project site. In addition, Drainage A is also a SBCFCD concrete lined channel that connects to San Antonio Wash and is located immediately offsite and south of County Road. The onsite portion of the Study Area contains 0.44 acre of Developed/Flood Control Channel and the offsite portion of the Study Area contains 1.25 acres of Developed/Flood Control Channel [Exhibit 4 – Vegetation Map].

#### **Disturbed/Developed**

The Project site supports 5.72 acres of Disturbed/Developed lands that that formerly supported numerous structures including houses, barns and sheds on manmade substrate including concrete, asphalt, and gravel. The structures were demolished in December 2019 due to routine loitering and vandalism. In addition, numerous ornamental hedge, shrub and tree species including but not limited to yucca (*Yucca* sp.), pine (*Pinus* sp.), English ivy (*Hedera helix*), sweet gum (*Liquidambar* sp.), pomegranate (*Punica granatum*), common fig (*Ficus carica*), mulberry (*Morus alba*), tree of heaven (*Ailanthus altissima*), puncture vine (*Tribulus terrestris*), and desert wild grape (*Vitis girdiana*) occur within the Disturbed/Developed areas. The offsite portions of the Study Area contain 1.58 acres of Disturbed/Developed lands which include paved portions of County Road, and unpaved compacted areas located along each side of San Antonio Wash and Drainage A [Exhibit 4 – Vegetation Map].

#### **Disturbed/Ruderal**

The Project site contains 7.68 acres of Disturbed/Ruderal lands that have historically been subject to regular disturbance. Dominant plant species observed include red-stemmed filaree (*Erodium cicutarium*), red brome (*Bromus madritensis* ssp. *rubens*), annual bur sage (*Ambrosia acanthicarpa*), Palmer's amaranth (*Amaranthus palmeri*), Russian thistle (*Salsola tragus*) and short-pod mustard (*Hirschfeldia incana*). Other plant species include telegraph weed (*Heterotheca grandiflora*), tumbling pigweed (*Amaranthus albus*), common wild oat (*Avena fatua*), ripgut grass (*Bromus diandrus*), Bermuda grass (*Cynodon dactylon*), lamb's quarters (*Chenopodium album*), tocalote (*Centaurea melitensis*), common horseweed (*Erigeron canadensis*), prickly lettuce (*Lactuca serriola*), western sunflower (*Helianthus annuus*), tree tobacco (*Nicotiana glauca*), white nightshade (*Solanum americanum*), doveweed (*Croton setiger*), castor bean (*Ricinis communis*), and jimsonweed (*Datura wrightii*).

This area also includes a small cluster of relatively small sized Mexican fan palms (*Washingtonia robusta*) located immediately east of East End Avenue. Approximately eight mostly dead northern California black walnut (*Juglans hindsii*) were located within the western portion of the Project site and were removed during the structure demolition in December 2019.

Several native blue elderberry trees (*Sambucus cerulea*) occur along the northernmost boundary of the Study Area [Exhibit 4 – Vegetation Map].

### **Ornamental**

The Project site contains 0.65 acre of ornamental vegetation occurring outside of the disturbed/developed areas that predominantly consists of gum trees (*Eucalyptus* sp.) [Exhibit 4 – Vegetation Map].

Representative site photographs are included in Exhibit 5.

### **4.3 Wildlife**

The Study Area is highly disturbed, surrounded by residential and commercial development and does not support native habitat. Therefore, species diversity is relatively low, and the Study Area predominantly supports species adapted to an urban environment. Common wildlife species detected during the general biological surveys include Botta's pocket gopher (*Thomomys bottae*), house sparrow (*Passer domesticus*), European starling (*Sturnus vulgaris*), and Eurasian collared dove (*Streptopelia decaocto*).

### **4.4 Special-Status Vegetation Communities (Habitats)**

The CNDDDB identifies the following 10 special-status vegetation communities for the Corona North, Cucamonga Peak, Glendora, Guasti, Mt. Baldy, Ontario, Prado Dam, San Dimas, and Yorba Linda quadrangle maps: Canyon Live Oak Ravine Forest, California Walnut Woodland, Coastal and Valley Fresh Water Marsh, Riversidian Alluvial Fan Sage Scrub, Southern California Arroyo Chub/Santa Ana Sucker Stream, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Willow Scrub, and Walnut Forest. The Study Area does not contain any special-status vegetation types, including those identified by the CNDDDB

### **4.5 Special-Status Plants**

No special-status plants were detected within the Study Area, and none are expected to occur due to a lack of suitable habitat. Table 4-2 provides a list of special-status plants evaluated for the Study Area through habitat assessments and general biological surveys. Species were evaluated based on the following factors: 1) species identified by the CNDDDB and CNPS as occurring (either currently or historically) on or in the vicinity of the Project site, and 2) any other special-status plants that are known to occur within the vicinity of the Project site, or for which potentially suitable habitat occurs within the site.

**Table 4-2. Special-Status Plants Evaluated for the Project Site**

|  |                       |
|--|-----------------------|
| <b><u>Status</u></b>   |                       |
| <b>Federal</b>   | <b>State</b>          |
| FE – Federally Endangered  | SE – State Endangered |
| FT – Federally Threatened  | ST – State Threatened |
| FC – Federal Candidate   |                       |
| <b>CNPS</b>  |                       |
| Rank 1A – Plants presumed extirpated in California and either rare or extinct elsewhere.   |                       |
| Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.  |                       |
| Rank 2A – Plants presumed extirpated in California, but common elsewhere.  |                       |
| Rank 2B – Plants rare, threatened, or endangered in California, but more common elsewhere.   |                       |
| Rank 3 – Plants about which more information is needed (a review list).  |                       |
| Rank 4 – Plants of limited distribution (a watch list).  |                       |
| <b>CNPS Threat Code extension</b>  |                       |
| .1 – Seriously endangered in California (over 80% occurrences threatened)  |                       |
| .2 – Fairly endangered in California (20-80% occurrences threatened)   |                       |
| .3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)  |                       |
| <b><u>Occurrence</u></b>   |                       |
| <ul style="list-style-type: none"> <li>Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.</li> <li>Absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.</li> <li>Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.</li> <li>Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.</li> <li>Present – The species was detected onsite incidentally or through focused surveys.</li> </ul> |                       |

| <b>Species Name</b>                                   | <b>Status</b>                                   | <b>Habitat Requirements</b>   | <b>Occurrence</b> |
|---|---|---|-------------------|
| Aparejo grass<br><i>Muhlenbergia utilis</i>           | Federal: None<br>State: None<br>CNPS: Rank 2B.2 | Wet habitats, including riverbanks and meadows, sometimes in alkaline soils   | Does not occur    |
| Brand's star phacelia<br><i>Phacelia stellaris</i>    | Federal: None<br>State: None<br>CNPS: Rank 1B.1 | Coastal dunes and coastal sage scrub.   | Does not occur    |
| Braunton's milk-vetch<br><i>Astragalus brauntonii</i> | Federal: FE<br>State: None<br>CNPS: Rank 1B.1   | Closed-cone coniferous forest, chaparral, coastal sage scrub, valley and foothill grassland. Usually carbonate soils. Recent burn or disturbed areas. | Does not occur    |
| California muhly<br><i>Muhlenbergia californica</i>   | Federal: None<br>State: None<br>CNPS: Rank 4.3  | Mesic habitats, including seeps and streambanks, in chaparral, coastal scrub, lower montane coniferous forest, and meadows.                           | Does not occur    |

| Species Name  | Status  | Habitat Requirements  | Occurrence     |
|---|---|---|----------------|
| California satintail<br><i>Imperata brevifolia</i>                              | Federal: None<br>State: None<br>CNPS: Rank 2B.1 | Mesic soils in chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), and riparian scrub.   | Does not occur |
| California saw-grass<br><i>Cladium californicum</i>                             | Federal: None<br>State: None<br>CNPS: Rank 2B.2 | Meadows and seeps, and alkaline or freshwater marshes and swamps.   | Does not occur |
| Chaparral ragwort<br><i>Senecio aphanactis</i>                                  | Federal: None<br>State: None<br>CNPS: Rank 2B.2 | Chaparral, cismontane woodland, coastal scrub. Sometimes associated with alkaline soils.  | Does not occur |
| Chaparral sand-verbena<br><i>Abronia villosa</i> var. <i>aurita</i>             | Federal: None<br>State: None<br>CNPS: Rank 1B.1 | Sandy soils in chaparral, coastal sage scrub.   | Does not occur |
| Coulter's saltbush<br><i>Atriplex coulteri</i>                                  | Federal: None<br>State: None<br>CNPS: Rank 1B.2 | Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland. Occurring on alkaline or clay soils.   | Does not occur |
| Greata's aster<br><i>Symphyotrichum greatae</i>                                 | Federal: None<br>State: None<br>CNPS: Rank 1B.3 | Mesic soils in broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and riparian woodland.   | Does not occur |
| Grey-leaved violet<br><i>Viola pinetorum</i> var. <i>grisea</i>                 | Federal: None<br>State: None<br>CNPS: Rank 1B.2 | Meadows and seeps, subalpine coniferous forest, and upper montane coniferous forest.  | Does not occur |
| Hall's monardella<br><i>Monardella macrantha</i> ssp. <i>hallii</i>             | Federal: None<br>State: None<br>CNPS: Rank 1B.3 | Occurs on dry slopes and ridges within openings in broadleaved upland forest, chaparral, lower montane coniferous forest, cismontane woodland, and valley and foothill grassland. | Does not occur |
| Hot springs fimbriatylis<br><i>thermalis</i>                                    | Federal: None<br>State: None<br>CNPS: Rank 2B.2 | Meadows and seeps (alkaline, near hot springs).   | Does not occur |
| Intermediate mariposa-lily<br><i>Calochortus weedii</i> var. <i>intermedius</i> | Federal: None<br>State: None<br>CNPS: Rank 1B.2 | Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.  | Does not occur |
| Johnston's buckwheat<br><i>Eriogonum microthecum</i> var. <i>johnstonii</i>     | Federal: None<br>State: None<br>CNPS: Rank 1B.3 | Rocky soils in subalpine coniferous forest and upper montane coniferous forest.   | Does not occur |
| Jokerst's monardella<br><i>Monardella australis</i> ssp. <i>jokerstii</i>       | Federal: None<br>State: None<br>CNPS: Rank 1B.1 | Steep scree or talus slopes between breccia, secondary alluvial benches along drainages and washes. Chaparral, lower montane coniferous forest.                                   | Does not occur |
| Laguna Mountains jewelflower<br><i>Streptanthus bernardinus</i>                 | Federal: None<br>State: None<br>CNPS: Rank 4.3  | Chaparral and lower montane coniferous forest.  | Does not occur |

| Species Name   | Status  | Habitat Requirements   | Occurrence     |
|--|---|--|----------------|
| Lemon lily<br><i>Lilium parryi</i>   | Federal: None<br>State: None<br>CNPS: Rank 1B.2 | Mesic soils in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest.   | Does not occur |
| Lucky morning-glory<br><i>Calystegia felix</i>                               | Federal: None<br>State: None<br>CNPS: Rank 3.1  | Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline soils. Meadows and seeps (sometimes alkaline), riparian scrub (alluvial). | Does not occur |
| Many-stemmed dudleya<br><i>Dudleya multicaulis</i>                           | Federal: None<br>State: None<br>CNPS: Rank 1B.2 | Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.   | Does not occur |
| Mesa horkelia<br><i>cuneata</i> var. <i>puberula</i>                         | Federal: None<br>State: None<br>CNPS: Rank 1B.1 | Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.   | Does not occur |
| Mount Gleason paintbrush<br><i>Castilleja gleasonii</i>                      | Federal: None<br>State: Rare<br>CNPS: Rank 1B.2 | Granitic soils in chaparral, lower montane coniferous forest, and pinyon and juniper woodland.   | Does not occur |
| Nevin's barberry<br><i>Berberis nevinii</i>                                  | Federal: FE<br>State: SE<br>CNPS: Rank 1B.1     | Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub.  | Does not occur |
| Parry's spineflower<br><i>Chorizanthe parryi</i> var. <i>parryi</i>          | Federal: None<br>State: None<br>CNPS: Rank 1B.1 | Sandy or rocky soils in open habitats of chaparral and coastal sage scrub.   | Does not occur |
| Peirson's spring beauty<br><i>Claytonia lanceolata</i> var. <i>peirsonii</i> | Federal: None<br>State: None<br>CNPS: Rank 3.1  | In scree within subalpine and upper montane coniferous forest.   | Does not occur |
| Prostrate vernal pool navarretia<br><i>Navarretia prostrata</i>              | Federal: None<br>State: None<br>CNPS: Rank 1B.1 | Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.  | Does not occur |
| Rigid fringe-pod<br><i>Thysanocarpus rigidus</i>                             | Federal: None<br>State: None<br>CNPS: Rank 1B.2 | Dry rocky slopes in pinyon and juniper woodland.   | Does not occur |
| Robinson's pepper grass<br><i>Lepidium virginicum</i> var. <i>robinsonii</i> | Federal: None<br>State: None<br>CNPS: Rank 4.3  | Chaparral, coastal sage scrub  | Does not occur |
| Rock Creek broomrape<br><i>Orobanche valida</i> ssp. <i>valida</i>           | Federal: None<br>State: None<br>CNPS: Rank 1B.2 | Granitic soils in chaparral, pinyon and juniper woodland.  | Does not occur |
| Salt Spring checkerbloom<br><i>Sidalcea neomexicana</i>                      | Federal: None<br>State: None<br>CNPS: Rank 2B.2 | Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.  | Does not occur |



