

# Biological Technical Report

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## Various Park Improvements at Stephen Sorensen Park Project

Community of Lake Los Angeles  
Los Angeles County, California

### Prepared For:

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## **LIST OF ACRONYMS AND ABBREVIATIONS**

ADA	Americans with Disabilities Act
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CNPS	California Native Plant Society
CWA	Clean Water Act
ESA	Endangered Species Act
FACW	Facultative wetland
GPS	Global Positioning System
HCP	Habitat conservation plan
MBTA	Migratory Bird Treaty Act
NPPA	Native Plant Protection Act
NWI	National Wetland Inventory
OHWM	Ordinary High Water Mark
SAA	Streambed Alteration Agreement
SSC	Species of Special Concern
TNW	Traditional Navigable Waters
USFWS	United States Fish and Wildlife Service



## **1.0 INTRODUCTION**

ECORP Consulting, Inc. conducted a biological reconnaissance survey for the County of Los Angeles Department of Parks and Recreation's (County) proposed Various Park Improvements at Stephen Sorensen Park Project (Project). The survey of the Project site was conducted to identify biological resources that could be affected by the proposed Project, pursuant to the terms of the California Environmental Quality Act (CEQA) and for the purposes of identifying any biological constraints that would affect the site plan for the Project. The Project will be subject to county, state, and federal regulations regarding compliance with the federal Endangered Species Act (ESA), California ESA, Migratory Bird Treaty Act (MBTA), and California Fish and Game Code.

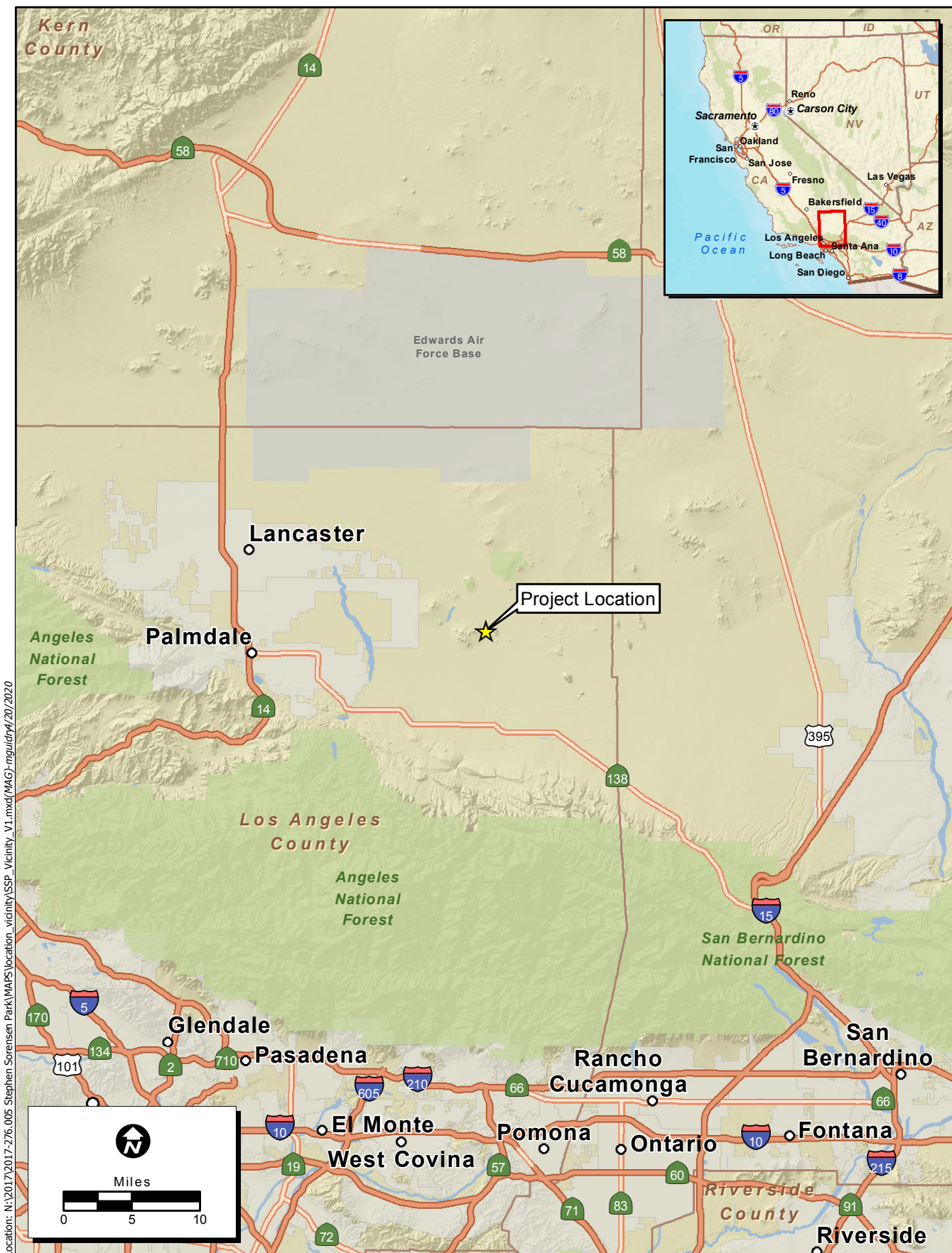
### **1.1 Location and Setting**

Stephen Sorensen Park (Park) is approximately 100 acres located in the unincorporated community of Lake Los Angeles, approximately 15 miles east of the City of Palmdale north of State Route 138 (Figure 1). The Park is encompassed by a large prehistoric site that has been investigated since the 1920s (CA-LAN-192). In order to protect the archaeological site, an earthen cap of unknown depth was placed on the site prior to development of Phase I of the Park in 1996.

The Project site is bounded by East Avenue P to the south and surrounded by open space to the north, west, and east. The Project site includes three separate work areas, two of which are located within the southeastern portion of the existing park (southeastern section), and the third located immediately north of the existing community center building (northwestern section). Surrounding land uses consist mainly of residential developments and undeveloped land. The Project site, as depicted on the United States Geological Survey (USGS) 7.5-minute Lovejoy Buttes topographic quadrangle, lies within Section 16 of Township 6 North, and Range 9 West (Figure 2). The elevation of the Project site ranges from approximately 2,690 to 2,720 feet above mean sea level.

### **1.2 Project Description**

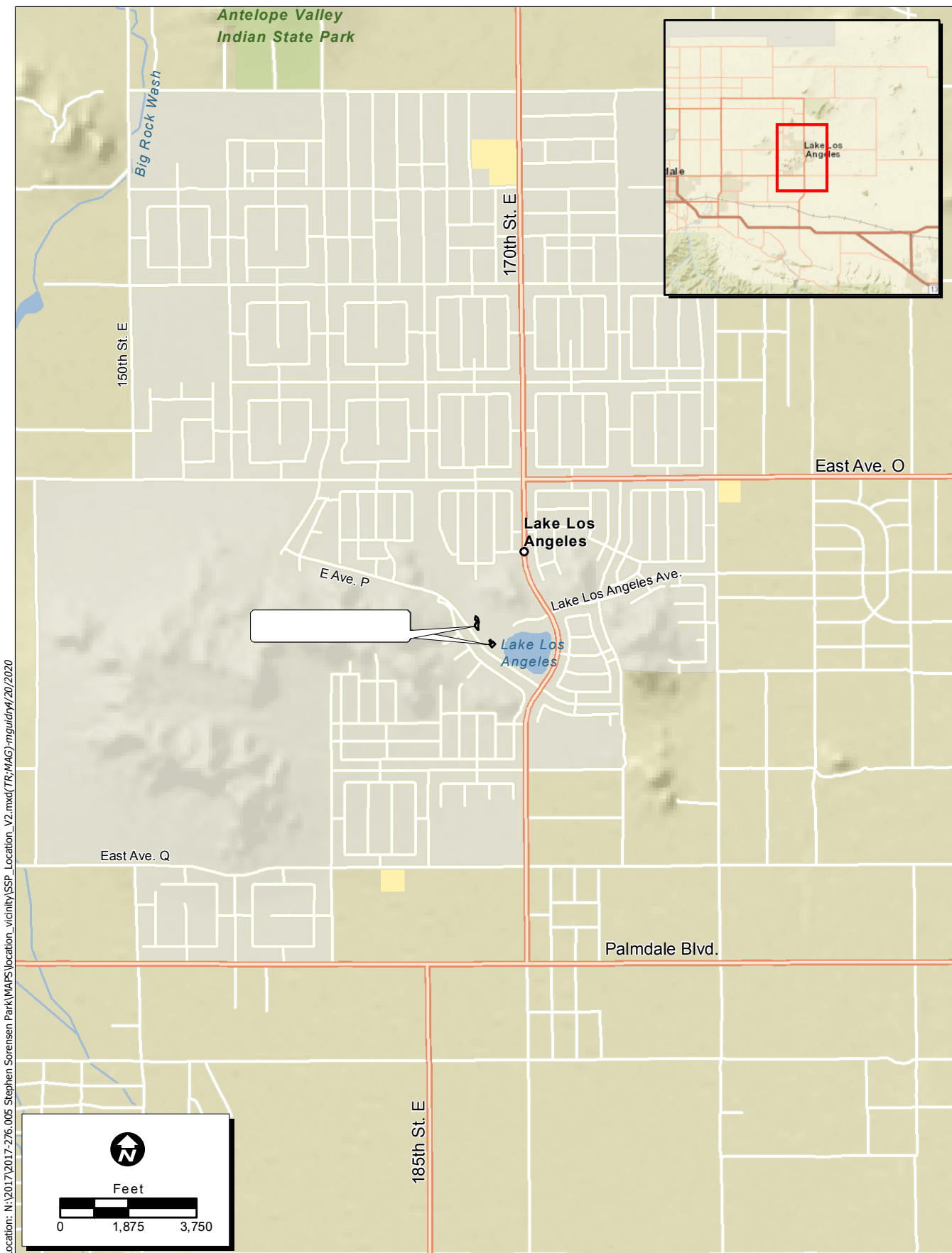
The County proposes to develop new park amenities at Stephen Sorensen Park (Park), including a skate park, gazebo/stage structure, fitness zone with shade structure, shade structure for existing playground, and associated Americans with Disabilities Act (ADA) improvements.



Location: N:\2017\2017-276.005 Stephen Sorensen Park\MAPS\location\_vicinity\SSP\_vicinity\_V1.mxd(MAG)mguidp4/20/2020

Map Date: 4/20/2020  
 Service Layer Credits: Sources: Esri, USGS, NOAA

**Figure 1. Project Vicinity**  
 2017-276.005 Stephen Sorensen Park



**Figure 2. Project Location**

2017-276.005 Stephen Sorensen Park

## **2.0 SPECIAL-STATUS SPECIES REGULATIONS**

The biological reconnaissance survey was conducted to identify potential issues and ensure compliance with state and federal regulations regarding listed, protected, and sensitive species. The regulations are detailed below.

### **2.1 Federal Regulations**

#### **2.1.1 *The Federal Endangered Species Act***

The ESA protects plants and animals that are listed as endangered or threatened by the United States Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service. Section 9 of the ESA prohibits the taking of endangered wildlife, where taking is defined as "*harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct*" (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S. Code 1538). Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of the ESA provides for issuance of incidental take permits where no other federal actions are necessary provided a habitat conservation plan (HCP) is developed.

#### **2.1.2 *Migratory Bird Treaty Act***

The MBTA implements international treaties between the United States and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities including hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR Part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code.

#### **2.1.3 *Federal Clean Water Act***

The federal Clean Water Act's (CWA) purpose is to "*restore and maintain the chemical, physical, and biological integrity of the nation's waters.*" Section 404 of the CWA prohibits the discharge of dredged or fill material into Waters of the United States (U.S.) without a permit from the U.S. Army Corps of Engineers (USACE). The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "*that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do*

support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b). The U.S. Environmental Protection Agency acts as a cooperating agency to set policy, guidance and criteria for use in evaluation permit applications and also reviews USACE permit applications.

The USACE regulates "fill" or dredging of fill material within its jurisdictional features. "Fill material" means any material used for the primary purpose of replacing an aquatic area with dry land or changing the bottom elevation of a water body. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the State Water Quality Control Board, administered by each of nine California Regional Water Quality Control Boards.

## **2.2 State and Local Regulations**

### **2.2.1 California Endangered Species Act**

The California ESA generally parallels the main provisions of the ESA but, unlike its federal counterpart, the California ESA applies the take prohibitions to species proposed for listing (called "candidates" by the state). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as "*hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.*" The California ESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

### **2.2.2 Fully Protected Species**

The State of California first began to designate species as "fully protected" prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under federal and/or California ESAs. The regulations that implement the Fully Protected Species Statute (California Fish and Game Code § 4700) provide that fully protected species may not be taken or possessed at any time. Furthermore, CDFW prohibits any state agency from issuing incidental take permits for fully protected species, except for necessary scientific research.

### **2.2.3 Native Plant Protection Act**

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code §§ 1900-1913) was created with the intent to "*preserve, protect and enhance rare and endangered plants in this State.*" The NPPA is administered by CDFW. The Fish and Wildlife Commission has the authority to designate native plants as "endangered" or "rare" and to protect endangered and rare plants from take. The California ESA

of 1984 (California Fish and Game Code § 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

## **2.2.4 California Fish and Game Code**

### **Streambed Alteration Agreement**

Section 1602 of the California Fish and Game Code requires that a Notification of Lake or Streambed Alteration be submitted to CDFW for *“any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake.”* The CDFW reviews the proposed actions and, if necessary, submits to the Applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the Applicant is the Streambed Alteration Agreement (SAA). Often, projects that require an SAA also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the SAA may overlap.

### **Migratory Birds**

The CDFW enforces the protection of nongame native birds in §§ 3503, 3503.5, and 3800 of the California Fish and Game Code. Section 3513 of the California Fish and Game Code prohibits the possession or take of birds listed under the MBTA. These sections mandate the protection of California nongame native birds' nests and also make it unlawful to take these birds. All raptor species are protected from “take” pursuant to California Fish and Game Code § 3503.5 and are also protected at the federal level by the MBTA of 1918.

## **2.2.5 County of Los Angeles General Plan Significant Ecological Areas**

The County of Los Angeles General Plan 2035 (County of Los Angeles 2015) designated Significant Ecological Areas (SEAs) throughout the county in order to protect land that contains irreplaceable biological resources. SEAs have been designated by determining land that is generally undisturbed or mildly disturbed, supports habitat for threatened species, contains corridors to promote species movement, and is large enough to support populations of these species. The boundaries of these SEAs were revised in the final General Plan adoption in October 2015.

## **2.2.6 Los Angeles County Oak Tree Ordinance**

The County of Los Angeles Oak Tree Ordinance serves to protect native oak tree species from removal, and to preserve and enhance the general health of native oak trees within the County. Pursuant to the Los Angeles County Oak Tree Ordinance, a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any tree of the oak tree genus (*Quercus*), which is eight inches or more in diameter at breast height (dbh) without first obtaining a permit (LACDPR 2011). Dbh is defined as diameter of the tree when measured 4.5 ft above mean natural grade, or in the case of oaks with multiple trunks combined diameter of 12 inches or more of the two largest trunks.

## **2.2.7 CEQA Significance Criteria**

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- 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 CDFW or USFWS;
- 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 CDFW or USFWS;
- have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- 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;
- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state HCP.

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of an important resource on a population-wide or region-wide basis

## **3.0 METHODS**

### **3.1 Literature Review**

Prior to conducting the biological reconnaissance survey, ECORP biologists performed a literature review using the CDFW's California Natural Diversity Database (CNDDDB; CDFW 2019a) and the California Native Plant Society's (CNPS') Electronic Inventory (CNPSEI, 2019) to determine the special-status plant and wildlife species that have been documented near the Project site. The CNDDDB and CNPSEI database searches were conducted on October 2, 2019. ECORP searched CNDDDB and CNPSEI records within the



Project site boundaries as depicted on USGS 7.5-minute Lovejoy Buttes topographic quadrangle, plus the surrounding eight topographic quadrangles, including Alpine Butte, Hi Vista, Adobe Mountain, El Mirage, Mescal Creek, Valyermo, Juniper Hills, Littlerock. The CNDDDB and CNPSEI contain records of reported occurrences of federally or state-listed endangered, threatened, proposed endangered or threatened species, California Species of Special Concern (SSC), and/or other special-status species or habitat that may occur within or near the Project. Additional information was gathered from the following sources and includes, but is not limited to:

- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2019b);
- Special Animals List (CDFW 2019c);
- The Jepson Manual (Baldwin et al. 2012);
- The Manual of California Vegetation, 2nd Edition (Sawyer et al. 2009); and
- various online websites (e.g., Calflora 2019).

Using this information and observations in the field, a list of special-status plant and animal species that have the potential to occur on or near the Project site was generated. For the purposes of this assessment, special-status species are defined as plants or animals that:

- have been designated as either rare, threatened, or endangered by CDFW, CNPS, or the USFWS, and/or are protected under either the federal or California ESAs;
- are candidate species being considered or proposed for listing under these same acts;
- are fully protected by the California Fish and Game Code, §§ 3511, 4700, 5050, or 5515; and/or
- are of expressed concern to resource and regulatory agencies or local jurisdictions.