| Species Name   | Status  | Habitat Requirements  | Occurrence     |
|--|---|---|----------------|
| San Bernardino aster<br><i>Symphotrichum defoliatum</i>                            | Federal: None<br>State: None<br>CNPS: Rank 1B.2 | Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic). | Does not occur |
| San Gabriel linanthus<br><i>Linanthus concinnus</i>                                | Federal: None<br>State: None<br>CNPS: Rank 1B.2 | Rocky soils and openings in chaparral, lower and upper montane coniferous forests.  | Does not occur |
| San Gabriel manzanita<br><i>Arctostaphylos glandulosa</i> ssp. <i>gabrielensis</i> | Federal: None<br>State: None<br>CNPS: Rank 1B.2 | Chaparral (rocky).  | Does not occur |
| San Gabriel Mountains dudleya<br><i>Dudleya densiflora</i>                         | Federal: None<br>State: None<br>CNPS: Rank 1B.1 | Chaparral, coastal sage scrub, lower montane coniferous forest. Occurring on granitic soils, cliffs, and canyon walls.                                      | Does not occur |
| Sanford's arrowhead<br><i>Sagittaria sanfordii</i>                                 | Federal: None<br>State: None<br>CNPS: Rank 1B.2 | Marshes and swamps (assorted shallow freshwater).   | Does not occur |
| Santa Ana River woolly star<br><i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>  | Federal: FE<br>State: SE<br>CNPS: Rank 1B.1     | Alluvial fan sage scrub, chaparral. Occurring on sandy or rocky soils.  | Does not occur |
| Slender mariposa lily<br><i>Calochortus clavatus</i> var. <i>gracilis</i>          | Federal: None<br>State: None<br>CNPS: Rank 1B.2 | Chaparral and coastal sage scrub.   | Does not occur |
| Slender-horned spineflower<br><i>Dodecahema leptoceras</i>                         | Federal: FE<br>State: SE<br>CNPS: Rank 1B.1     | Sandy soils in alluvial scrub, chaparral, cismontane woodland.  | Does not occur |
| Smooth tarplant<br><i>Centromadia pungens</i> ssp. <i>laevis</i>                   | Federal: None<br>State: None<br>CNPS: Rank 1B.1 | Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.                         | Does not occur |
| Sonoran maiden fern<br><i>Thelypteris puberula</i> var. <i>sonorensis</i>          | Federal: None<br>State: None<br>CNPS: Rank 2B.2 | Meadows and seeps (seeps and streams)   | Does not occur |
| Thread-leaved brodiaea<br><i>Brodiaea filifolia</i>                                | Federal: FT<br>State: SE<br>CNPS: Rank 1B.1     | Clay soils in chaparral (openings), cismontane woodland, coastal sage scrub, playas, valley and foothill grassland, vernal pools.                           | Does not occur |
| White rabbit-tobacco<br><i>Pseudognaphalium leucocephalum</i>                      | Federal: None<br>State: None<br>CNPS: Rank 2B.2 | Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland.  | Does not occur |
| Woolly mountain-parsley<br><i>Oreonana vestita</i>                                 | Federal: None<br>State: None<br>CNPS: Rank 1B.3 | Gravel or talus in lower montane coniferous forest, subalpine coniferous forest, and upper montane coniferous forest.                                       | Does not occur |

#### 4.6 Special-Status Animals

No special-status animals were detected within the Study Area. Table 4-3 provides a list of special-status animals evaluated for the Study Area through habitat assessments and general biological surveys. Species were evaluated based on the following factors, including: 1) species identified by the CNDDDB as occurring (either currently or historically) on or in the vicinity of the Project site, and 2) any other special-status animals that are known to occur within the vicinity of the Project site, for which potentially suitable habitat occurs on the site.

**Table 4-3. Special Status Animals Evaluated for the Project Site**

|   |  |
|---|--|
| <b><u>Status</u></b>  |  |
| <b>Federal</b>  | <b>State</b>                             |
| FE – Federally Endangered   | SE – State Endangered                    |
| FT – Federally Threatened   | ST – State Threatened                    |
| FPT – Federally Proposed Threatened   | SC – State Candidate                     |
| FC – Federal Candidate  | CFP – California Fully-Protected Species |
| BGEPA – Bald and Golden Eagle Protection Act  | SSC – Species of Special Concern         |
| <b>Western Bat Working Group (WBWG)</b>   |  |
| H – High Priority   |  |
| LM – Low-Medium Priority  |  |
| M – Medium Priority   |  |
| MH – Medium-High Priority   |  |
| <b><u>Occurrence</u></b>  |  |
| <ul style="list-style-type: none"> <li>Absent – The species is absent from the site, either because the site lacks suitable habitat for the species, the site is located outside of the known range of the species, or focused surveys has confirmed the absence of the species.</li> <li>Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.</li> <li>Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.</li> <li>Present – The species was detected onsite incidentally or through focused surveys.</li> </ul> |  |
|   |  |
|   |  |

| <b>Species Name</b>  | <b>Status</b>                | <b>Habitat Requirements</b>   | <b>Occurrence</b> |
|--|------------------------------|---|-------------------|
| <b>Invertebrates</b>   |                              |   |                   |
| Crotch bumble bee<br><i>Bombus crotchii</i>                                | Federal: None<br>State: None | Relatively warm and dry sites, including the inner Coast Range of California and margins of the Mojave Desert.                              | Does not occur    |
| Delhi-sands flower-loving fly<br><i>Raphiomidas terminatus abdominalis</i> | Federal: FE<br>State: None   | Fine, sandy soils, often associated with wholly or partially consolidated dunes referred to as the “Delhi” series. Vegetation consists of a | Does not occur    |

| Species Name   | Status                      | Habitat Requirements   | Occurrence     |
|--|-----------------------------|--|----------------|
|  |                             | sparse cover, including Californica buckwheat, California croton, deerweed, and evening primrose.  |                |
| <b>Fish</b>  |                             |  |                |
| Arroyo chub<br><i>Gila orcutti</i>   | Federal: None<br>State: SSC | Slow-moving or backwater sections of warm to cool streams with substrates of sand or mud.  | Does not occur |
| Santa Ana speckled dace<br><i>Rhinichthys osculus</i> ssp. 3                       | Federal: None<br>State: SSC | Occurs in the headwaters of the Santa Ana and San Gabriel Rivers. May be extirpated from the Los Angeles River system. Requires permanent flowing streams with summer water temperatures of 17-20 C. Usually inhabits shallow cobble and gravel riffles.   | Does not occur |
| Santa Ana sucker<br><i>Catostomus santaanae</i>                                    | Federal: FT<br>State: None  | Small, shallow streams, less than 7 meters in width, with currents ranging from swift in the canyons to sluggish in the bottom lands. Preferred substrates are generally coarse and consist of gravel, rubble, and boulders with growths of filamentous algae, but occasionally they are found on sand/mud substrates.   | Does not occur |
| Southern steelhead - southern California DPS<br><i>Oncorhynchus mykiss irideus</i> | Federal: FE<br>State: None  | Clear, swift moving streams with gravel for spawning. Federal listing refers to populations from Santa Maria river south to southern extent of range (San Mateo Creek in San Diego county.)  | Does not occur |
| <b>Amphibians</b>  |                             |  |                |
| Arroyo toad<br><i>Anaxyrus californicus</i>  | Federal: FE<br>State: SSC   | Breed, forage, and/or aestivate in aquatic habitats, riparian, coastal sage scrub, oak, and chaparral habitats. Breeding pools must be open and shallow with minimal current, and with a sand or pea gravel substrate overlain with sand or flocculent silt. Adjacent banks with sandy or gravelly terraces and very little herbaceous cover for adult and juvenile foraging areas, within a moderate riparian canopy of cottonwood, willow, or oak. | Does not occur |
| Coast Range newt<br><i>Taricha torosa</i>  | Federal: None<br>State: SSC | Found in wet forests, oak forests, chaparral, and rolling  | Does not occur |

| Species Name  | Status                      | Habitat Requirements  | Occurrence     |
|---|-----------------------------|---|----------------|
|   |                             | grasslands. In southern California, drier chaparral, oak woodland, and grasslands are used.   |                |
| Foothill yellow-legged frog<br><i>Rana boylei</i>                                     | Federal: None<br>State: SSC | Rocky streams and rivers with rocky substrate and open, sunny banks, in forests, chaparral, and woodlands. Sometimes in isolated pools, vegetated backwaters, and deep, shaded, spring-fed pools. | Does not occur |
| Northern leopard frog<br><i>Lithobates pipiens</i>                                    | Federal: None<br>State: SSC | Inhabits grassland, wet meadows, potholes, forests, woodland, brushlands, springs, canals, bogs, marshes, reservoirs. Generally, prefers permanent water with abundant aquatic vegetation.        | Does not occur |
| Southern mountain yellow-legged frog<br><i>Rana muscosa</i>                           | Federal: FE<br>State: SE    | Streams and small pools in ponderosa pine, montane hardwood-conifer, and montane riparian habitat types.  | Does not occur |
| Western spadefoot<br><i>Spea hammondi</i>   | Federal: None<br>State: SSC | Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.  | Does not occur |
| <b>Reptiles</b>   |                             |   |                |
| California glossy snake<br><i>Arizona elegans occidentalis</i>                        | Federal: None<br>State: SSC | Inhabits arid scrub, rocky washes, grasslands, chaparral.   | Does not occur |
| Coast horned lizard<br><i>Phrynosoma blainvillii</i>                                  | Federal: None<br>State: SSC | Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.  | Does not occur |
| Coast patch-nosed snake<br><i>Salvadora hexalepis virgulata</i>                       | Federal: None<br>State: SSC | Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.  | Does not occur |
| Coastal whiptail<br><i>Aspidoscelis tigris stejnegeri</i><br>( <i>multiscutatus</i> ) | Federal: None<br>State: SSC | Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.  | Does not occur |
| Red-diamond rattlesnake<br><i>Crotalus ruber</i>                                      | Federal: None<br>State: SSC | Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.  | Does not occur |
| San Diego banded gecko<br><i>Coleonyx variegatus abbotti</i>                          | Federal: None<br>State: SSC | Primarily a desert species, but also occurs in cismontane chaparral, desert scrub, and open sand dunes.   | Does not occur |
| Southern California legless lizard<br><i>Anniella stebbinsi</i>                       | Federal: None<br>State: SSC | Broadleaved upland forest, chaparral, coastal dunes, coastal scrub; found in a broader range of habitats that   | Does not occur |

| Species Name  | Status                         | Habitat Requirements  | Occurrence   |
|---|--------------------------------|---|--|
|   |                                | any of the other species in the genus. Often locally abundant, specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans   |  |
| Two-striped garter snake<br><i>Thamnophis hammondi</i>  | Federal: None<br>State: SSC    | Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.  | Does not occur   |
| Western pond turtle<br><i>Emys marmorata</i>  | Federal: None<br>State: SSC    | Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks. | Does not occur   |
| <b>Birds</b>  |                                |   |  |
| Black swift (nesting)<br><i>Cypseloides niger</i>   | Federal: None<br>State: SSC    | Nests in forested areas near rivers in dark, damp areas. Forages in skies over mountainous areas and on coastal cliffs.   | Does not occur   |
| Burrowing owl (burrow sites & some wintering sites)<br><i>Athene cunicularia</i>                            | Federal: None<br>State: SSC    | Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.  | Not expected to occur. Site is highly disturbed. No burrows or suitable nesting habitat occurs on site. Low potential to forage on site. |
| California black rail<br><i>Laterallus jamaicensis coturniculus</i>   | Federal: None<br>State: ST, FP | Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.   | Does not occur   |
| Coastal cactus wren (San Diego & Orange County only)<br><i>Campylorhynchus brunneicapillus sandiegensis</i> | Federal: None<br>State: SSC    | Occurs almost exclusively in cactus (cholla and prickly pear) dominated coastal sage scrub.   | Does not occur   |
| Coastal California gnatcatcher<br><i>Poliophtila californica californica</i>                                | Federal: FT<br>State: SSC      | Low elevation coastal sage scrub and coastal bluff scrub.   | Does not occur   |
| Golden eagle (nesting & wintering)<br><i>Aquila chrysaetos</i>  | Federal: None<br>State: FP     | In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous   | Does not occur   |

| Species Name  | Status                          | Habitat Requirements  | Occurrence  |
|---|---------------------------------|---|---|
|   |                                 | forests, and montane valleys. Nests on rock outcrops and ledges.  |   |
| Grasshopper sparrow (nesting)<br><i>Ammodramus savannarum</i>                     | Federal: None<br>State: SSC     | Open grassland and prairies with patches of bare ground.  | Does not occur  |
| Least Bell's vireo (nesting)<br><i>Vireo bellii pusillus</i>                      | Federal: FE<br>State: SE        | Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.   | Does not occur  |
| Loggerhead shrike (nesting)<br><i>Lanius ludovicianus</i>                         | Federal: None<br>State: SSC     | Forages over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs. | Low potential to nest on site due to the presence of shrubs and trees. Low to moderate potential to forage on site. |
| Long-eared owl (nesting)<br><i>Asio otus</i>                                      | Federal: None<br>State: SSC     | Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.   | Does not occur  |
| Northern harrier (nesting)<br><i>Circus cyaneus</i>                               | Federal: None<br>State: SSC     | A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.  | Low potential to forage on site. No potential for nesting.  |
| Southwestern willow flycatcher (nesting)<br><i>Empidonax traillii extimus</i>     | Federal: FE<br>State: SE        | Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.   | Does not occur  |
| Swainson's hawk (nesting)<br><i>Buteo swainsoni</i>                               | Federal: None<br>State: ST      | Summer in wide open spaces of the American West. Nest in grasslands but can use sage flats and agricultural lands. Nests are placed in lone trees.  | Does not nest on site. Low potential to forage on site.   |
| Tricolored blackbird (nesting colony)<br><i>Agelaius tricolor</i>                 | Federal: None<br>State: CE, SSC | Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.   | Does not occur  |
| Western yellow-billed cuckoo (nesting)<br><i>Coccyzus americanus occidentalis</i> | Federal: FT<br>State: SE        | Dense, wide riparian woodlands with well-developed understories.  | Does not occur  |
| White-tailed kite (nesting)<br><i>Elanus leucurus</i>                             | Federal: None<br>State: FP      | Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.  | Does not nest on site. Low potential to forage on site.   |

| Species Name   | Status                                  | Habitat Requirements   | Occurrence     |
|--|---|--|----------------|
| Yellow rail<br><i>Coturnicops noveboracensis</i>                       | Federal: None<br>State: SSC             | Shallow marshes, and wet meadows; in winter, drier freshwater and brackish marshes, as well as dense, deep grass, and rice fields.   | Does not occur |
| Yellow warbler (nesting)<br><i>Setophaga petechia</i>                  | Federal: None<br>State: SSC             | Breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats. | Does not occur |
| Yellow-breasted chat (nesting)<br><i>Icteria virens</i>                | Federal: None<br>State: SSC             | Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.   | Does not occur |
| <b>Mammals</b>   |   |  |                |
| American badger<br><i>Taxidea taxus</i>                                | Federal: None<br>State: SSC             | Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.   | Does not occur |
| Big free-tailed bat<br><i>Nyctinomops macrotis</i>                     | Federal: None<br>State: SSC<br>WBWG: MH | Roost mainly in crevices and rocks in cliff situations; also utilize buildings, caves, and tree cavities.  | Does not occur |
| Desert bighorn sheep<br><i>Ovis canadensis nelsoni</i>                 | Federal: None<br>State: FP              | Visually open foraging areas of grass near steep, rocky areas.   | Does not occur |
| Los Angeles pocket mouse<br><i>Perognathus longimembris brevinasus</i> | Federal: None<br>State: SSC             | Fine, sandy soils in coastal sage scrub and grasslands.  | Does not occur |
| Northwestern San Diego pocket mouse<br><i>Chaetodipus fallax</i>       | Federal: None<br>State: SSC             | Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.  | Does not occur |
| Pallid bat<br><i>Antrozous pallidus</i>                                | Federal: None<br>State: SSC<br>WBWG: H  | Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.  | Does not occur |
| Pocketed free-tailed bat<br><i>Nyctinomops femorosaccus</i>            | Federal: None<br>State: SSC<br>WBWG: M  | Rocky areas with high cliffs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.  | Does not occur |
| San Bernardino kangaroo rat<br><i>Dipodomys merriami parvus</i>        | Federal: FE<br>State: SSC               | Typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and floodplains, and along washes with nearby sage scrub.   | Does not occur |

| Species Name   | Status                                 | Habitat Requirements   | Occurrence     |
|--|--|--|----------------|
| San Diego black-tailed jackrabbit<br><i>Lepus californicus bennettii</i> | Federal: None<br>State: SSC            | Occupies a variety of habitats, but is most common among shortgrass habitats. Also occurs in sage scrub, but needs open habitats.  | Does not occur |
| San Diego desert woodrat<br><i>Neotoma lepida intermedia</i>             | Federal: None<br>State: SSC            | Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.   | Does not occur |
| Stephens' kangaroo rat<br><i>Dipodomys stephensi</i>                     | Federal: FE<br>State: ST               | Open grasslands or sparse shrublands with less than 50% vegetation cover during the summer.  | Does not occur |
| Western mastiff bat<br><i>Eumops perotis californicus</i>                | Federal: None<br>State: SSC<br>WBWG: H | Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels. | Does not occur |
| Western yellow bat<br><i>Lasiurus xanthinus</i>                          | Federal: None<br>State: SSC<br>WBWG: H | Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.   | Does not occur |

#### 4.5.1 Special-Status Wildlife Species not Observed but with a Potential to Occur at the Project Site

##### Birds

**Burrowing Owl (*Athene cunicularia*)** - The burrowing owl is designated as a CDFW Species of Special Concern and occurs in shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), prairies, coastal dunes, desert floors, and some artificial, open areas as a year-long resident (Haug, *et al.* 1993). They require large open expanses of sparsely vegetated areas on gently rolling or level terrain with an abundance of active small mammal burrows. As a critical habitat feature, they require the use of rodent or other burrows for roosting and nesting cover.

The burrowing owl including suitable habitat (i.e., burrows) and sign (e.g., cast pellets, preened feathers, or whitewash clustered at a burrow) was not detected within the Study Area and therefore, focused burrowing owl surveys were not conducted. The Study Area is highly disturbed and surrounded by residential and commercial development including State Highway 60. Despite this, the Project site does provide approximately 7.68 acres of low quality foraging habitat (disturbed/ruderal) for the burrowing owl.



**Loggerhead Shrike (*Lanius ludovicianus*)** - The loggerhead shrike is designated as a CDFW Species of Special Concern when nesting. The loggerhead shrike is known to forage over open ground within areas of short vegetation, pastures with fence rows, old orchards, mowed roadsides, cemeteries, golf courses, riparian areas, open woodland, agricultural fields, desert washes, desert scrub, grassland, broken chaparral and beach with scattered shrubs (Unitt 1984; Yosef 1996).

The Project site supports approximately 7.68 acres of foraging habitat (Disturbed/Ruderal) and 0.65 acre of potential nesting habitat (Ornamental). The loggerhead shrike was not detected during the general biological surveys.

**Northern Harrier (*Circus cyaneus*)** - The northern harrier is designated as a CDFW Species of Special Concern. The northern harrier frequents open wetlands, wet and lightly grazed pastures, old fields, dry uplands, upland prairies, mesic grasslands, drained marshlands, croplands, shrub-steppe, meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands and is seldom found in wooded areas (Bent 1937; and Bildstein 1996). In general, it prefers saltwater marshes, wet meadows, sloughs, and bogs for its nesting and foraging habitat and if these are absent, it hunts open fields and is frequently observed hunting over agricultural areas (Call 1978).

The Study Area does not support nesting habitat. The Project Site provides approximately 7.68 acres of potential foraging habitat (Disturbed/Ruderal). The northern harrier was not detected during the general biological surveys.

**Swainson's Hawk (*Buteo swainsonii*)** – The Swainson's hawk is listed as Threatened by the state and is also designated as a CDFW Species of Special Concern for nesting. The Swainson's hawk does not breed in western San Bernardino County but does migrate through as a transient in the spring and fall and may occasionally winter within the area.

The Study Area does not support nesting habitat. The Project Site provides approximately 7.68 acres of potential foraging habitat (Disturbed/Ruderal). The Swainson's hawk was not detected during the general biological surveys.

#### **4.5.3 Critical Habitat**

The Study Area is not located within USFWS-designated Critical Habitat areas.

#### **4.7 Raptor Use**

Southern California holds a diversity of birds of prey (raptors), and many of these species are in decline. For most of the declining species, foraging requirements include extensive open, undisturbed, or lightly disturbed areas, especially grasslands. This type of habitat has declined severely in the region, affecting many species, but especially raptors. A few species, such as the Red-tailed Hawk (*Buteo jamaicensis*) and American Kestrel (*Falco sparverius*), are somewhat adaptable to low-level human disturbance and can be readily observed adjacent to neighborhoods

and other types of development. These species still require appropriate foraging habitat and low levels of disturbance in vicinity of nesting sites.

The Study Area provides very marginal foraging habitat for raptors, including several special-status raptors. During the general biological surveys, GLA detected the American kestrel and a flyover by a Cooper's hawk (*Accipiter cooperii*). Approximately half of the Study Area supports disturbed/developed areas and the remaining northern portion supports mostly disturbed/ruderal plant species. Small mammal burrows were not detected within the Study Area including those of California ground squirrel burrows. The majority of the site is routinely mowed and/or disked for weed abatement. As described in section 4.5.2 above, there is potential (albeit low potential) for burrowing owl, Swainson's hawk, northern harrier, and white-tailed kite to forage on the Study Area. A total of 7.68 acres of potential foraging habitat and 0.65 acre of potential nesting habitat is present for common raptor species.

#### **4.8 Nesting Birds**

The Study Area contains trees, shrubs, and ground cover that provide suitable habitat for nesting migratory birds. Impacts to nesting birds are prohibited under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code.<sup>12</sup>

#### **4.9 Wildlife Linkages/Corridors and Nursery Sites**

Habitat linkages are areas which provide a communication between two or more other habitat areas which are often larger or superior in quality to the linkage. Such linkage sites can be quite small or constricted, but may can be vital to the long-term health of connected habitats. Linkage values are often addressed in terms of "gene flow" between populations, with movement taking potentially many generations. The Study Area does not contain wildlife linkages on site.

Corridors are similar to linkages, but provide specific opportunities for individual animals to disperse or migrate between areas, generally extensive but otherwise partially or wholly separated regions. Adequate cover and tolerably low levels of disturbance are common requirements for corridors. Habitat in corridors may be quite different than that in the connected areas, but if used by the wildlife species of interest, the corridor will still function as desired. The Study Area does not contain wildlife corridors on site.

Wildlife nurseries are sites where wildlife concentrate for hatching and/or raising young, such as rookeries, spawning areas, and bat colonies. Nurseries can be important to both special-status species as well as commonly occurring species. The Study Area does not support wildlife nurseries on site.

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<sup>12</sup> The MBTA makes it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 C.F.R. Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 C.F.R.21). In addition, sections 3505, 3503.5, and 3800 of the California Department of Fish and Game Code prohibit the take, possession, or destruction of birds, their nests or eggs.

#### **4.10 Jurisdictional Delineation**

Corps and Regional Board jurisdiction associated with the Study Area totals 1.19 acres, none of which consists of jurisdictional wetlands. A total of 2,266 linear feet of streambed is present. Corps and Regional Board jurisdiction is limited to San Antonio Wash and one drainage feature previously referenced in this report as Drainage A, both of which are ephemeral, concrete-sided and concrete-bottomed SBCFCD channels. San Antonio Wash enters the Project Study Area after crossing beneath the rail line along the northwestern boundary and flows in a north to south direction. Drainage A enters the Project Study Area after crossing beneath the rail line along the southeastern boundary and generally extends in an east to west direction before converging with San Antonio Wash. The OHWM within San Antonio Wash is 30 feet wide and the OHWM within Drainage A ranges between 18 and 40 feet. No vegetation is present within both channels.

Exhibit 7A depicts the limits of Corps/Regional Board jurisdiction associated with the Project Study Area.

CDFW jurisdiction associated with the Study Area totals 1.19 acres, none of which consists of vegetated riparian habitat. A total of 2,266 linear feet of streambed is present. CDFW jurisdiction is limited to San Antonio Wash and one drainage feature previously referenced in this report as Drainage A, both of which are ephemeral, concrete-sided and concrete-bottomed SBCFCD channels. San Antonio Wash enters the Project Study Area after crossing beneath the rail line along the northwestern boundary and flows in a north to south direction. Drainage A enters the Project Study Area after crossing beneath the rail line along the southeastern boundary and generally extends in an east to west direction before converging with San Antonio Wash. The High Water Mark (HWM) within San Antonio Wash is 30 feet wide and the HWM within Drainage A ranges between 18 and 40 feet.

Exhibit 7B depicts the limits of CDFW jurisdiction associated with the Project Study Area.

## **5.0 IMPACT ANALYSIS**

The following discussion examines the potential impacts to plant and wildlife resources that would occur as a result of the proposed project. Impacts (or effects) can occur in two forms, direct and indirect. Direct impacts are considered to be those that involve the loss, modification or disturbance of plant communities, which in turn, directly affect the flora and fauna of those habitats. Direct impacts also include the destruction of individual plants or animals, which may also directly affect regional population numbers of a species or result in the physical isolation of populations thereby reducing genetic diversity and population stability.

Indirect impacts pertain to those impacts that result in a change to the physical environment, but which is not immediately related to a project. Indirect (or secondary) impacts are those that are reasonably foreseeable and caused by a project, but occur at a different time or place. Indirect impacts can occur at the urban/wildland interface of projects, to biological resources located downstream from projects, and other offsite areas where the effects of the project may be experienced by plants and wildlife. Examples of indirect impacts include the effects of increases in ambient levels of noise or light; predation by domestic pets; competition with exotic plants and animals; introduction of toxics, including pesticides; and other human disturbances such as hiking, off-road vehicle use, unauthorized dumping, etc. Indirect impacts are often attributed to the subsequent day-to-day activities associated with project build-out, such as increased noise, the use of artificial light sources, and invasive ornamental plantings that may encroach into native areas. Indirect effects may be both short-term and long-term in their duration. These impacts are commonly referred to as “edge effects” and may result in a slow replacement of native plants by non-native invasives, as well as changes in the behavioral patterns of wildlife and reduced wildlife diversity and abundance in habitats adjacent to project sites.

Cumulative impacts refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. A cumulative impact can occur from multiple individual effects from the same project, or from several projects. The cumulative impact from several projects is the change in the environment resulting from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

### **5.1 California Environmental Quality Act (CEQA)**

#### **5.1.1 Thresholds of Significance**

Environmental impacts to biological resources are assessed using impact significance threshold criteria, which reflect the policy statement contained in CEQA, Section 21001(c) of the California Public Resources Code. Accordingly, the State Legislature has established it to be the policy of the State of California:

*“Prevent the elimination of fish or wildlife species due to man’s activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and*

*preserve for future generations representations of all plant and animal communities...”*

Determining whether a project may have a significant effect, or impact, plays a critical role in the CEQA process. According to CEQA, Section 15064.7 (Thresholds of Significance), each public agency is encouraged to develop and adopt (by ordinance, resolution, rule, or regulation) thresholds of significance that the agency uses in the determination of the significance of environmental effects. A threshold of significance is an identifiable quantitative, qualitative or performance level of a particular environmental effect, non-compliance with which means the effect will normally be determined to be significant by the agency and compliance with which means the effect normally will be determined to be less than significant. In the development of thresholds of significance for impacts to biological resources CEQA provides guidance primarily in Section 15065, Mandatory Findings of Significance, and the CEQA Guidelines, Appendix G, Environmental Checklist Form. Section 15065(a) states that a project may have a significant effect where:

*“The project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or wildlife community, reduce the number or restrict the range of an endangered, rare, or threatened species, ...”*

Therefore, for the purpose of this analysis, impacts to biological resources are considered potentially significant (before considering offsetting mitigation measures) if one or more of the following criteria discussed below would result from implementation of the proposed project.

### **5.1.2 Criteria for Determining Significance Pursuant to CEQA**

Appendix G of the 2018 State CEQA guidelines indicate that a project may be deemed to have a significant effect on the environment if the project is likely to:

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

*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.*

*e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

*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.*

## **5.2 Impacts to Sensitive Vegetation Communities**

The proposed Project will not impact sensitive vegetation communities. Tables 5-1 and 5-2 provide a summary of permanent and temporary vegetation community impacts. The proposed Project would permanently impact, both on- and offsite, 14.36 acres of disturbed habitat types, including Developed/Flood Control Channel, Disturbed/Developed areas, Disturbed/Ruderal areas, and Ornamental vegetation. The Project would also temporarily impact 0.03 acre of Developed/Flood Control Channel off site.