Special-status species reported for the region in the literature review or for which suitable habitat occurs on the site were assessed for their potential to occur within the Project site based on the following guidelines:

- **Present:** The species was observed on site during a site visit or focused survey.
- **High:** Habitat (including soils and elevation factors) for the species occurs within the Project site and a known occurrence has recently been recorded (within the last 20 years) within five miles of the area.
- **Moderate:** Habitat (including soils and elevation factors) for the species occurs within the Project site and a documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or a recently documented observation occurs within five miles of the area and marginal or limited amounts of habitat occurs in the Project site.
- **Low:** Limited or marginal habitat for the species occurs within the Project site and a recently documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the



Project site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.

- **Presumed Absent:** Species was not observed during a site visit or focused surveys conducted in accordance with protocol guidelines at an appropriate time for identification; habitat (including soils and elevation factors) does not exist on site; or the known geographic range of the species does not include the Project site.

Note that location information on some special-status species may be of questionable accuracy or unavailable. Therefore, for survey purposes, the environmental factors associated with a species' occurrence requirements may be considered sufficient reason to give a species a positive potential for occurrence. In addition, just because a record of a species does not exist in the databases does not mean it does not occur. In many cases, records may not be present in the databases because an area has not been surveyed for that species.

In addition, the National Wetland Inventory (NWI) was queried for previously mapped features on-site (NWI 2020). The Web Soil Survey for Los Angeles County, California (Natural Resources Conservation Service [NRCS] 2020) was used to aid in identifying potential hydric soils onsite prior to the field survey.

## 3.2 Field Survey

### 3.2.1 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted by walking the entire Project site to determine the vegetation communities and wildlife habitats on the Project site. The biologists documented the plant and animal species present on the Project site, and the location and condition of the Project site were assessed for the potential to provide habitat for special-status plant and wildlife species. Data were recorded on a Global Positioning System (GPS) unit, field notebooks, and/or maps. Photographs were also taken during the survey to provide visual representation of the conditions within the Project site. The Project site was also examined to assess its potential to facilitate wildlife movement or function as a movement corridor for wildlife moving throughout the region. In addition, the biologist noted the vegetation communities present on the Project site.

Plant and wildlife species, including any special-status species that were observed during the survey, were recorded. Plant nomenclature follows that of *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012). Wildlife nomenclature follows Society for the Study of Amphibians and Reptiles (SSAR; SSAR 2017), *Check-list of North American Birds* (Chesser et al. 2019), and the *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014).

In instances where a special-status species was observed, the date, species, location and habitat, and GPS coordinates were recorded. The locations of special-status species observations were recorded using a handheld GPS in NAD 83, Universal Transverse Mercator coordinates, Zone 11S.

### 3.2.2 Aquatic Resources Delineation

An aquatic resources delineation of potential Waters of the U.S./State was conducted in accordance with the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987), the *Regional*

*Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (Arid West Region Supplement) (USACE 2008a) and *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b). The boundaries of potential Waters of the U.S. were delineated through aerial photograph interpretation and standard field methodologies. All wetland data were recorded on Arid West Region – Wetland Determination Data Forms (Appendix D).

All proposed park improvement areas were surveyed to determine the location and extent of potential Waters of the U.S./State, including wetlands within the Project site. Field delineation data were collected on *Wetland Determination Data Form-Arid West Region*. The aquatic resources within the Project site were recorded in the field using a post-processing capable GPS unit with sub-meter accuracy (Trimble™ GeoXT). Paired locations were sampled to evaluate whether or not the vegetation, hydrology and soils data supported a wetland/aquatic resource determination. At each paired location, one point was located such that it was within the estimated aquatic resource area and the other point was situated outside the limits of the estimated aquatic resource area. Additional non-paired locations were sampled to document marginal areas that were determined not to be aquatic resources because they lacked hydrophytic vegetation, hydric soils and/or wetland hydrology.

Due to the potential for the presence of Native American resources, no soil pits were dug. Normally, soil pits are a part of the sampling process to determine if hydric soils are present that would qualify under the USACE definitions for wetland soils.

### **Routine Determinations for Wetlands**

The following three criteria must be met to be determined a wetland:

- A majority of dominant vegetation species are wetland associated species
- Hydrologic conditions exist that result in periods of flooding, ponding or saturation during the growing season
- Hydric soils are present

### *Vegetation*

Hydrophytic vegetation is defined as the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanent or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present (Environmental Laboratory 1987). The definition of wetlands includes the phrase "a prevalence of vegetation typically adapted for life in saturated soil conditions." Prevalent vegetation is characterized by the dominant plant species comprising the plant community (Environmental Laboratory 1987). The dominance test is the basic hydrophytic vegetation indicator and was applied at each data point location. The "50/20 rule" was used to select the dominant plant species from each stratum of the community. The rule states that for each stratum in the plant community, dominant species are the most abundant plant species (when ranked in descending order of coverage and cumulatively totaled) that immediately exceed 50 percent of the total coverage for the stratum, plus any additional species that individually comprise 20 percent or

more of the total cover in the stratum (HQUSACE 1992; USACE 2008b). The Jepson Manual, Second Edition (Baldwin, et al. 2012) was used for plant nomenclature and identification.

Dominant plant species observed at each data point were then classified according to their indicator status (probability of occurrence in wetlands) (Table 1), North American Digital Flora: National Wetland Plant List (Lichvar et al. 2016). If the majority (greater than 50 percent) of the dominant vegetation on a site is classified as obligate (OBL), facultative wetland (FACW) or facultative (FAC), then the site was considered to be dominated by hydrophytic vegetation.

<b>Plant Species Classification</b>	<b>Abbreviation</b>	<b>Probability of Occurring in Wetland</b>
Obligate	OBL	Almost always occur in wetlands
Facultative Wetland	FACW	Usually occur in wetlands, but may occur in non-wetlands
Facultative	FAC	Occur in wetlands and non-wetlands
Facultative Upland	FACU	Usually occur in non-wetlands, but may occur in wetlands
Upland	UPL	Almost never occur in wetlands
Plants That Are Not Listed (assumed upland species)	N/L	Does not occur in wetlands in any region.

In instances where indicators of hydric soil and wetland hydrology were present, but the plant community failed the dominance test, the vegetation was re-evaluated using the prevalence index. The prevalence index is a weighted-average wetland indicator status of all plant species in the sampling plot, where each indicator status category is given a numeric code (OBL=1, FACW=2, FAC=3, FACU=4 and UPL=5) and weighting is by abundance (percent cover). If the plant community failed the prevalence index, the presence/absence of plant morphological adaptations to prolonged inundation or saturation in the root zone was evaluated.

### *Soils*

A hydric soil is defined as a soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part (NRCS 2003). Indicators that a hydric soil is present include, but are not limited to, histosols, histic epipedon, hydrogen sulfide, depleted below dark surface, sandy redox, loamy gleyed matrix, depleted matrix, redox dark surface, redox depressions and vernal pools.

Since no soil pits were allowed to be dug, the soil surface was examined for hydric soil indicators. Hydric soils are formed predominantly by the accumulation or loss of iron, manganese, sulfur, or carbon compounds in a saturated and anaerobic environment. These processes and the features in the soil that develop can be identified by looking at the color and texture of the soils.

### *Hydrology*

Wetlands, by definition, are seasonally or perennially inundated or saturated at or near (within 12 inches of) the soil surface. Primary indicators of wetland hydrology include, but are not limited to visual observation of saturated soils, visual observation of inundation, surface soil cracks, inundation visible on

aerial imagery, water-stained leaves, oxidized rhizospheres along living roots, aquatic invertebrates, water marks (secondary indicator in riverine environments), drift lines (secondary indicator in riverine environments) and sediment deposits (secondary indicator in riverine environments). The occurrence of one primary indicator is sufficient to conclude that wetland hydrology is present. If no primary indicators are observed, two or more secondary indicators are required to conclude wetland hydrology is present. Secondary indicators include, but are not limited to drainage patterns, crayfish burrows, FAC-neutral test and shallow aquitard.

### **Ordinary High-Water Mark/Non-Wetland Waters**

The discussion in this section briefly summarizes *A Field Guide to the Identification of the Ordinary High-Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008b). OHWM indicators commonly found in the Arid West include a clear natural scour line impressed on the bank, recent bank erosion, destruction of native terrestrial vegetation and the present of litter and debris. Resources needed to delineate OHWM include aerial photography and other imagery, topographic maps and other maps (e.g., geological, soil, vegetation), rainfall data, stream gage data and existing delineations (if present). Field identification of the OHWM includes noting general impression of the vegetation species and distribution, geomorphic features present, surrounding upland land use and hydrologic alterations and in-stream and floodplain structures. In the field, the process of delineating the OHWM includes the identification of a low-flow channel (if present), a transition to an active floodplain and an active floodplain through the presence of geomorphic features (e.g., presence of an active floodplain, benches, break in bank slope, staining of rocks, litter or drift) and vegetation indicators (e.g., presence of sparse/low vegetation, annual herbs, hydromesic ruderals, pioneer tree seedlings and saplings, xeroriparian species).