**Table 5-1. Summary of Permanent Vegetation/Land Use Impacts for the Study Area**

| <b>Vegetation Type</b>          | <b>Onsite</b> | <b>Offsite</b> | <b>Study Area Totals (Acres)</b> |
|---------------------------------|---------------|----------------|----------------------------------|
| Developed/Flood Control Channel | 0             | 0.001          | 0.001                            |
| Disturbed/Developed             | 5.72          | 1.33           | 7.05                             |
| Disturbed/Ruderal               | 6.89          | 0              | 6.89                             |
| Ornamental                      | 0.42          | 0              | 0.42                             |
| <b>Total</b>                    | <b>13.03</b>  | <b>1.33</b>    | <b>14.36</b>                     |

**Table 5-2. Summary of Temporary Vegetation/Land Use Impacts for the Study Area**

| <b>Vegetation Type</b>          | <b>Onsite</b> | <b>Offsite</b> | <b>Study Area Totals (Acres)</b> |
|---------------------------------|---------------|----------------|----------------------------------|
| Developed/Flood Control Channel | 0             | 0.03           | 0.03                             |
| Disturbed/Developed             | 0             | 0              | 0                                |
| Disturbed/Ruderal               | 0             | 0              | 0                                |
| Ornamental                      | 0             | 0              | 0                                |
| <b>Total</b>                    | <b>0</b>      | <b>0.03</b>    | <b>0.03</b>                      |

A project impact map is attached as Exhibit 8 and a vegetation impact map is attached as Exhibit 9.

## **5.3 Impacts to Special-Status Plants**

The proposed Project will not impact special-status plants.

## **5.4 Impacts to Special-Status Animals**

### **5.4.1 Impacts to Listed Species**

The proposed Project may result in the loss of habitat for the Swainson's hawk. Although not confirmed present, Swainson's hawk has very limited potential to forage within the Study Area and therefore to potentially be impacted by the Project, if present.

**Swainson's Hawk.** Development of the proposed Project would remove 6.89 acres (disturbed/ruderal) of potential foraging habitat for migrating Swainson's hawks during spring/fall and winter. Although this species is listed as Threatened by the state of California, CESA does not protect migrant habitat unless the habitat supports breeding/nesting, thus protection under CESA wouldn't be triggered by the Project. Furthermore, the removal of this amount of potential foraging habitat would not be a significant impact under CEQA. The number of individual Swainson's hawks potentially affected would be very low.

### **5.4.2 Impacts to Non-Listed Species**

In addition to the listed species discussed above, the proposed Project would impact habitat for the following non-listed and/or special-status species that have potential to occur: 1) Birds: burrowing owl (foraging role only), loggerhead shrike, northern harrier hawk (foraging role only), white-tailed kite (foraging role only).

**Burrowing Owl.** No ground squirrel burrows or physical evidence of burrowing owls were detected within the Study Area during the habitat assessment/general biological surveys. The Study Area is highly disturbed and is completely surrounded by development and is adjacent to State Highway 60 Freeway. Despite this, approximately 6.89 acres of the Project site are proposed to be impacted and could provide low quality foraging habitat for the burrowing owl.

**Other Non-Listed Species.** Proposed impacts to loggerhead shrike (nesting and foraging role), northern harrier (foraging role only), and white-tailed kite (foraging role), would be less than significant under CEQA. This is based on the number of individuals potentially affected, the species role in the Study Area, and/or whether the species remains "common" to the region.

## **5.5 Impacts to Critical Habitat**

The proposed Project will not impact lands designated as critical habitat by the USFWS.

### **5.6 Impacts to Nesting Birds**

The project has the potential to impact active bird nests if vegetation is removed during the nesting season (February 1 to August 31). Impacts to nesting birds are prohibited by the MBTA and California Fish and Game Code. A project-specific mitigation measure is identified in Section 6.0 of this report to avoid impacts to nesting birds.

## **5.7 Impacts to Jurisdictional Waters**

The proposed Project will result in permanent impact to 0.001 acre of CDFW jurisdiction and temporary impact to 0.02 acre of Corps/Regional Board jurisdiction, none of which is wetlands, and 45 linear feet of streambed would be temporarily disturbed. The Project will also result in temporary impact to 0.03 acre of CDFW jurisdiction, none of which is riparian habitat, and 45 linear feet of streambed would be temporarily disturbed. Based on the Project site plan, regulatory permits from the Corps, CDFW, and Regional Board will be required to compensate (mitigate) for temporary and permanent impacts. The proposed impact would occur within a concrete channel which does not contain sensitive habitat; therefore, the impacts would be less than significant prior to mitigation.

A Corps/Regional Board impact map is attached as Exhibit 10A and a CDFW impact map is attached as Exhibit 10B.

## **5.8 Indirect Impacts to Biological Resources**

In the context of biological resources, indirect effects are those effects associated with developing areas adjacent to adjacent native open space. Potential indirect effects associated with development include water quality impacts from associated with drainage into adjacent open space/downstream aquatic resources; lighting effects; noise effects; invasive plant species from landscaping; and effects from human access into adjacent open space, such as recreational activities (including off-road vehicles and hiking), pets, dumping, etc. Temporary, indirect effects may also occur as a result of construction-related activities.

The Project is not expected to result in indirect effects based on a number of factors including historical land use practices within the Study Area; proximity of the Study area to adjacent residential and commercial development, including State Highway 60; lack of native habitats and special status resources within the Study Area.

## **5.9 Cumulative Impacts to Biological Resources**

Cumulative impacts are defined as the direct and indirect effects of a proposed project which, when considered alone, would not be deemed a substantial impact, but when considered in addition to the impacts of related projects in the area, would be considered potentially significant. "Related projects" refers to past, present, and reasonably foreseeable probable future projects, which would have similar impacts to the proposed project.

Although these species are generally not expected to occur within the Study Area due to the disturbed nature of the site, close proximity to development and disturbance, the Study Area does provide limited potential foraging opportunities for the burrowing owl, northern harrier, Swainson's hawk, and white-tailed kite on site. For other biological resources potentially present and impacted by the Project Study Area (such as the loggerhead shrike), the degree of contribution to the regional decline of this resources is judged to not be considerable at the project and regional levels.



Based on the level of ongoing human disturbance within the Project Study Area, and the regional availability of foraging habitat in the vicinity of the Study Area, such as the Prado Regional Park, Prado Basin, Chino Hills State Park, and the Santa Ana Mountains, the loss of 6.89 acres of mostly low-quality potential raptor foraging habitat is not judged to be significant under CEQA

## **6.0 MITIGATION/AVOIDANCE MEASURES**

The following discussion provides project-specific mitigation/avoidance measures for actual or potential impacts to special-status resources.

### **6.1 Burrowing Owl**

Although burrowing owls and suitable habitat (i.e., ground squirrel burrows) are not present on site due to a lack of suitable habitat, habitat conditions can change over time. As such, the following measure is necessary to ensure consistency with the MSHCP and to avoid any physical harm to burrowing owls during construction:

- **Pre-Construction Survey.** A qualified biologist will conduct a pre-construction presence/absence survey for burrowing owls no more than 14 days prior to ground disturbing activities. If burrowing owls are detected during pre-construction surveys, then then owls must be relocated from the site outside of the breeding season following accepted protocols, and subject to the approval of CDFW.

### **6.2 Nesting Birds**

The Study Area contains vegetation with the potential to support native nesting birds. As discussed above, the MBTA and California Fish and Game Code prohibits mortality of native birds, including eggs. The following measure is recommended to avoid mortality to nesting birds. Potential impacts to native birds was not considered a biologically significant impact under CEQA, however, to comply with state law, the following is recommended:

- As feasible, vegetation clearing should be conducted outside of the nesting season, which is generally identified as February 1 through September 15. If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a nesting bird survey within three days prior to any disturbance of the site, including disking, demolition activities, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests, and the buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests.

### **6.3 Jurisdictional Waters**

The proposed Project will result in permanent impact to 0.001 acre of CDFW jurisdiction and temporary impact to 0.02 acre of Corps/Regional Board jurisdiction, none of which is wetlands, and 45 linear feet of streambed would be temporarily disturbed. The Project will also result in temporary impact to 0.03 acre of CDFW jurisdiction, none of which is riparian habitat, and 45

linear feet of streambed would be temporarily disturbed. Based on the Project site plan, regulatory permits from the Corps (404 Nationwide Permit 7, *Outfall Structures and Associated Intake Structures*), CDFW (1602 streambed alteration agreement, and Regional Board (401 water quality certification) will be required to compensate (mitigate) for temporary and permanent impacts.

Based on the overall impact to Corps, CDFW, and Regional Board jurisdiction resulting from the proposed permanent and temporary impact to Drainage A, the following is recommended to comply with state law:

- The Project Proponent shall compensate for permanent impacts to 0.001 acre of CDFW jurisdiction at a minimum 1:1 mitigation-to-impact ratio through the purchase of rehabilitation, re-establishment, and/or establishment mitigation credits at an approved mitigation bank or in-lieu fee program. The mitigation receipt from this fee payment will be provided to the Lead Agency prior to permanent disturbance to Drainage A offsite.

Temporary impacts to Corps, CDFW, and Regional Board jurisdiction will be restored on site through returning the temporary impact area to its pre-project condition.

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## 8.0 CERTIFICATION

*I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.*



Signed: \_\_\_\_\_

Date: 04/30/20

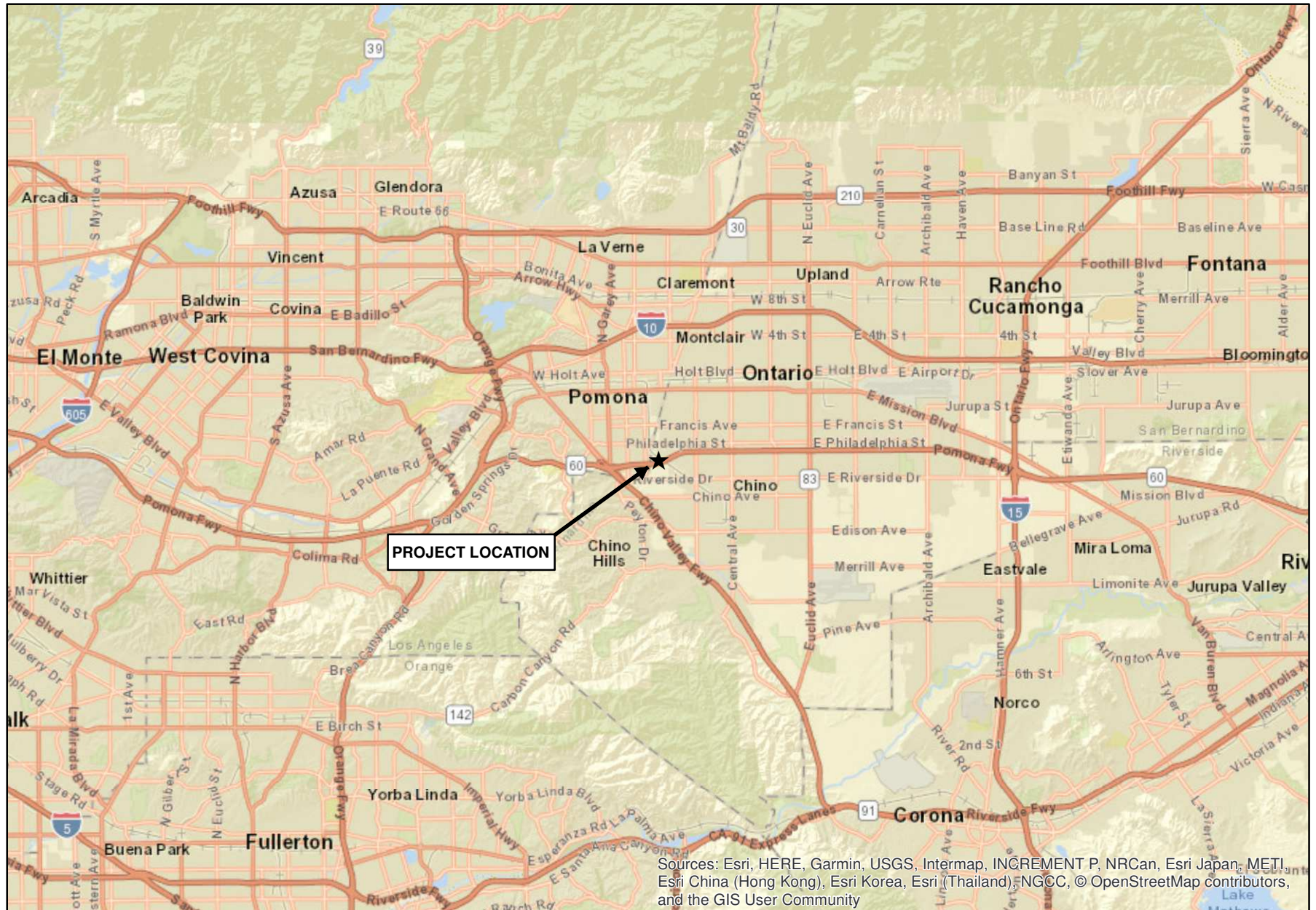
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Source: ESRI World Street Map



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Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