## **4.0 RESULTS**

Summarized below are the results of the literature review and field surveys, including site characteristics, vegetation communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors).

### **4.1 Literature Review**

The literature review and database searches resulted in records for 23 special-status plant species and 21 special-status wildlife species that could occur on and/or near the Project site.

#### **4.1.1 Special-Status Plants and Wildlife**

The literature review and database searched identified 23 special-status plant species and 21 special-status wildlife species that could occur near the Project site. A list was generated from the results of the literature review and the Project site was evaluated for suitable habitat that could support any of the special-status plant or wildlife species on the list.

#### 4.1.2 U.S. Fish and Wildlife Service Designated Critical Habitat

The Project site is not located within any USFWS-designated critical habitat. The closest designated critical habitat is for desert tortoise (*Gopherus agassizii*) and is located approximately 9.5 miles northeast of the Project site.

#### 4.1.3 Aquatic Resources Delineation Literature Review

Previously mapped aquatic features within the Project site include two fluvial natural stream features that flow northwest. Both features are outside of the immediate Project site and the buffer areas that were surveyed. Based on a cursory examination of the general area, the features mapped appeared to be present on the ground.

### 4.2 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted on November 6, 2019, by ECORP biologists Lauren Simpson and Taylor Dee. Summarized below are the results of the biological reconnaissance survey, including site characteristics, plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors). Weather conditions during the survey are summarized below in Table 2.

Date	Time		Temperature (°F)		Cloud Cover (%)		Wind Speed (mph)	
	Start	end	Min	Max	min	max	min	max
11/06/19	0720	1049	56	78	0	0	0	1

#### 4.2.1 Property Characteristics

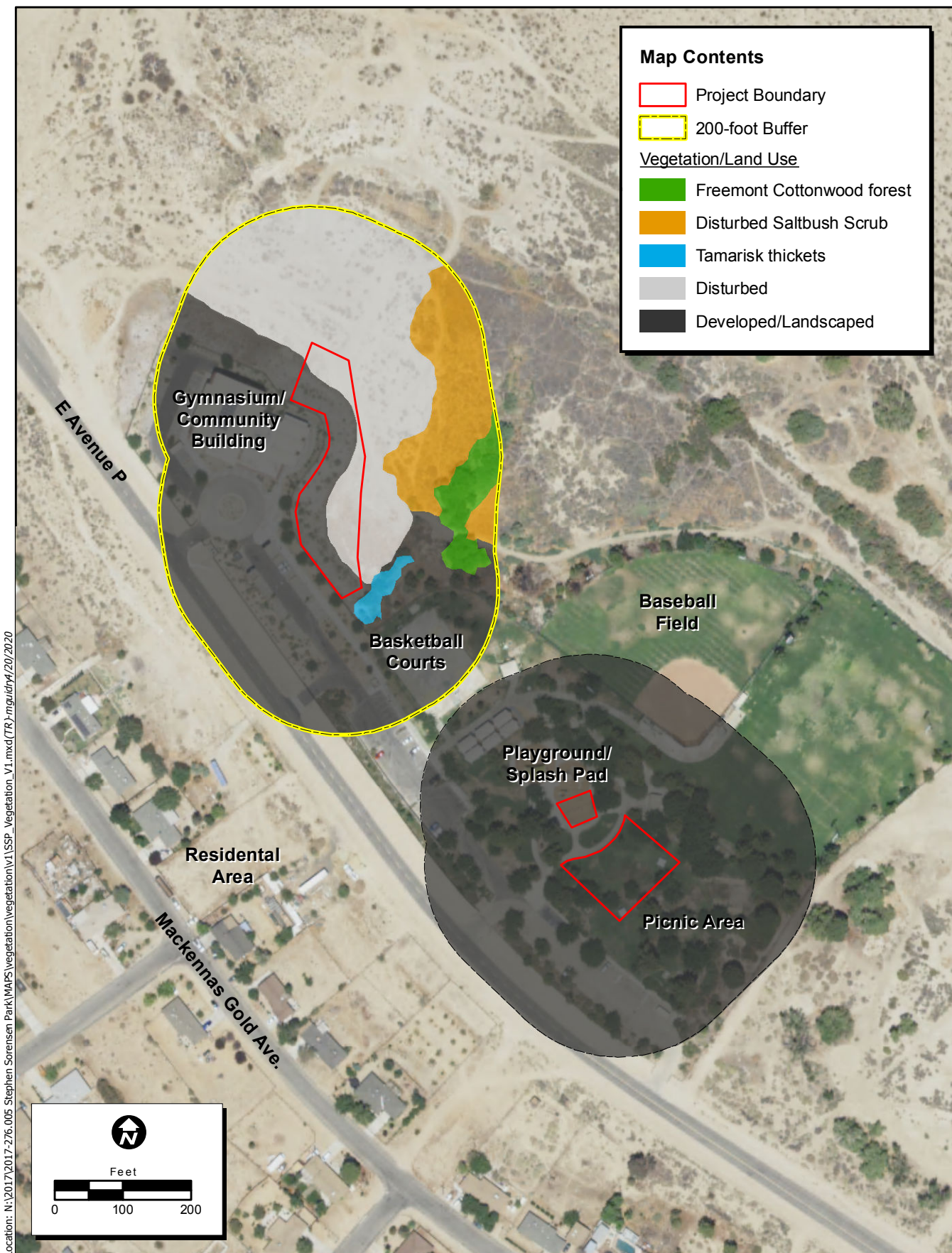
The Project site is separated into two distinct areas. The southeastern section of the Project site is an entirely developed park area with existing playground equipment and landscaping with a lawn and ornamental trees and shrubs. The northwestern section of the Project site consists of a previously disturbed and currently landscaped slope that runs along the Park and community center building edge and an area of disturbed vegetation. The Project site did not contain any major existing structures except for a playground area encompassing a swing set in the southeastern area; however, Park facilities and buildings were located in the vicinity of the site. The Project site is bounded by an undeveloped desert wash to the north, existing Park property to the east, undeveloped land and residential housing to the south, and East Avenue P to the west. Soils on the Project site consisted of Cajon loamy fine sand, 9 to 15 percent slopes, hummocky and Rosamond fine sandy loam. Representative site photographs are presented in Appendix A.

## 4.2.2 Vegetation Communities

The Project site itself was classified entirely as disturbed and developed/landscaped land cover types, no native or non-native vegetation communities were present within the boundaries of the Project site. These land cover types are discussed below. Vegetation communities present adjacent to and surrounding the Project site include disturbed saltbush (*Atriplex canescens*) scrub, Fremont cottonwood (*Populus fremontii*) forest, and Tamarisk (*Tamarix* spp.) thickets. These communities were not present within the Project site boundaries. Figure 3 shows the distribution of vegetation communities and land cover types within and adjacent to the Project site.

### Disturbed

Disturbed is not a vegetation classification, but rather a land cover type. While native plant species were intermixed in the disturbed areas, the dominant plant species observed in the disturbed areas of the Project site were nonnative species. The disturbed land cover type was only present in the northwestern section of the Project site, at the base of the landscaped slope. The dominant plant species in the disturbed areas included tamarisk (*Tamarix* sp.), Russian thistle (*Salsola tragus*), and annual bursage (*Ambrosia acanthicarpa*).



Map Date: 4/20/2020  
 Photo Sources: NAIP (2018)

**Figure 3. Vegetation Communities and Land Use**

## **Developed/Landscaped**

Developed/landscaped is not a vegetation classification, but rather a land cover type. The developed/landscaped areas of the Project site included the landscaped playground area in the southeastern section of the Project site and the slope along the Park edge in the northwestern section of the project site. Developed/landscaped area in the southeastern section contained landscaped trees, shrubs, and lawns as well as playground equipment and paving. The Developed/landscaped area in the northwestern section contained what appeared to be planted tamarisk, California buckwheat (*Eriogonum fasciculatum*), and rubber rabbitbrush (*Ericameria nauseosa*) shrubs with wood chippings covering the ground for stabilization.