## EAST END AVENUE PROJECT

Regional Map

GLENN LUKOS ASSOCIATES



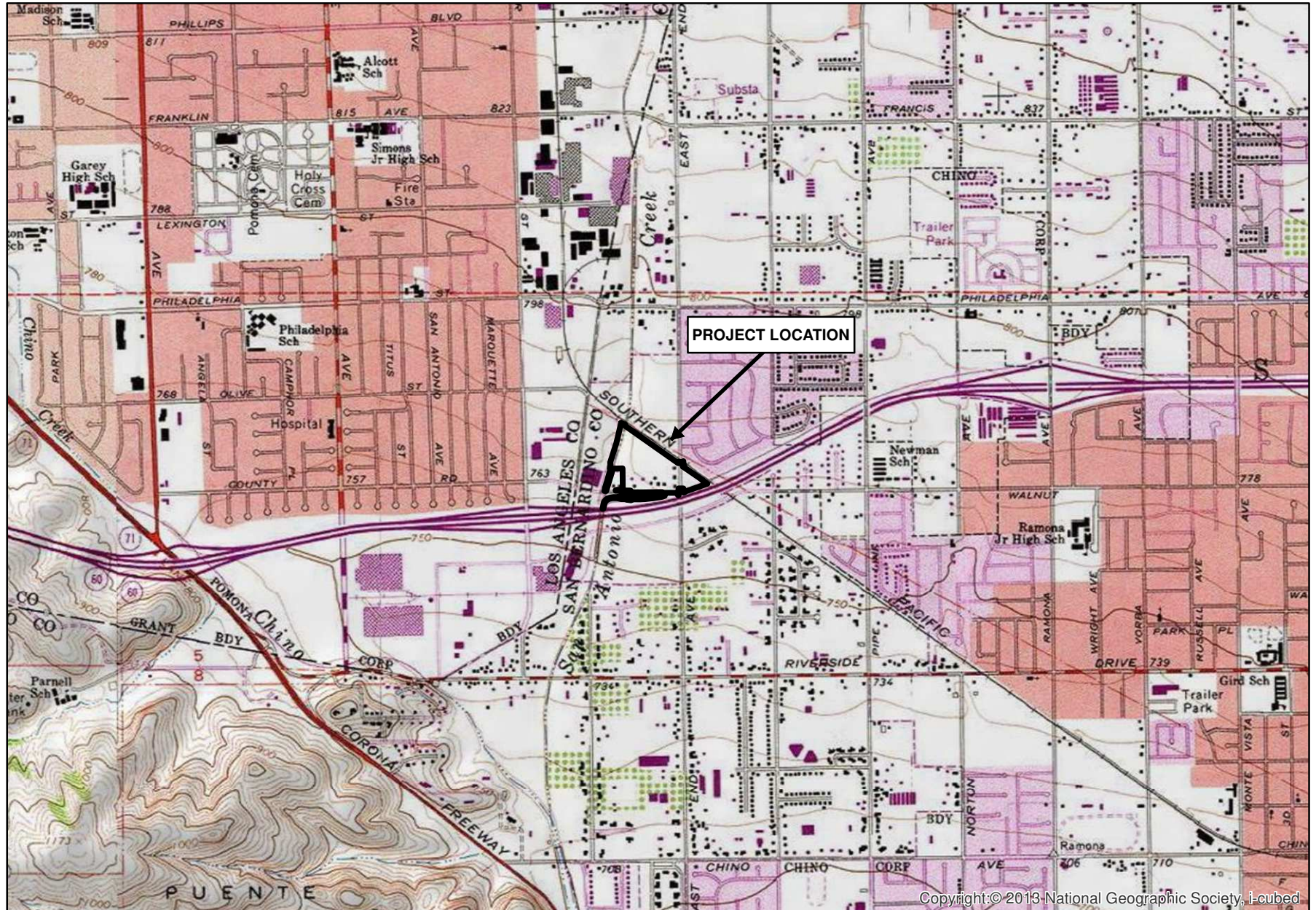
Exhibit 1



Adapted from USGS Ontario, CA quadrangle



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2,000  
4,000  
Feet



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## EAST END AVENUE PROJECT

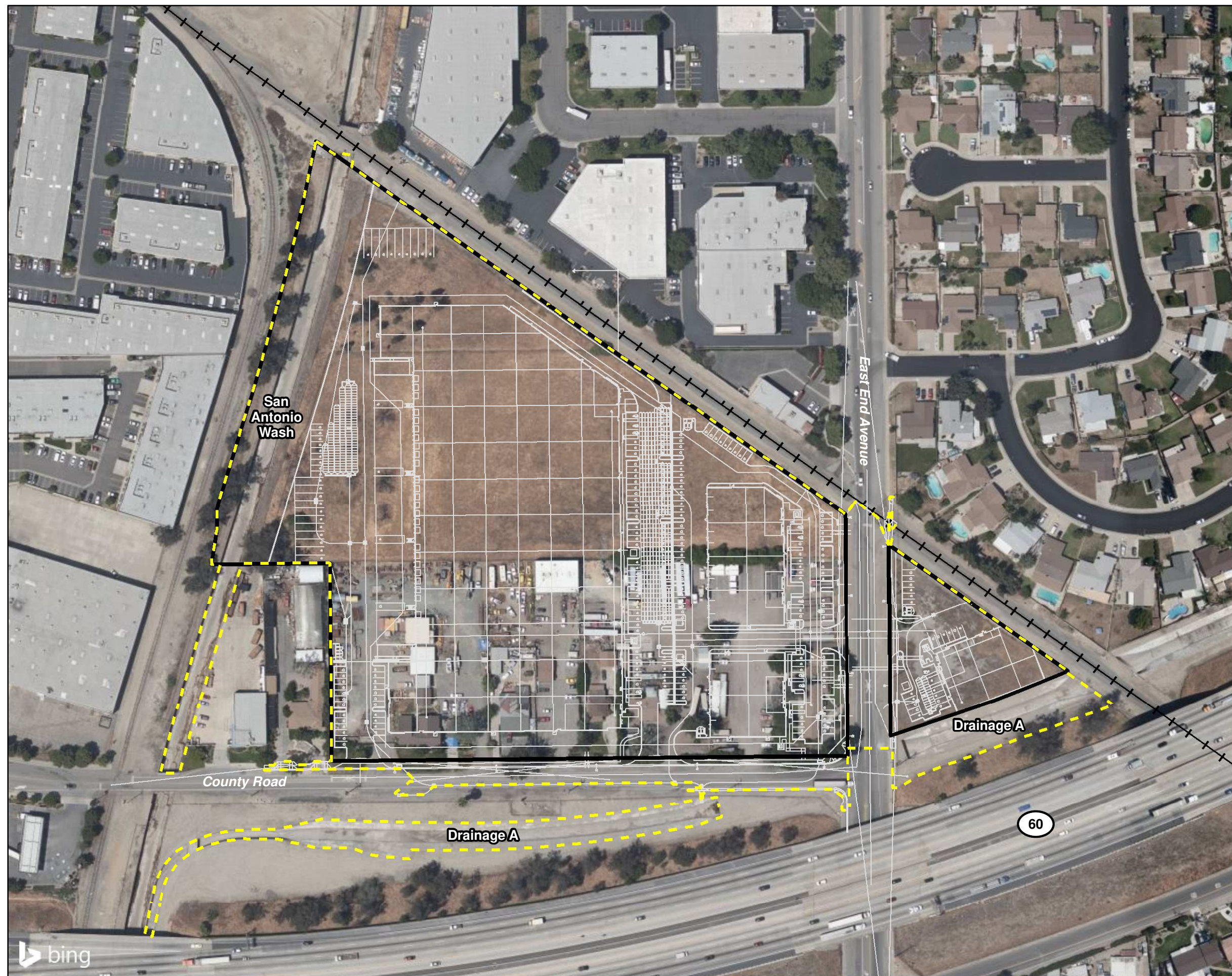
Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2







- Property Boundary
- Study Area
- Site Plan
- Railroad



0 75 150 300  
Feet

1 inch = 150 feet

Coordinate System: State Plane 5 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD83  
Map Prepared by: B. Gale, GLA  
Date Prepared: February 18, 2020

## EAST END AVENUE PROJECT

Site Plan

GLENN LUKOS ASSOCIATES

Exhibit 3

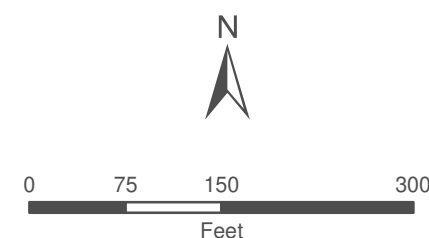


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- Property Boundary
- Study Area
- Ornamental
- Disturbed/Ruderal
- Disturbed/Developed
- Developed/Flood Control Channel
- Railroad



1 inch = 150 feet

Coordinate System: State Plane 5 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD83  
Map Prepared by: B. Gale, GLA  
Date Prepared: February 19, 2020

## EAST END AVENUE PROJECT

Vegetation Map

GLENN LUKOS ASSOCIATES

Exhibit 4







Photograph 1: View looking west towards East End Avenue at the smaller eastern parcel (October 2019).



Photograph 2: View looking west towards East End Avenue at the smaller eastern parcel (January 2020).



Photograph 3: View looking at developed areas of the Project site (October 2019).



Photograph 4: View looking at developed areas of the Project site after building demolition (January 2020).







Photograph 5: View looking west from near East End Avenue at disturbed/ruderal areas (October 2019).



Photograph 6: View looking east at disturbed/ruderal areas (January 2010).



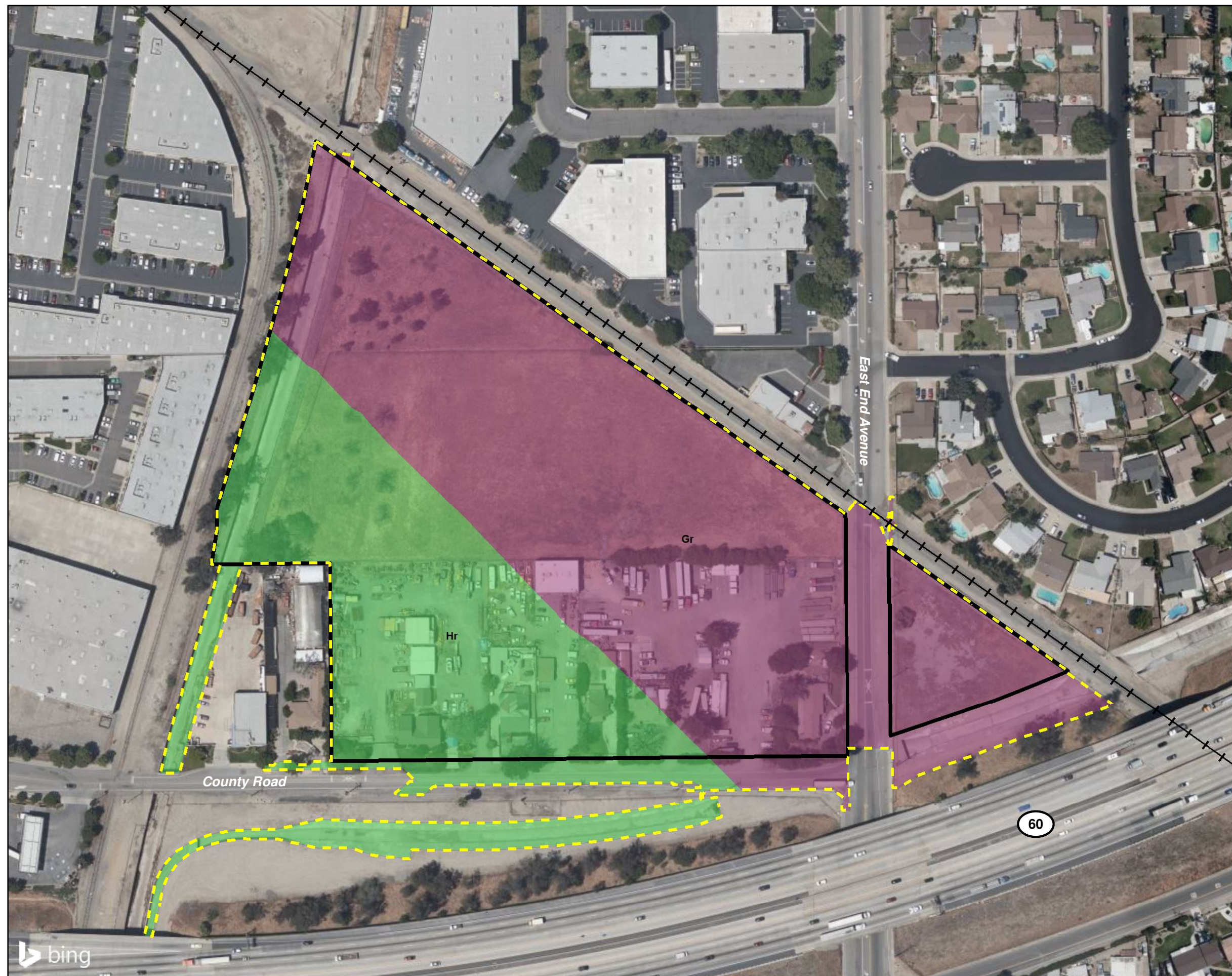
Photograph 7: View looking at east at Drainage A taken from East End Avenue (January 2020).




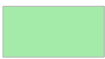
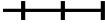


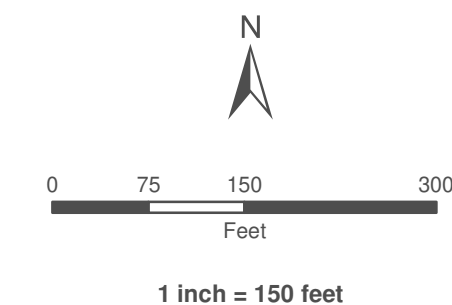
Photograph 8: View looking south at San Antonio Wash from near the northeastern corner of the Project site (January 2020).