### **4.2.3 Plants**

Plant species observed on the Project site were typical of the disturbed and developed land present on the Project site and the surrounding vegetation communities for the time of the year in which the survey was conducted. Dominant species within the Project site boundaries in the southeastern section included ornamental trees and shrubs such as sweetgum (*Liquidambar styraciflua*), pine trees (*Pinus* sp.), and ornamental rosemary shrubs (*Rosmarinus* sp.). Dominant species within the Project site boundaries in the northwestern section included native species such as rubber rabbitbrush, annual bursage, and California buckwheat, and nonnative species such as tamarisk, Russian thistle, red-stemmed filaree (*Erodium cicutarium*), and brome grasses (*Bromus* sp.) A full list of plant species observed on or immediately adjacent to the Project site is included in Appendix B.

### **4.2.4 Wildlife**

Wildlife species observed and detected on the Project site were characteristic of a landscaped park setting and surrounding desert habitats. Two mammal species were detected on the Project site, desert cottontail (*Sylvilagus auduboni*) and feral cat (*Felis catus*). Twenty-one bird species were also detected on the Project site, including white-crowned sparrow (*Zonotrichia leucophrys*), Say's phoebe, (*Sayornis saya*), mourning dove (*Zenaida macroura*), common raven (*Corvus corax*), Anna's hummingbird (*Calypte anna*), and killdeer (*Charadrius vociferous*). A single mid-sized burrow was identified in the northwestern section of the Project site, but it could not be attributed to any particular species. Due to the high level of human activity in the area and the disturbed nature of the Project site, the property represents relatively low-quality habitat for most wildlife species. A complete list of wildlife species observed on or immediately adjacent to the Project site is included in Appendix C.

### **4.2.5 Potential for Special-Status Plant and Wildlife Species to Occur on the Project Site**

The literature review and database searches identified 23 special-status plant species and 21 special-status wildlife species that occur on or near the Project site. However, due to the level of human disturbance at the Project site and the current lack of suitable habitat for the special-status plant and wildlife species, many of the species are presumed absent from the Project site. Additionally, with the San Gabriel Mountains to the south, many of the species that appeared in the literature review were species associated with high elevation habitats not present at the Project site and were thus presumed absent.



## Special-Status Plants

Although 23 special-status plant species appeared in the literature search, due to the Project site's level of disturbance and development, and the current lack of suitable habitat for the special-status plant species identified in the literature review and database searches, all of the 23 species are presumed to be absent from the Project site. Descriptions of the CNPS designations are found in Table 3 and a list of the 23 special-status plant species identified in the literature review is presented below.

<b>List Designation</b>	<b>Meaning</b>
1A	Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B	Plants Rare, Threatened, or Endangered in California and Elsewhere
2A	Plants Presumed Extirpated in California, But Common Elsewhere
2B	Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3	Plants about which we need more information; a review list
4	Plants of limited distribution; a watch list
List 1B, 2, and 4 extension meanings:	
.1	Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
.2	Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

Note: According to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California FGC (CDFW 1984). This interpretation is inconsistent with other definitions.

## Plant Species Presumed Absent

The following species are presumed absent from the Project site due to the lack of suitable habitat, soil type, and/or elevation range at the project site:

- chaparral sand-verbena (*Abronia villosa* var. *aurita*), CNPS 1B.2
- Parish's oxytheca (*Acanthoscyphus parishii* var. *parishii*), CNPS 4.2
- San Gabriel manzanita (*Arctostaphylos glandulosa* ssp. *gabrielensis*), CNPS 1B.2
- San Antonio milk vetch (*Astragalus lentiginosus* var. *antoniuss*), CNPS 1B.3
- Big Bear Valley woollypod (*Astragalus leucolobus*), CNPS 1B.2
- Palmer's mariposa lily (*Calochortus palmeri* var. *palmeri*), CNPS 1B.2
- alkali mariposa lily (*Calochortus striatus*), CNPS 1B.2
- Peirson's morning-glory (*Calystegia peirsonii*), CNPS 4.2
- white pygmy-poppy (*Canbya candida*), CNPS 4.2
- Kern Canyon clarkia (*Clarkia xantiana* ssp. *parviflora*), CNPS 4.2

- Clokey's cryptantha (*Cryptantha clokeyi*), CNPS 1B.2
- Johnston's buckwheat (*Eriogonum microthecum* var. *johnstonii*), CNPS 1B.3
- Barstow woolly sunflower (*Eriophyllum mohavense*), CNPS 1B.2
- lemon lily (*Lilium parryi*), CNPS 1B.2
- San Gabriel linanthus (*Linanthus concinnus*), CNPS 1B.2
- Peirson's lupine (*Lupinus peirsonii*), CNPS 1B.3
- Robbins' nemacladus (*Nemacladus secundiflorus* var. *robbinsii*), CNPS 1B.2
- short-joint beavertail (*Opuntia basilaris* var. *brachyclada*), CNPS 1B.2
- woolly mountain-parsley (*Oreonana vestita*), CNPS 1B.3
- Rock Creek broomrape (*Orobanche valida* ssp. *valida*), CNPS 1B.2
- Parish's popcornflower (*Plagiobothrys parishii*), CNPS 1B.1
- Greata's aster (*Symphotrichum greatae*), CNPS 1B.3
- grey-leaved violet (*Viola pinetorum* ssp. *grisea*), CNPS 1B.2

### **Special-Status Wildlife**

Of the 21 special-status wildlife species identified in the literature review, two were found to have a low potential to occur and the remaining 19 species are presumed absent from the Project site. None of the sensitive wildlife species with a potential to occur in the area were observed during the reconnaissance survey.

### **Wildlife Species with a Low Potential to Occur**

The following species have a low potential to occur on the Project site because limited or marginal habitat for the species occurs within the Project site and a recently documented observation occurs within the database search, but not within five miles of the area; a historic documented observation (more than 20 years old) was recorded within five miles of the Project site; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.

- burrowing owl (*Athene cunicularia*), CDFW SSC
- loggerhead shrike (*Lanius ludovicianus*), CDFW SSC

### **Wildlife Species Presumed Absent**

The following species are presumed absent from the Project site due to the lack of suitable habitat on the Project site:

- Nelson's antelope squirrel (*Ammospermophilus nelsoni*), State listed Threatened
- arroyo toad (*Anaxyrus californicus*), federally listed endangered and CDFW SSC

- California glossy snake (*Arizona elegans occidentalis*), CDFW SSC
- Crotch bumble bee (*Bombus crotchii*), State candidate endangered
- Swainson's hawk (*Buteo swainsoni*), State listed threatened
- pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*), CDFW SSC
- mountain plover (*Charadrius montanus*), CDFW SSC
- Townsend's big-eared bat (*Corynorhinus townsendii*), CDFW SSC
- western mastiff bat (*Eumops perotis californicus*), CDFW SSC
- quino checkerspot butterfly (*Euphydryas editha quino*), federally listed endangered
- Desert tortoise (*Gopherus agassizii*), federally and State -listed threatened
- south coast marsh vole (*Microtus californicus stephensi*), CDFW SSC
- southern grasshopper mouse (*Onychomys torridus ramona*), CDFW SSC
- Coast horned lizard (*Phrynosoma blainvillii*), CDFW SSC
- Southern mountain yellow-legged frog (*Rana muscosa*), federally listed endangered, State listed endangered
- American badger (*Taxidea taxus*), CDFW SSC
- Two-striped gartersnake (*Thamnophis hammondi*), CDFW SSC
- Le Conte's thrasher (*Toxostoma lecontei*), CDFW SSC (*San Joaquin population only*)
- Mohave ground squirrel (*Xerospermophilus mohavensis*), State -listed threatened

#### **4.2.6 Raptors and Migratory Birds**

Suitable nesting habitat for numerous species of migratory birds protected under the federal MBTA and California Fish and Game Code is present on the Project site in the shrubs, trees, surrounding buildings and landscaping, and other anthropogenic structures (e.g., telephone poles, buildings). Therefore, nesting birds could use the Project site during the nesting bird season (typically February 15 through August 31).

#### **4.2.7 Wildlife Movement Corridors, Linkages, and Significant Ecological Areas**

The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The definition of a corridor varies, but corridors may include such areas as greenbelts, refuge systems, underpasses, and biogeographic land bridges. In general, a corridor is described as a linear habitat, embedded in a dissimilar matrix, which connects two or more large blocks of habitat. Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife

species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. The nature of corridor usage and wildlife movement patterns vary greatly among species.

The Project site was assessed for its ability to function as a wildlife corridor. The Project site itself does not support any significant drainages or areas that have the potential to serve as wildlife movement corridors, and it is unlikely that wildlife use the Project site for regional or local movement because of the fencing dividing the site and the level of development and human presence within the site. The desert wash that runs north of the Project site may serve as a wildlife movement corridor and wildlife may move parallel to the Project site but would not be expected to pass through the site in any substantial way.

### **4.3 Aquatic Resources Delineation**

The aquatic resources delineation field assessment was conducted by ECORP biologist Scott Taylor on January 29, 2020.

#### **4.3.1 Historic Aquatic Resources Information**

The Project site is located at Lovejoy Springs, a historic and culturally significant spring that is formed by subsurface impoundments created by the surrounding buttes. Lovejoy Springs is fed by subsurface flows originating in the San Gabriel Mountains to the south, resulting in a general south to north drainage pattern. In prehistoric times the springs were known to flow regularly, providing surface water for Native Americans and, later, travelers through the area. As development of the area grew, the surface water amounts from the springs declined. The Tehachapi earthquake of 1952 is thought to have changed the subsurface geology, leading to a cessation of most if not all surface flows from the springs.

Lovejoy Springs attracted agricultural development in the late nineteenth century and then urban development followed. The Lake Los Angeles community underwent its major development during the late 1960s, when the Antelope Valley became a major focus for real estate developers. Planned originally as a resort town, the area once included an artificial lake that supported freshwater fishing. Stephen Sorensen Park was originally built in 2004, to provide recreational opportunities for the Lake Los Angeles residents. Because the park contains various landscaped elements, such as lawns and trees, the area is irrigated. Most of the drainages on site recorded in this delineation are supported primarily from irrigation runoff from the Park.

The NWI reveals the Lovejoy Springs location along with two riverine features, one of which flows northwards from the spring. The other feature flows to the south of the park, south of Avenue P, and then flowing across Avenue P and proceeding to the north just to the west of the developed portions of the Park. These features are both fed by a combination of drainage ditches and natural drainage courses, according to the NWI mapping. During the site visit, both features that are mapped within proximity to the Park were observed but were located outside of areas proposed as part of this Project.

The topography within the developed portions of the Park has been leveled and terraced to support baseball fields, playgrounds, and other park elements. The undeveloped portions of the Park consist of gently rolling terrain with a depression area where the springs originally flowed. The Park is drained by

an underground system that releases storm flows and other runoff into undeveloped portions of the Park to the north of the developed areas. The underground pipe outlets were generally one foot in diameter and covered by flap gates, to prevent any backflow.

The Project site is located on the western edge of the Mojave Desert region of the Desert Province (Baldwin, et al., editors. 2012). This area is characterized by an arid desert climate, which is composed of hot and dry summer months and cooler winter months with most of the precipitation recorded as rainfall, but some recorded as snow. The annual average total precipitation near Lake Los Angeles (at Pearblossom) is reported to be 6.94 inches (WREC 2020). At the Saddleback Butte, California (SDD) reporting station, a total of 4.16 inches of rain were recorded for the 2019-2020 rain year (CDWR 2020). This reporting station is located approximately 5 miles north of the Project.

**4.3.2 National Wetlands Inventory**

Previously mapped aquatic resources within the Project site include two fluvial natural stream features as well as Lovejoy Springs. The two linear features occur to the west of the Project’s proposed impact boundaries. Lovejoy Springs occurs north of the impact boundaries.

**4.3.3 Soils**

According to the Web Soil Survey, two soil units have been mapped for the Project site and immediately surrounding area (NRCS 2020), in addition to the ‘Water’ category (Figure 4. *Natural Resources Conservation Service Soil Types* and Table 4. *Natural Resources Conservation Service Soil Types*). Water is mapped as an area where the ground cover is obscured by a pond or reservoir. Formerly, when the original soil mapping was conducted, a water feature was present in this area. The only soil type within the Project area itself, however, is Cajon loamy fine sand, which is not a hydric soil.

<b>Soil Unit</b>	<b>Hydric?</b>	<b>Hydric Components (NRCS 2019)</b>
CcD2 – Cajon loamy fine sand, 9-15 percent slopes, hummocky	No	None
Ro – Rosamond fine sandy loam	No	None
W – Water	N/A	N/A

**4.3.4 Waters of the U.S./Wetlands**

No potential Waters of the U.S. have been mapped for this Project site, only areas under state jurisdiction (Figure 5. *Aquatic Resources Delineation*). The Arid West Wetland Determination Data Forms (Version 2.0) are included in Appendix D and photo-documentation of representative aquatic resources and culvert locations is included in Appendix E.

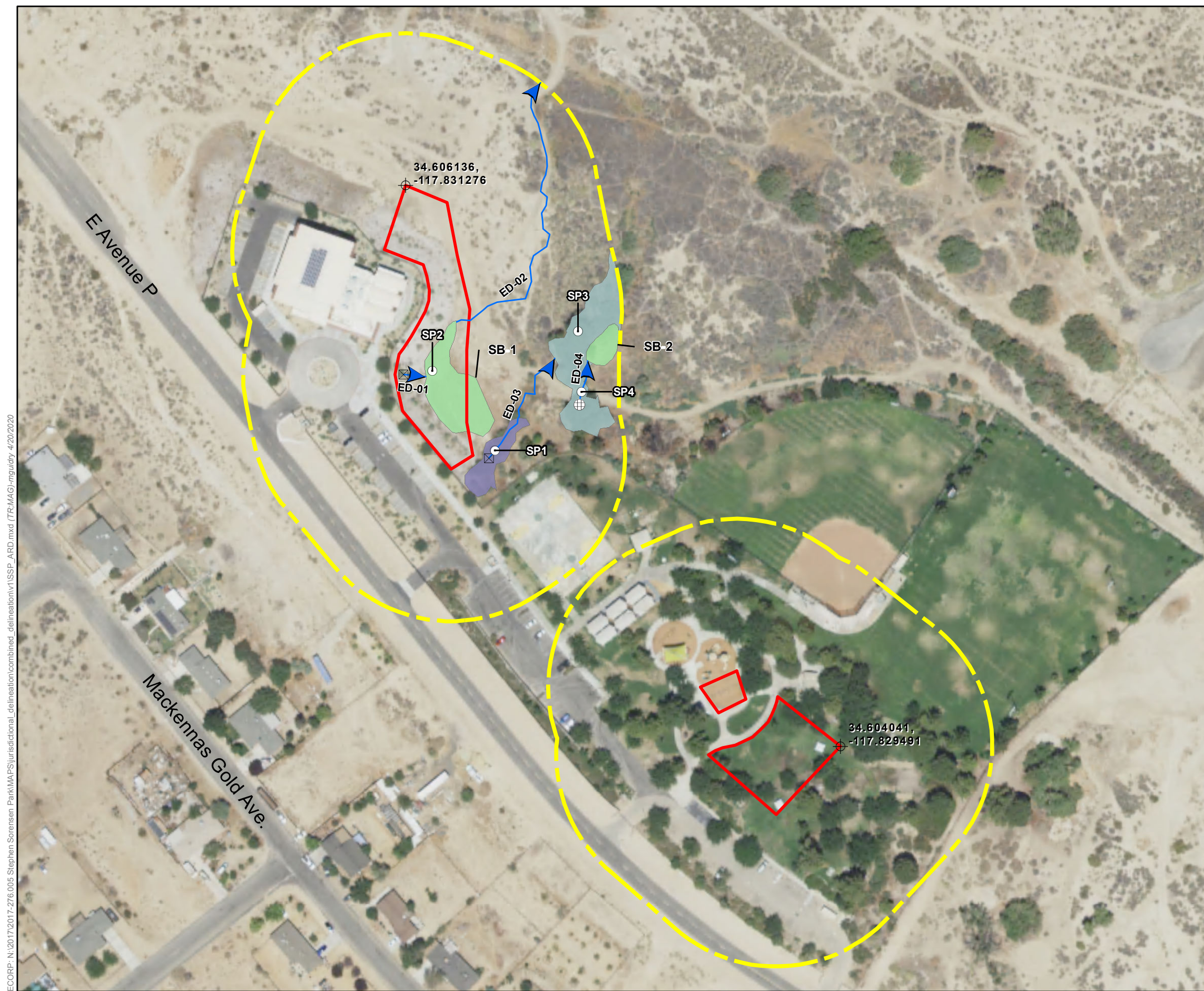
Potential wetland areas were sampled within areas where water-pooling was in evidence, or where hydrophytic vegetation was present. These areas were tested for the presence of wetland parameters under USACE guidelines, including hydrophytic vegetation, hydrophytic soils and wetland hydrology.

Although the waters do not drain to Traditional Navigable Waters (TNW) or to federal waters, so no USACE wetlands are presumed present.