-  Property Boundary
-  Study Area
-  Gr - Grangeville Fine Sandy Loam
-  Hr - Hilmar Loamy Fine Sand
-  Railroad



Coordinate System: State Plane 5 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD83  
Map Prepared by: B. Gale, GLA  
Date Prepared: February 18, 2020

## EAST END AVENUE PROJECT

Soils Map

GLENN LUKOS ASSOCIATES

Exhibit 6

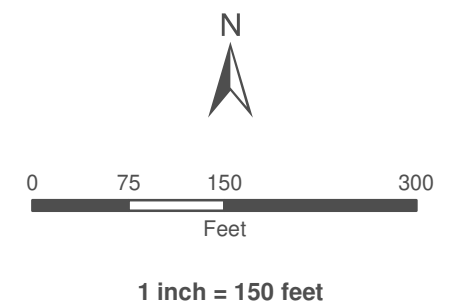


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- Property Boundary
- Study Area
- Corps/RWQCB Non-Wetland Waters
- Width of Jurisdiction in Feet
- Railroad



Coordinate System: State Plane 5 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD83  
Map Prepared by: B. Gale, GLA  
Date Prepared: February 18, 2020

## EAST END AVENUE PROJECT

Corps/RWQCB Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

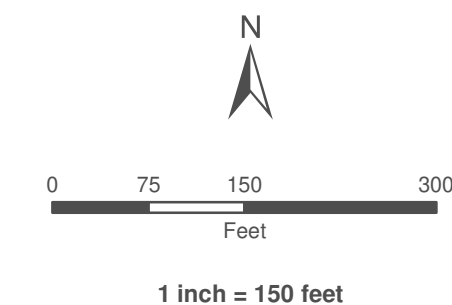
Exhibit 7A







- Property Boundary
- Study Area
- CDFW Non-Riparian Streambed
- Width of Jurisdiction in Feet
- Railroad



Coordinate System: State Plane 5 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD83  
Map Prepared by: B. Gale, GLA  
Date Prepared: February 18, 2020

## EAST END AVENUE PROJECT

CDFW Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

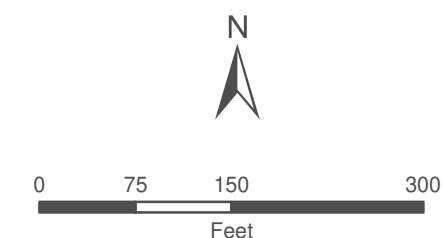
Exhibit 7B







- Property Boundary
- Study Area
- Permanent Impacts
- Temporary Impacts
- No Impacts
- Railroad



1 inch = 150 feet

Coordinate System: State Plane 5 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD83  
Map Prepared by: B. Gale, GLA  
Date Prepared: April 27, 2020

## EAST END AVENUE PROJECT

Impact Map

GLENN LUKOS ASSOCIATES

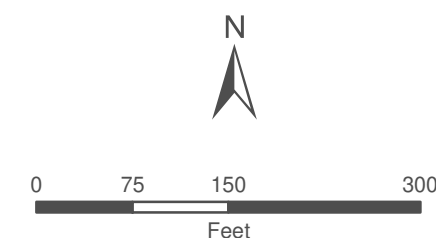
Exhibit 8







- Property Boundary
- Study Area
- Permanent Impacts
- Temporary Impacts
- Ornamental
- Disturbed/Ruderal
- Disturbed/Developed
- Developed/Flood Control Channel
- Railroad



1 inch = 150 feet

Coordinate System: State Plane 5 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD83  
Map Prepared by: B. Gale, GLA  
Date Prepared: April 27, 2020

## EAST END AVENUE PROJECT

Vegetation Impact Map





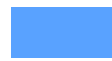

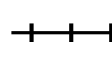
GLENN LUKOS ASSOCIATES

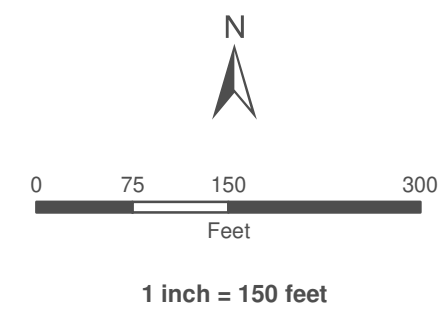
Exhibit 9







-  Property Boundary
-  Study Area
-  Permanent Impacts
-  Temporary Impacts
-  Corps/RWQCB Non-Wetland Waters
-  Width of Jurisdiction in Feet
-  Railroad



Coordinate System: State Plane 5 NAD 83  
 Projection: Lambert Conformal Conic  
 Datum: NAD83  
 Map Prepared by: B. Gale, GLA  
 Date Prepared: April 27, 2020







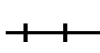
## EAST END AVENUE PROJECT

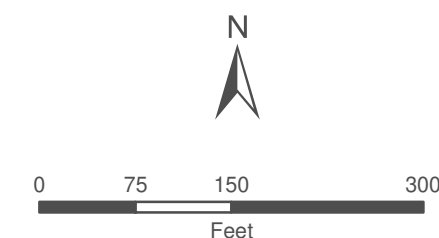
Corps/RWQCB Jurisdictional Delineation Impacts Map







-  Property Boundary
-  Study Area
-  Permanent Impacts
-  Temporary Impacts
-  CDFW Non-Riparian Streambed
-  Width of Jurisdiction in Feet
-  Railroad



Coordinate System: State Plane 5 NAD 83  
 Projection: Lambert Conformal Conic  
 Datum: NAD83  
 Map Prepared by: B. Gale, GLA  
 Date Prepared: April 27, 2020

## EAST END AVENUE PROJECT

CDFW Jurisdictional Delineation Impacts Map

GLENN LUKOS ASSOCIATES

Exhibit 10B





# APPENDIX A

## FLORAL COMPENDIUM

The floral compendium lists all species identified during floristic level/focused plant surveys conducted for the Project site. Taxonomy typically follows The Jepson Manual, 2<sup>nd</sup> Edition (2012). Common plant names are taken from Baldwin (2012), Munz (1974), and Roberts et al (2004) and Roberts (2008). An asterisk (\*) denotes a non-native species.

### SCIENTIFIC NAME

### COMMON NAME

## GYMNOSPERMS

### CONIFEROPHYTA

### CONE-BEARING PLANTS

#### PINACEAE

#### Pine Family

\* *Pinus* sp.

pine

### MAGNOLIOPHYTA

### FLOWERING PLANTS

### MAGNOLIIDS

### MAGNOLIID CLADE

### MONOCOTYLEDONS

### MONOCOTS

#### AGAVACEAE

#### Agave Family

\* *Yucca* sp.

yucca

#### ARECACEAE

#### Palm Family

\* *Washingtonia robusta*

Mexican fan palm

#### POACEAE

#### Grass Family

\* *Avena fatua*

common wild oat

\* *Bromus diandrus*

ripgut grass

\* *Cynodon dactylon*

Bermuda grass

### EUDICOTYLEDONS

### EUDICOTS

#### ADOXACEAE

#### Elderberry Family

*Sambucus nigra* subsp. *caerulea*

Mexican elderberry

#### AMARANTHACEAE

#### Amaranth Family

*Amaranthus palmeri*

Palmer's amaranth

\* *Chenopodium album*

lamb's quarters

\* *Salsola tragus*

Russian-thistle

## **ARALIACEAE**

\* *Hedera helix*

## **Ginseng Family**

English ivy

## **ASTERACEAE**

*Ambrosia acanthicarpa*

\* *Centaurea melitensis*

*Erigeron canadensis*

*Helianthus annuus*

\* *Lactuca serriola*

## **Sunflower Family**

annual bur-sage

toocalote

common horseweed

western sunflower

prickly lettuce

## **EUPHORBIACEAE**

*Croton setiger*

\* *Ricinus communis*

## **Spurge Family**

doveweed

castor bean

## **GERANIACEAE**

\* *Erodium cicutarium*

## **Geranium Family**

red-stemmed filaree

## **HAMAMELIDACEAE**

\* *Liquidambar* sp.

## **Witch-Hazel Family**

sweet gum

## **JUGLANDACEAE**

*Juglans hindsii*

## **Walnut Family**

northern California black walnut

## **LYTHRACEAE**

\* *Punica granatum*

## **Loosestrife Family**

pomegranate

## **MORACEAE**

\* *Ficus carica*

*Morus alba*

## **Mulberry Family**

common fig

mulberry

## **MYRTACEAE**

\* *Eucalyptus globulus*

## **Myrtle Family**

Tasmanian blue gum

## **NYCTAGINACEAE**

*Abronia villosa* subsp. aurita

## **Four O'Clock Family**

chaparral sand-verbena

## **ROSACEAE**

*Rosa californica*

## **Rose Family**

California rose

## **SIMAROUBACEAE**

\* *Ailanthus altissima*

## **Simarouba Family**

Tree of heaven

## **SOLANACEAE**

*Datura wrightii*

## **Nightshade Family**

jimsonweed

\* *Nicotiana glauca*  
*Solanum americanum*

tree tobacco  
white nightshade

**VITACEAE**

*Vitis girdiana*

**Grape Family**

desert wild grape

**ZYGOPHYLLACEAE**

\* *Tribulus terrestris*

**Caltrop Family**

puncture vine

## **APPENDIX B**

### **FAUNAL COMPENDIUM**

The faunal compendium lists species identified on the Project site. Scientific nomenclature and common names for vertebrate species referred to in this report follow Collins (2009) for amphibians and reptiles, Bradley, et al. (2014) for mammals, and AOU Checklist (1998) for birds. An (\*) denotes non-native species.

#### **LEPIDOPTERA**

##### **NYMPHALIDAE**

*Danaus plexippus*

#### **AVES**

##### **ACCIPITRIDAE**

*Accipiter cooperii*

##### **AEGITHALIDAE**

*Psaltirparus minimus*

##### **COLUMBIDAE**

\* *Streptopelia decaocto*  
*Zenaida macroura*

##### **CORVIDAE**

*Corvus brachyrhynchos*

##### **EMBERIZIDAE**

\* *Passer domesticus*

##### **FALCONIDAE**

*Falco sparverius*

##### **FRINGILLIDAE**

*Carpodacus mexicanus*  
*Spinus psaltria*

##### **ICTERIDAE**

*Sturnella neglecta*

##### **MIMIDAE**

*Mimus polyglottos*

#### **BUTTERFLIES**

##### **Brush-Footed Butterflies**

Monarch

#### **BIRDS**

##### **Hawks and Old World Vultures**

Cooper's hawk

##### **Long-Tailed Tits and Bushtits**

bushtit

##### **Pigeons and doves**

Eurasian collared-dove  
mourning dove

##### **Crows and Jays**

American crow

##### **Emberizines**

house sparrow

##### **Caracaras and Falcons**

American kestrel

##### **Finches**

house finch  
lesser goldfinch

##### **Blackbirds**

western meadowlark

##### **Mockingbirds and Thrashers**

northern mockingbird

**PARULIDAE**

*Dendroica coronata*

**STURNIDAE**

\* *Sturnus vulgaris*

**TROCHILIDAE**

*Calypte anna*

*Selasphorus sasin*

**TYRANNIDAE**

*Sayornis nigricans*

*Sayornis saya*

*Tyrannus vociferans*

**MAMMALIA****CANIDAE**

*Canis latrans*

**FELIDAE**

\* *Felis catus*

**GEOMYIDAE**

*Thomomys bottae*

**Wood Warblers and Relatives**

yellow-rumped warbler

**Starlings**

European starling

**Hummingbirds**

Anna's hummingbird

Allen's hummingbird

**Tyrant Flycatchers**

black phoebe

Say's phoebe

Cassin's kingbird

**MAMMALS****Foxes, Wolves and Allies**

coyote

**Cats**

feral cat

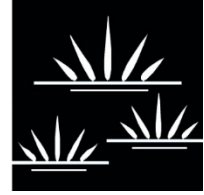
**Pocket Gophers**

Botta's pocket gopher

# GLENN LUKOS ASSOCIATES

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Regulatory Services



March 25, 2020

David Ornelas  
T&B Planning  
3665 Ruffin Road  
Suite 208  
San Diego, California 92123

**SUBJECT:** Jurisdictional Delineation of the East End Avenue Project, a 14.49-Acre Property and its 2.83-Acre Off Site Study Area Located in the City of Chino, San Bernardino County, California.

Dear Mr. Ornelas:

This letter report summarizes our preliminary findings of U.S. Army Corps of Engineers (Corps), Santa Ana Regional Water Quality Control Board (Regional Board), and California Department of Fish and Wildlife (CDFW) jurisdiction for the above-referenced property.<sup>1</sup>

## **Project Location**

The East End Avenue Project (Project) totals approximately 17.32 acres (14.49 acres onsite and 2.83 acres off site) and is located at latitude 34.027513 and longitude -117.726197 in the City of Chino, San Bernardino County, California [Exhibit 1] within an unsectioned area of Township 2 South and Range 8 West of the U.S. Geological Survey (USGS) 7.5" quadrangle map Ontario, California (dated 1967 and photorevised in 1981) [Exhibit 2 – Vicinity Map]. The Project site is bordered by the Atchison, Topeka, and Santa Fe rail line to the north, the commercial development and County Road to the south, East End Avenue to the east, and San Antonio Wash to the west.

---

<sup>1</sup> This report presents our best effort at estimating the subject jurisdictional boundaries using the most up-to-date regulations and written policy and guidance from the regulatory agencies. Only the regulatory agencies can make a final determination of jurisdictional boundaries. If a final jurisdictional determination is required, GLA can assist in getting written confirmation of jurisdictional boundaries from the agencies.

## **Jurisdictional Delineation**

In September 2019, regulatory specialists of Glenn Lukos Associates, Inc. (GLA) examined the Project site to determine the limits of (1) Corps jurisdiction pursuant to Section 404 of the Clean Water Act (CWA), (2) Regional Board jurisdiction pursuant to Section 401 of the CWA and Section 13260 of the California Water Code (CWC) [the Porter-Cologne Water Quality Act (Porter-Cologne)], and (3) CDFW jurisdiction pursuant to Division 2, Chapter 6, Sections 1600-1617 of the California Fish and Game Code.

Enclosed are exhibits that depict the areas of potential Corps/Regional Board (Exhibit 3A) and CDFW (Exhibits 3B) jurisdiction. Photographs to document the topography, vegetative communities, and general widths of each of the waters are provided as Exhibit 4 and maps depicting the soils are included as Exhibit 5.

Corps/Regional Board jurisdiction associated with the Project Study Area totals 1.19 acres, none of which consists of jurisdictional wetlands. A total of 2,266 linear feet of streambed is present.

CDFW jurisdiction associated with the Project Study Area totals 1.69 acres, none of which consists of riparian habitat. A total of 2,266 linear feet of streambed is present.

## **I. METHODOLOGY**

Prior to beginning the field delineation, a color aerial photograph, a topographic base map of the property, and the previously cited USGS topographic map were examined to determine the locations of potential areas of Corps/Regional Board/CDFW jurisdiction. Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. Suspected wetland habitats on the site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual<sup>2</sup> (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement)<sup>3</sup>. While in the field the limits of Corps/Regional Board/CDFW jurisdiction were recorded onto a color aerial photograph using visible landmarks and/or sub-meter accuracy global positioning system devices.

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<sup>2</sup> Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.

<sup>3</sup> U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.