**Figure 4. Natural Resources Conservation Service Soil Types**





**Map Features**

- Project Area
- 200-ft Buffer
- Culvert
- Stormdrain
- Reference Coordinates

**Three Criteria Sample Point**

- Sample Point

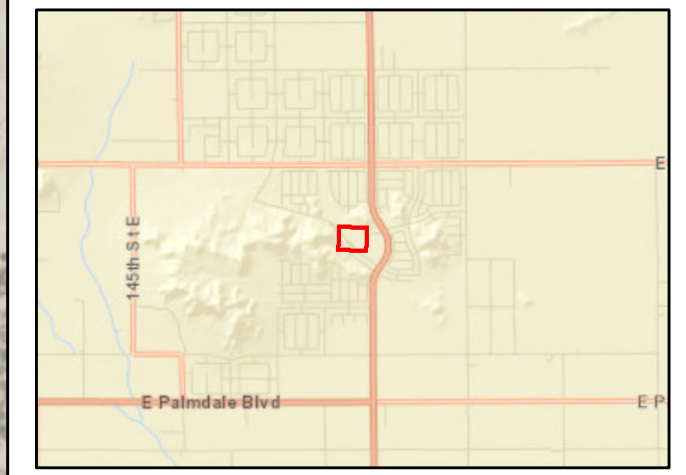
**CDFW Jurisdictional Features<sup>1</sup>**

- Cottonwood/Willow/Tamarisk riparian
- Shallow Basin
- Tamarisk Thickets
- Ephemeral Drainage

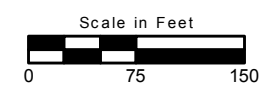
CDFW Features Within Project Area	CDFW Features Within 200-ft Buffer	Grand Total
0.122 (ac.)	0.407 (ac.)	0.529 (ac.)
183.451 (lft.)	1154.553 (lft.)	1338.004 (lft.)

Photo Source: NAIP (2018)  
 Boundary Source: Los Angeles County Department of Parks and Recreation  
 Delineator(s): Scott Taylor  
 Coordinate System: NAD 1983 StatePlane California II FIPS 0402 Feet

<sup>1</sup> Subject to U.S. Army Corps of Engineers verification. This exhibit depicts information and data produced in accord with the wetland delineation methods described in the 1987 Corps of Engineers Wetland Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0 as well as the Updated Map and Drawing Standards for the South Pacific Division Regulatory Program as amended on February 10, 2016, and conforms to Sacramento District specifications. However, feature boundaries have not been legally surveyed and may be subject to minor adjustments if more accurate locations are required.  
 \* The acreage value for each feature has been rounded to the nearest 1/1000 decimal. Summation of these values may not equal the total potential Waters of the U.S. acreage reported.



ECORP: N:\2017\2017-276.005 Stephen Sorensen Park\MAPS\jurisdictional\_delineation\combined\_delineation\VT\SPP\_ARC.mxd (TR\MAG)\mguidry\_4/20/2020



**Figure 5. Aquatic Resources Delineation**



### 4.3.5 CDFW Jurisdiction

Several areas under CDFW jurisdiction have been mapped within the Project site and its buffer, including four ephemeral drainages, two shallow basins, and two habitat types: tamarisk thickets and Fremont cottonwood forest (Figure 5. *Aquatic Resources Delineation* and Table 5. Potential CDFW Jurisdiction). The Arid West Wetland Determination Data Forms (Version 2.0) are included in Appendix D and photo-documentation of representative aquatic resources and culvert locations is included in Appendix E.

<b>Table 5. Potential CDFW Jurisdiction</b>		
<b>Classification</b>	<b>Project Area (Acres/Linear Feet)<sup>1</sup></b>	<b>Buffer (Acres/Linear Feet)</b>
Ephemeral Drainage		
ED-01	0.003/29	0
ED-02	0.001/17	0.018/397
ED-03	0	0.008/174
ED-04	0	0.007/60
Shallow Basin		
SB-1	0.118/137	0.045/44
SB-2	0	0.036/64
Tamarix Thickets	0	0.070/125
Fremont Cottonwood Forest	0	0.224/292
<b>Total:</b>	<b>0.122/183</b>	<b>0.408/1,156</b>

Acres in this table represent a calculated estimation and are subject to modification following the Corps' verification process. Waters areas are measured in State Plane (NAD83) coordinates. All measurements are in the defined units for this coordinate system (feet) and all calculations and summations are calculated in square feet. Results are converted to acreages for ease of use. However, this conversion may lead to minor rounding errors in the reporting of acreage summaries.

### Ephemeral Drainage

Ephemeral drainages are linear features that result from surface flows for short periods during and immediately following significant rainfall events. Ephemeral drainage flows are made up entirely of surface runoff and are not typically influenced by groundwater. Sample points 1, 2, 3, and 4 were collected within ephemeral drainages. Each of these drainage features is supplied by water runoff from the park, which is conveyed through underground pipes and then a flap gated culvert.

The ephemeral drainages within the Project site ranged from unvegetated to densely vegetated with riparian plant species such as tamarisk, mule fat, black willow, and Fremont cottonwood. All of these plants are hydrophytic to some degree, indicating that water flows are fairly regular in the area, likely resulting from irrigation drainage from the nearby Park. The soils found within the ephemeral drainages were largely composed of alluvial sediment and loams that appeared consistent with the recorded native soils to the area. No subsoil investigation was conducted due to the cultural resources potentially present in the area and potential for disturbance of these resources. All soil observations were made on the

surface. According to the soil types recorded to be present, no hydric elements are present and the typical soil matrix color within the drainages would be 10YR with 3 to 6 moist value and 2 to 6 chroma. Observed indicators of hydric soils were absent from all of the sample points.

Indicators of the presence of wetland hydrology within the ephemeral drainages included sediment deposits (B2, Riverine), drift deposits (B3, Riverine) and drainage patterns (B10, Riverine).

A single sample point (SP4) was taken within ED-04 due to the presence of a patch of black willow (FACW) and Mexican rush (*Juncus mexicanus*; FACW), with small amounts of rabbitsfoot grass (*Polypogon monspeliensis*; FACW). The area was a few feet below the culvert leading from the Park and was located just above a small dirt pathway. Hydric soils were deemed not to be present, but the area was considered to support hydrophytic vegetation. There was also wetland hydrology present – Salt Crust (B11) and Sediment Deposits (B2). Note that a pit was not dug in this area, but the soils did not appear to show indicators on the surface.

### **Shallow Basins**

There are two locations mapped as shallow basins, which represent areas where runoff forms shallow puddles formed by the surrounding topography. One of the basins is partially within the Project site and rests atop a small topographic bench. This area was previously graded during construction of the Park and is part of the Park landscaped areas. A small ephemeral drainage empties into this area (ED-01), then flows outwards to the north (ED-02).

A second shallow basin is located entirely within the buffer area and is adjacent to the Fremont Cottonwood Forest area. The basin is fed by runoff from an ephemeral drainage (ED-04), which originates from park runoff via a small flap gated culvert. The basin appears to collect all of the runoff flowing from this ephemeral drainage, as well as runoff from another adjacent ephemeral drainage (ED-03) which runs through a small patch of tamarisk thickets.

A sample point (SP2) was taken within the shallow basin within the Project site, in a portion of the basin that was considered to be its lowest point. Neither hydric vegetation or soils were deemed present, but there were signs of wetland hydrology present – Sediment Deposits (B2), Drift Deposits (B3), Surface Soil Cracks (B6), and Biotic Crusts (B12). Note that a pit was not dug in this area, but the soils did not appear to show indicators on the surface.

### **Tamarisk Thickets**

Tamarisk thickets are considered to be a riparian habitat which is jurisdictional to the CDFW due to their association with streambeds. Plant species observed within the habitat type included tamarisk (*Tamarix parviflora*), mule fat and red brome (*Bromus madritensis* ssp. *rubens*). There was also Russian thistle and rubber rabbitbrush present in small quantities. Both tamarisk (FAC) and mule fat (FAC) are considered to be potentially hydrophytic plant species.

A sample point (SP1) was taken within the tamarisk thickets within the Project site, in a portion of the associated channel that was considered to be its lowest point. Hydric soils were deemed not to be present, but the area was considered to support hydrophytic vegetation. There was also wetland

hydrology present – Sediment Deposits (B2), Drift Deposits (B3), and Drainage Patterns (B10). Note that a pit was not dug in this area, but the soils did not appear to show indicators on the surface.

### **Fremont Cottonwood Forest**

Fremont cottonwood forest areas are considered to be a riparian habitat that is which is jurisdictional to the CDFW due to their association with streambeds. Plant species observed within the habitat type included Fremont cottonwood, tamarisk, and rubber rabbitbrush. Both cottonwood (FAC) and tamarisk (FAC) are considered to be potentially hydrophytic plant species.

A sample point (SP3) was taken within the Fremont cottonwood forest within the buffer, in a portion of the associated channel that was considered to be its lowest point. Hydric soils were deemed not to be present, but the area was considered to support hydrophytic vegetation. There was also wetland hydrology present – Water-Stained Leaves (B9), Sediment Deposits (B2), Drift Deposits (B3), and Drainage Patterns (B10). Note that a pit was not dug in this area, but the soils did not appear to show indicators on the surface.