The Soil Conservation Service (SCS)<sup>4</sup> has mapped the following soil type as occurring in the general vicinity of the project site:

*Grangeville fine sandy loam (Gr)*

The Grangeville series consists of somewhat poorly drained soils. These soils are formed on slopes of alluvial fans in moderately coarse textured granitic alluvium. Slopes are typically zero to two percent. The vegetation commonly associated with Grangeville soils includes annual grasses and forbs and scattered cottonwood trees. Grangeville soils are used for irrigated alfalfa, small grain and pasture plants.

*Hilmar Loamy Fine Sand (Hr)*

The Hilmar series consists of somewhat poorly drained, nearly level soils on alluvial valley floors and fans. These soils formed on wind-laid, coarse-textured material underlain by medium-textured granitic alluvium. The vegetation commonly associated with this soil unit includes annual grasses and forbs. Hilmar soils are used for irrigated crops such as grapes, alfalfa, pasture plants, and small grains.

These soil units are not identified as hydric in the SCS's publication, Hydric Soils of the United States.<sup>5</sup> None of these soils are identified as hydric for the local Hydric Soils List of Southwestern San Bernardino County, however, inclusions of the Grangeville soil may be considered hydric for soils in the Aquic suborder, Aquic subgroups, Albolls suborder, Salorthids great group, Pell great groups of vertisols, Pachic subgroups, or Cumulic subgroups, which have a frequently occurring water table at less than 1.5 feet from the surface for a significant period (usually more than two weeks) during the growing season if permeability is less than 6.0 inches an hour in all layers within 20 inches and/or soils that are frequently ponded for a long duration during the growing season. It would also be considered hydric under FSA items 1, 4, and/or 5 due to saturation, seasonally flooded or ponded areas, and/or areas farmed under natural conditions without removing woody vegetation or other manipulation.

It is important to note that under the Arid West Region Supplement, the presence of mapped hydric soils is no longer dispositive for the presence of hydric soils. Rather, the presence of hydric soils must now be confirmed in the field.

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<sup>4</sup> SCS is now known as the National Resource Conservation Service or NRCS.

<sup>5</sup> United States Department of Agriculture, Soil Conservation Service. 1991. Hydric Soils of the United States, 3rd Edition, Miscellaneous Publication Number 1491. (In cooperation with the National Technical Committee for Hydric Soils.)

## II. JURISDICTION

### A. Army Corps of Engineers

Pursuant to Section 404 of the CWA, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a) as:

- (1) All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;*
- (2) All interstate waters including interstate wetlands;*
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect foreign commerce including any such waters:*
  - (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or*
  - (ii) From which fish or shell fish are or could be taken and sold in interstate or foreign commerce; or*
  - (iii) Which are used or could be used for industrial purpose by industries in interstate commerce...*
- (4) All impoundments of waters otherwise defined as waters of the United States under the definition;*
- (5) Tributaries of waters identified in paragraphs (a) (1)-(4) of this section;*
- (6) The territorial seas;*
- (7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a) (1)-(6) of this section.*
- (8) Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other federal agency, for the purposes of the Clean Water Act, the final authority regarding Clean Water Act jurisdiction remains with the EPA.*

*Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 123.11(m) which also meet the criteria of this definition) are not waters of the United States.*

In the absence of wetlands, the limits of Corps jurisdiction in non-tidal waters, such as intermittent streams, extend to the OHWM which is defined at 33 CFR 328.3(e) as:

*...that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.*

**1. Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.**

Pursuant to Article I, Section 8 of the U.S. Constitution, federal regulatory authority extends only to activities that affect interstate commerce. In the early 1980s the Corps interpreted the interstate commerce requirement in a manner that restricted Corps jurisdiction on isolated (intrastate) waters. On September 12, 1985, the U.S. Environmental Protection Agency (EPA) asserted that Corps jurisdiction extended to isolated waters that are used or could be used by migratory birds or endangered species, and the definition of “waters of the United States” in Corps regulations was modified as quoted above from 33 CFR 328.3(a).

On January 9, 2001, the Supreme Court of the United States issued a ruling on *Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers, et al.* (SWANCC). In this case the Court was asked whether use of an isolated, intrastate pond by migratory birds is a sufficient interstate commerce connection to bring the pond into federal jurisdiction of Section 404 of the Clean Water Act.

The written opinion notes that the court’s previous support of the Corps’ expansion of jurisdiction beyond navigable waters (*United States v. Riverside Bayview Homes, Inc.*) was for a wetland that abutted a navigable water and that the court did not express any opinion on the question of the authority of the Corps to regulate wetlands that are not adjacent to bodies of open water. The current opinion goes on to state:

*In order to rule for the respondents here, we would have to hold that the jurisdiction of the Corps extends to ponds that are not adjacent to open water. We conclude that the text of the statute will not allow this.*

Therefore, we believe that the court’s opinion goes beyond the migratory bird issue and says that no isolated, intrastate water is subject to the provisions of Section 404(a) of the Clean Water Act (regardless of any interstate commerce connection). However, the Corps and EPA have issued a joint memorandum which states that they are interpreting the ruling to address only the migratory bird issue and leaving the other interstate commerce clause nexuses intact.

## **2. Rapanos v. United States and Carabell v. United States**

On June 5, 2007, the EPA and Corps issued joint guidance that addresses the scope of jurisdiction pursuant to the Clean Water Act in light of the Supreme Court's decision in the consolidated cases *Rapanos v. United States* and *Carabell v. United States* ("Rapanos"). The chart below was provided in the joint EPA/Corps guidance.

For sites that include waters other than Traditional Navigable Waters (TNWs) and/or their adjacent wetlands or Relatively Permanent Waters (RPMs) tributary to TNWs and/or their adjacent wetlands, as set forth in the chart below, the Corps must apply the "significant nexus" standard.

For "isolated" waters or wetlands, the joint guidance also requires an evaluation by the Corps and EPA to determine whether other interstate commerce clause nexuses, not addressed in the SWANCC decision are associated with isolated features on project sites for which a jurisdictional determination is being sought from the Corps.

The Corps and EPA will assert jurisdiction over the following waters:

- Traditional navigable waters.
- Wetlands adjacent to traditional navigable waters.
- Non-navigable tributaries of traditional navigable waters that are relatively permanent where the tributaries typically flow year-round or have continuous flow at least seasonally (e.g., typically three months).
- Wetlands that directly abut such tributaries.

The Corps and EPA will decide jurisdiction over the following waters based on a fact-specific analysis to determine whether they have a significant nexus with a TNW:

- Non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to non-navigable tributaries that are not relatively permanent.
- Wetlands adjacent to but that do not directly abut a relatively permanent non-navigable tributary.

The agencies generally will not assert jurisdiction over the following features:

- Swales or erosional features (e.g., gullies, small washes characterized by low volume, infrequent or short duration flow).
- Ditches (including roadside ditches) excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

The agencies will apply the significant nexus standard as follows:

- A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by all wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical and biological integrity of downstream traditional navigable waters.
- Significant nexus includes consideration of hydrologic and ecologic factors.

### **3. Wetland Definition Pursuant to Section 404 of the Clean Water Act**

The term “wetlands” (a subset of “waters of the United States”) is defined at 33 CFR 328.3(b) as “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support...a prevalence of vegetation typically adapted for life in saturated soil conditions.” In 1987 the Corps published the Wetland Manual to guide its field personnel in determining jurisdictional wetland boundaries. The methodology set forth in the Wetland Manual and the Arid West Supplement generally require that, in order to be considered a wetland, the vegetation, soils, and hydrology of an area exhibit at least minimal hydric characteristics. While the Wetland Manual and Arid West Supplement provide great detail in methodology and allow for varying special conditions, a wetland should normally meet each of the following three criteria:

- More than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the Arid West 2016 Regional Wetland Plant List<sup>6,7</sup>);
- Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and
- Whereas the Wetland Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with “problematic hydrophytic vegetation”, which require a minimum of 14 days of ponding to be considered a wetland.

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<sup>6</sup> Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. Arid West 2016 Regional Wetland Plant List. Phytoneuron 2016-30: 1-17. Published 28 April 2016.

<sup>7</sup> Note the Corps also publishes a National List of Plant Species that Occur in Wetlands (Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-30: 1-17. Published 28 April 2016.); however, the Regional Wetland Plant List should be used for wetland delineations within the Arid West Region.

## **B. Regional Water Quality Control Board**

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States<sup>8</sup> and waters of the state. Waters of the United States are defined above in Section II.A and waters of the state are defined as “any surface water or groundwater, including saline waters, within the boundaries of the state” (California Water Code 13050[e]).

Section 401 of the CWA requires certification for any federal permit or license authorizing impacts to waters of the U.S. (i.e., waters that are within federal jurisdiction), such as Section 404 of the CWA and Section 10 of the Safe Rivers and Harbors Act, to ensure that the impacts do not violate state water quality standards. When a project could impact waters outside of federal jurisdiction, the Regional Board has the authority under the Porter-Cologne Water Quality Control Act to issue Waste Discharge Requirements (WDRs) to ensure that impacts do not violate state water quality standards. Clean Water Act Section 401 Water Quality Certifications, WDRs, and waivers of WDRs are also referred to as orders or permits.

### **1. State Wetland Definition**

The Water Boards define an area as wetland<sup>9</sup> as follows: *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area’s vegetation is dominated by hydrophytes or the area lacks vegetation.*

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<sup>8</sup> Therefore, wetlands that meet the current definition, or any historic definition, of waters of the U.S. are waters of the state. In 2000, the State Water Resources Control Board determined that all waters of the U.S. are also waters of the state by regulation, prior to any regulatory or judicial limitations on the federal definition of waters of the U.S. (California Code of Regulations title 23, section 3831(w)). This regulation has remained in effect despite subsequent changes to the federal definition. Therefore, waters of the state includes features that have been determined by the U.S. Environmental Protection Agency (U.S. EPA) or the U.S. Army Corps of Engineers (Corps) to be “waters of the U.S.” in an approved jurisdictional determination; “waters of the U.S.” identified in an aquatic resource report verified by the Corps upon which a permitting decision was based; and features that are consistent with any current or historic final judicial interpretation of “waters of the U.S.” or any current or historic federal regulation defining “waters of the U.S.” under the federal Clean Water Act.

<sup>9</sup> State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. [For Inclusion in the Water Quality Control Plans for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California].

The following wetlands are waters of the state:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;<sup>10</sup> and*
3. *Artificial wetlands<sup>11</sup> that meet any of the following criteria:*
  - a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;*
  - b. Specifically identified in a water quality control plan as a wetland or other water of the state;*
  - c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or*
  - d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):*
    - i. Industrial or municipal wastewater treatment or disposal,*
    - ii. Settling of sediment,*
    - iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,*
    - iv. Treatment of surface waters,*
    - v. Agricultural crop irrigation or stock watering,*
    - vi. Fire suppression,*
    - vii. Industrial processing or cooling,*
    - viii. Active surface mining – even if the site is managed for interim wetlands functions and values,*
    - ix. Log storage,*
    - x. Treatment, storage, or distribution of recycled water, or*

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<sup>10</sup> “Created by modification of a surface water of the state” means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.

<sup>11</sup> Artificial wetlands are wetlands that result from human activity.

- xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or*
- xii. Fields flooded for rice growing.<sup>12</sup>*

*All artificial wetlands that are less than an acre in size and do not satisfy the criteria set forth in 2, 3.a, 3.b, or 3.c are not waters of the state. If an aquatic feature meets the wetland definition, the burden is on the applicant to demonstrate that the wetland is not a water of the state.*

### **C. California Department of Fish and Wildlife**

Pursuant to Division 2, Chapter 6, Sections 1600-1617 of the California Fish and Game Code, the CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel, or bank of any river, stream, or lake, which supports fish or wildlife.

CDFW defines a stream (including creeks and rivers) 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 surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW also defines a stream as "a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators."

It is important to note that the Fish and Game Code defines fish and wildlife to include: all wild animals, birds, plants, fish, amphibians, invertebrates, reptiles, and related ecological communities including the habitat upon which they depend for continued viability (FGC Division 5, Chapter 1, section 45 and Division 2, Chapter 1 section 711.2(a) respectively). Furthermore, Division 2, Chapter 5, Article 6, Section 1600 et seq. of the California Fish and Game Code does not limit jurisdiction to areas defined by specific flow events, seasonal changes in water flow, or presence/absence of vegetation types or communities.

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<sup>12</sup> Fields used for the cultivation of rice (including wild rice) that have not been abandoned due to five consecutive years of non-use for the cultivation of rice (including wild rice) that are determined to be a water of the state in accordance with these Procedures shall not have beneficial use designations applied to them through the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, except as otherwise required by federal law for fields that are considered to be waters of the United States. Further, agricultural inputs legally applied to fields used for the cultivation of rice (including wild rice) shall not constitute a discharge of waste to a water of the state. Agricultural inputs that migrate to a surface water or groundwater may be considered a discharge of waste and are subject to waste discharge requirements or waivers of such requirements pursuant to the Water Board's authority to issue or waive waste discharge requirements or take other actions as applicable.



### **III. RESULTS**

#### **A. Corps Jurisdiction**

Corps jurisdiction associated with the Project site and the adjacent offsite Study Area totals 1.19 acres, none of which consists of jurisdictional wetlands. A total of 2,266 linear feet of streambed is present. Corps jurisdiction is limited to the San Antonio Wash and one drainage feature referred to herein as Drainage A.

##### *San Antonio Wash*

Corps jurisdiction associated with the San Antonio Wash (including onsite and offsite areas) totals 0.68 acre, none of which consist of jurisdictional wetlands. A total of 992 linear feet of Corps jurisdictional streambed is present. San Antonio Wash is an ephemeral, concrete-sided and concrete-bottomed flood control channel that is located within the westerly portion of the property and extends south of the property boundary. The channel enters the Project Study Area after crossing beneath the Atchison, Topeka, and Santa Fe rail line along the northwestern boundary and flows in a north to south direction for approximately 992 linear feet before extending under County Road.

The OHWM within San Antonio Wash is 30 feet wide. No vegetation is present within the wash as this feature is a concrete-sided and concrete-bottomed flood control channel.

##### *Drainage A*

Corps jurisdiction associated with Drainage A totals 0.51 acre, none of which consist of jurisdictional wetlands. A total of 1,274 linear feet of Corps jurisdictional streambed is present. Drainage A is an ephemeral, concrete-sided and concrete-bottomed trapezoidal flood control channel that is located offsite, just south of the southeastern boundary of the Project site, and is tributary to San Antonio Wash. Drainage A enters the Project Study Area after crossing beneath the Atchison, Topeka, and Santa Fe rail line along the southeastern boundary of the Project site. Drainage A generally extends in an east to west direction for approximately 1,274 linear feet. Drainage A crosses under East End Avenue and surfaces west of East End Avenue, where it extends south of County Road.

The OHWM within Drainage A ranges in width from 18 to 40 feet. No vegetation is present within the wash as this feature is a concrete-sided and concrete-bottomed flood control channel.

Exhibit 3A depicts the limits of Corps jurisdiction associated with the Project Study Area.

**B. Regional Board Jurisdiction**

San Antonio Wash and Drainage A have been determined to be Corps jurisdictional waters subject to regulation pursuant to Section 401 and 404 of the CWA and does not need to be addressed separately pursuant to Section 13260 of the CWC, the Porter-Cologne Act.

**C. CDFW Jurisdiction**

CDFW jurisdiction associated with the Project site and the adjacent offsite Study Area totals 1.69 acres, none of which consists of vegetated riparian habitat. A total of 2,266 linear feet of streambed is present. CDFW jurisdiction is limited to the San Antonio Wash and one drainage feature referred to herein as Drainage A.

*San Antonio Wash*

CDFW jurisdiction associated with the San Antonio Wash totals 0.68 acre, none of which consists of riparian habitat. A total of 992 linear feet of streambed is present. San Antonio Wash is an ephemeral, concrete-sided and concrete-bottomed flood control channel that is located within the westerly portion of the property and extends south of the property boundary. The channel enters the Project Study Area after crossing beneath the Atchison, Topeka, and Santa Fe rail line along the northwestern boundary and flows in a north to south direction for approximately 992 linear feet before extending under County Road.

The HWM within San Antonio Wash is 30 feet in width. No vegetation is present within the wash as this feature is a concrete-sided and concrete-bottomed flood control channel.

*Drainage A*

CDFW jurisdiction associated with Drainage A totals 1.01 acres, none of which consists of vegetated riparian habitat. A total of 1,274 linear feet of streambed is present. Drainage A is an ephemeral, concrete-sided and concrete-bottomed trapezoidal flood control channel that is located offsite, just south of the southeastern boundary of the Project site, and is tributary to San Antonio Wash. Drainage A enters the Project Study Area after crossing beneath the Atchison, Topeka, and Santa Fe rail line along the southeastern boundary of the Project site. Drainage A generally extends in an east to west direction for approximately 1,274 linear feet. Drainage A crosses under East End Avenue and surfaces west of East End Avenue, where it extends south of County Road.

The HWM within Drainage A ranges in width from 30 to 40 feet. No vegetation is present within the channel as this feature is a concrete-sided and concrete-bottomed flood control channel.

Exhibit 3B depicts the limits of CDFW jurisdiction within the Project Study Area.

#### IV. DISCUSSION


##### A. Impact Analysis

An analysis of impacts will be performed, based upon this delineation and the current Project design (or design alternative) upon the client's request. This analysis will be provided as a separate memorandum and accompanying map.

If you have any questions about this letter report, please contact me at (949) 340-3851 at the office or (714) 323-6221 on my cellular telephone.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

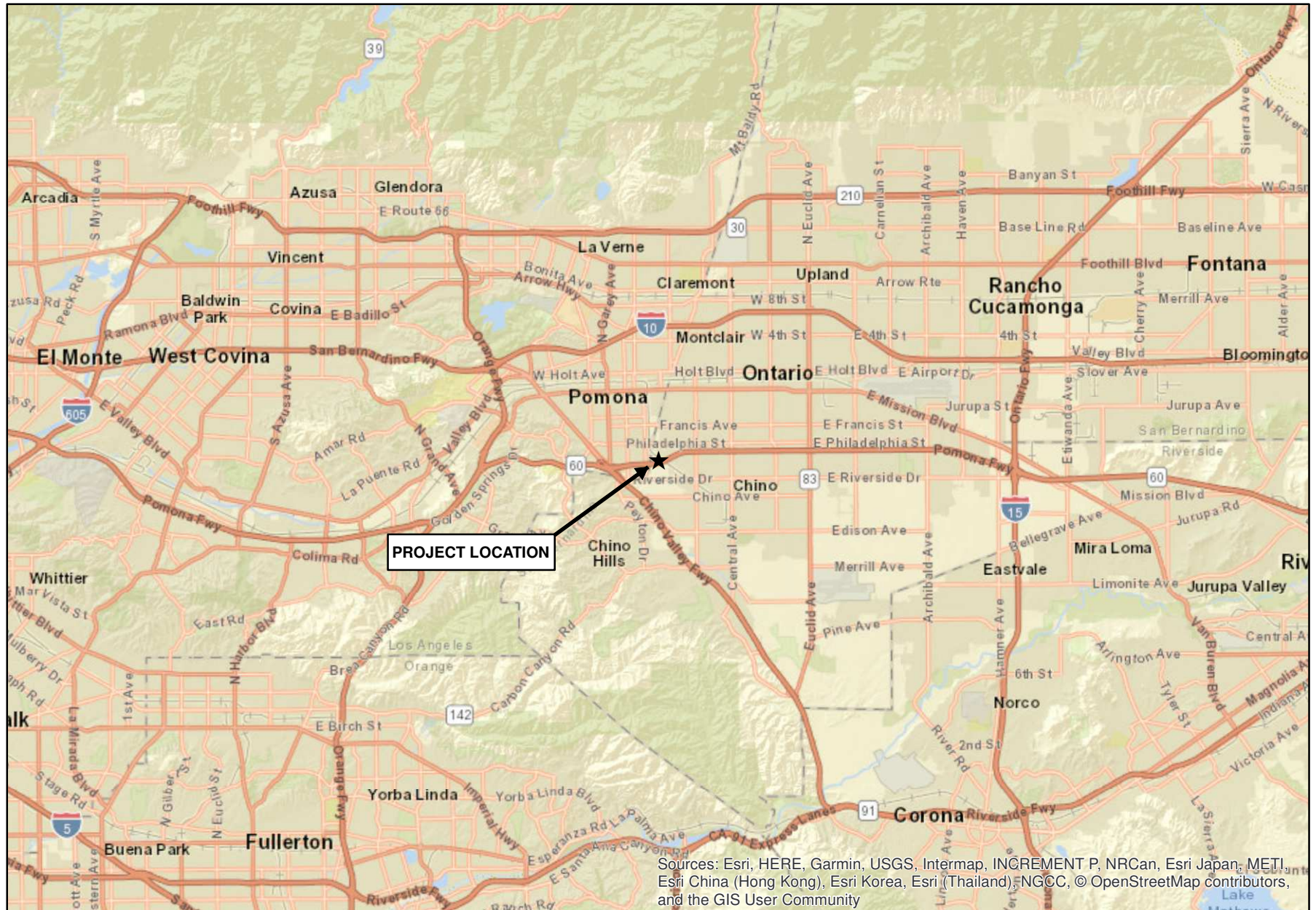
A handwritten signature in black ink, appearing to read "Martin A. Rasnick", is centered within a light gray rectangular box.

Martin A. Rasnick  
Principal/Senior Regulatory Specialist

Source: ESRI World Street Map



0  
2  
4  
8  
Miles



Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, © OpenStreetMap contributors, and the GIS User Community

## EAST END AVENUE PROJECT

Regional Map

GLENN LUKOS ASSOCIATES



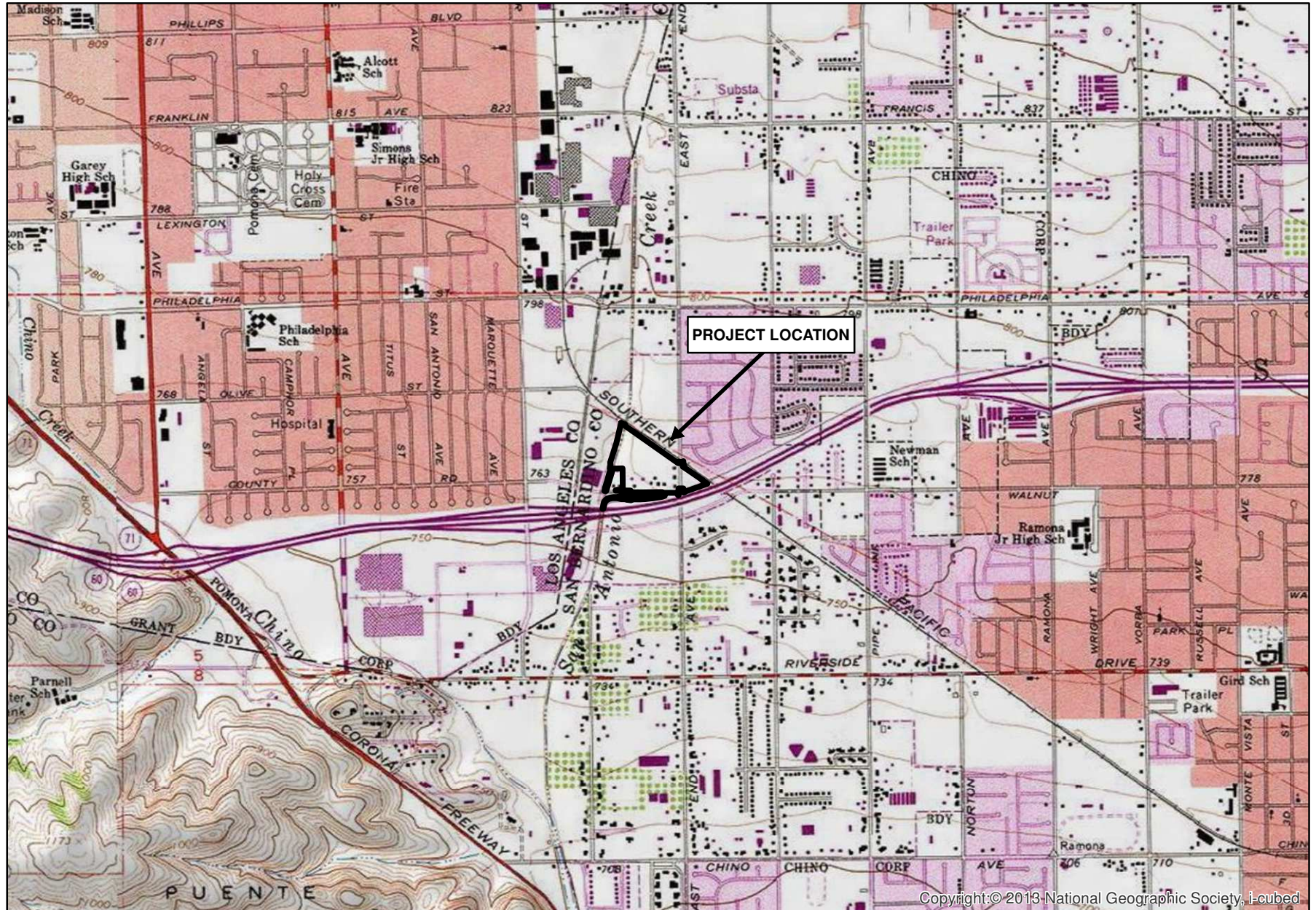
Exhibit 1



Adapted from USGS Ontario, CA quadrangle



0  
1,000  
2,000  
4,000  
Feet



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## EAST END AVENUE PROJECT

Vicinity Map

GLENN LUKOS ASSOCIATES

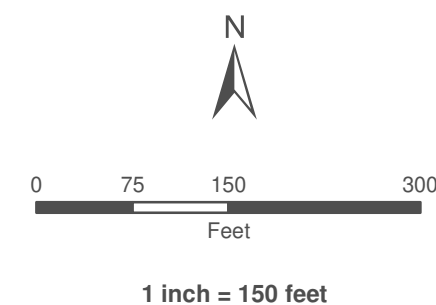
Exhibit 2







- Property Boundary
- Study Area
- Corps/RWQCB Non-Wetland Waters
- Width of Jurisdiction in Feet
- Railroad



Coordinate System: State Plane 5 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD83  
Map Prepared by: B. Gale, GLA  
Date Prepared: February 18, 2020

## EAST END AVENUE PROJECT

Corps/RWQCB Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

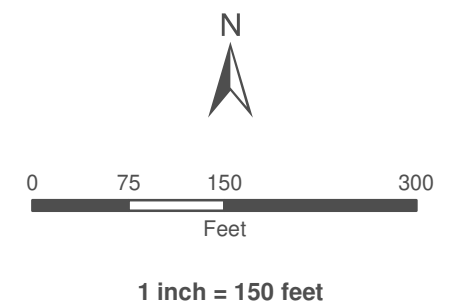
Exhibit 3A







- Property Boundary
- Study Area
- CDFW Non-Riparian Streambed
- Width of Jurisdiction in Feet
- Railroad



Coordinate System: State Plane 5 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD83  
Map Prepared by: B. Gale, GLA  
Date Prepared: February 18, 2020

## EAST END AVENUE PROJECT

CDFW Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

Exhibit 3B







Photograph 1: September 2019. View of San Antonio Wash looking downstream. Photo taken from County Road looking south.



GLENN LUKOS ASSOCIATES

Exhibit 4



Photograph 2: September 2019. View of San Antonio Wash looking upstream. Photo taken from County Road looking north.

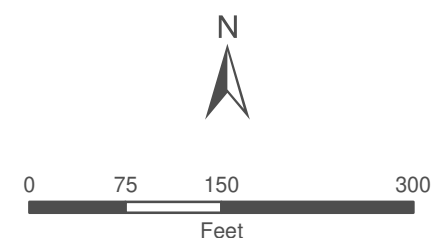
**EAST END AVENUE PROJECT**

Site Photographs





- Property Boundary
- Study Area
- Gr - Grangeville Fine Sandy Loam
- Hr - Hilmar Loamy Fine Sand
- Railroad



1 inch = 150 feet

Coordinate System: State Plane 5 NAD 83  
Projection: Lambert Conformal Conic  
Datum: NAD83  
Map Prepared by: B. Gale, GLA  
Date Prepared: February 18, 2020

## EAST END AVENUE PROJECT

Soils Map

GLENN LUKOS ASSOCIATES

Exhibit 6



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