#### **4.3.6 Jurisdictional Assessment**

The ephemeral drainages mapped within the Project site are not tributary to TNW based on an assessment of aerial photographs of the drainageways as they flow northwest away from the Project site. The drainages flow down into open desert areas that are very level in terrain and eventually appear to sheet flow into fields or into other flatlands. Historically the streams flowing from these hills may have entered into a playa or other similar isolated feature. Since the drainages recorded on the site do not connect downstream to TNW or to Interstate Waters, as determined by the USACE, these aquatic resources are not expected to be subject to regulation under the CWA. However, some or all of these ephemeral drainages, as well as their respective habitat areas, may be regulated under the SAA Section 1602 of the California Fish and Game Code.

## **5.0 IMPACT ANALYSIS**

### **5.1 Special-Status Species**

The Project site is generally classified as disturbed and developed/landscaped. No special-status plant or wildlife species were observed during the biological survey. Twenty-three special-status plant species were identified in the literature review and database searches but based on the conditions on the Project site and the available habitat, all 23 species were presumed absent from the Project site. As such, the Project would have no impacts to special-status plant species.

The literature review and database searches identified 21 special-status wildlife species that occur in the vicinity of the Project site, but based on condition of the Project site and the available habitat, only two species were determined have low potential to occur on the Project site and may require mitigation and/or avoidance measures. The remaining 19 species identified in the literature review and database searches are presumed absent from the Project site due to the absence of records in the vicinity and/or lack of suitable habitat on the Project site.

Burrowing owl, a CDFW SSC, was identified to have a low potential to occur at the Project site within the proposed skate park area location. There is no suitable habitat for burrowing owl in the portions of the Project site within the existing developed Park. The Project site contained only marginally suitable foraging and burrowing habitat, and a single burrow of adequate size was observed within the Project site during the survey. No records of burrowing owl were documented within five miles of the Project site. Although burrowing owls may not have been present when the survey was conducted, the species is mobile and could take up residence at any time. Direct impacts in the form of habitat loss and indirect impacts in the form of construction noise and ground vibrations may occur in the proposed skate park area of the Project site. Impacts to burrowing owl would be less than significant with the implementation of Mitigation Measure BIO-1.

Loggerhead shrike, a CDFW SSC, was also determined to have a low potential to occur on the Project site due to the presence of suitable foraging and nesting habitat. No records of loggerhead shrike were documented within five miles of the Project site. Direct impacts to nesting loggerhead shrike may occur through removal of the larger shrubs in the Project site. Impacts to loggerhead shrike would be less than significant with the implementation of Mitigation Measure BIO-2.

The Project site contained suitable nesting habitat for bird species protected under the MBTA. Development of the Project site will be required to comply with the MBTA and avoid impacts to nesting birds. If construction of the Project occurs during the bird-breeding season (typically February 1 through August 31), ground-disturbing construction activities could directly affect birds protected by the MBTA and their nests through the removal of habitat and indirectly through increased noise. Impacts to nesting birds would be less than significant with the implementation of Mitigation Measure BIO-2.

## **5.2 Sensitive Natural Communities**

The Project site did not contain any riparian habitat or sensitive natural communities that would need to be preserved and no project-related impacts to these types of resources are anticipated with the development of the Project.

## **5.3 State and Federally Protected Wetlands and Waters of the United States**

According to the results of the aquatic resources delineation Waters of the U.S. are not present within the Project site or the buffer area that was surveyed. There are, however, areas that would qualify under CDFW jurisdiction and SWRCB jurisdiction. Impacts to these areas would be considered to be significant under CEQA and would require both mitigation and regulatory permitting under the California Fish and Game Code (Section 1600) and the federal CWA (Section 401). Mitigation for impacts could include on- or off-site habitat creation, enhancement, rehabilitation or restoration. Alternatively, a payment of in-lieu fee to compensate for impacts may be possible. Typically, the type of mitigation and acreage of mitigation is negotiated with the regulatory agencies during the permitting process. Please refer to recommendation BIO-3 below.

## **5.4 Wildlife Corridors and Nursery Sites**

The Project site is located within and adjacent to areas containing existing disturbances (e.g., paved roads and residential, commercial, and industrial developments). The Project site is heavily disturbed and

contained very little cover that would only allow for local movement of wildlife. No migratory wildlife corridors or native wildlife nursery sites were identified within the Project site. Therefore, no impacts to wildlife corridors or nursery sites are expected to occur during the development of the Project site.

## 5.5 Local Policies and Ordinances

No local policies and ordinances that pertain to biological resources are applicable to the proposed Project, therefore no impacts would occur.

### 5.5.1 County of Los Angeles General Plan Significant Ecological Areas

The Project site is not located within a SEA.

### 5.5.2 Los Angeles County Oak Tree Ordinance

There are no oak trees present on the Project site.

## 5.6 Habitat Conservation Plans and Natural Community Conservation Plans

The Project site is not located within an HCP or NCCP. Therefore, development of the Project site will not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional or state HCP.

## 6.0 RECOMMENDATIONS

The following mitigation measures are recommended prior to Project implementation:

**BIO-1: Pre-construction Surveys for Burrowing Owl:** Pre-construction surveys for burrowing owl shall be conducted prior to the start of construction in the proposed skate park area of the Project site. Pre-construction surveys for burrowing owl would not be required for the portions of the Project site within the existing developed Park. The surveys shall follow the methods described in the CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). Two surveys shall be conducted, with the first survey being conducted between 30 and 14 days before initial ground disturbance (grading, grubbing, and construction), and the second survey being conducted no more than 24 hours prior to initial ground disturbance. If burrowing owls and/or suitable burrowing owl burrows with sign (e.g., whitewash, pellets, feathers, prey remains) are identified on the Project site during the survey and impacts to those features are unavoidable, consultation with the CDFW shall be conducted and the methods described in the CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFW 2012) for avoidance and/or passive relocation shall be followed.

**BIO-2: Pre-construction Nesting Bird Survey:** If construction or other Project activities are scheduled to occur during the bird breeding season (February through August for raptors and March through August for the majority of migratory bird species), a pre-construction nesting bird survey shall be conducted by a qualified biologist to ensure that active bird nests, including those for the loggerhead shrike, will not be disturbed or destroyed. The survey shall be completed no more than 14 days prior to initial ground disturbance. The nesting bird survey shall include the Project site and adjacent areas where Project activities

have the potential to affect active nests, either directly or indirectly due to construction activity or noise. If an active nest is identified, a qualified biologist shall establish an appropriate disturbance limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance limit buffer zones until the nest is deemed inactive by the qualified biologist.

**BIO-3: Aquatic Resources Regulatory Permitting:** If Project-related impacts will occur to areas under the jurisdiction of the CDFW or SWRCB, then a regulatory permit with those agencies is needed prior to the impact occurring. Permitting includes preparation and submittal of a Notification of Lake or Streambed Alteration under Section 1600 of the California Fish and Game Code. The permit process will take approximately six months, as long as the impacts are relatively minor. A completed CEQA document, and Notice of Determination, will be necessary to submit along with the applications. Other items such as finalized project plans, quantities of fill material, supporting technical studies and so on are also submitted along with the applications. As a part of this process, the project must also identify and approve mitigation through the respective agencies. Mitigation can include onsite or offsite options or could include payment of an in-lieu fee to a conservation organization. Types of mitigation can include restoration, creation, rehabilitation, enhancement or other types of habitat improvement. Typically, the type of mitigation and acreage of mitigation is negotiated with the regulatory agencies during the permitting process.

## 7.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the 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. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the Project applicant or the applicant's representative and that I have no financial interest in the Project.

SIGNED: \_\_\_\_\_



Lauren Simpson  
Staff Biologist

DATE: \_\_\_\_\_

4/2/2020

ECORP Consulting, Inc.

## 8.0 LITERATURE CITED

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## **LIST OF APPENDICES**

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Appendix A – Representative Site Photographs

Appendix B – Plant Species Observed

Appendix C – Wildlife Species Observed

Appendix D – Wetland Determination Data Forms

Representative Site Photographs



Photo 1. Playground set in the southeastern section of the Project site



Photo 2. Landscaped park area in the southeastern section of the Project site.





Photo 3. Disturbed slope area in northwestern section of the Project site.



Photo 4. Disturbed land cover in the northwestern section of the Project site.





Photo 5. Tamarisk thickets along drainage (ED-03) south of northwestern section of the Project site.



Photo 6. Fremont cottonwood forest and disturbed saltbush scrub east of the northwestern section of the Project site.





Photo 7. Typical flapgate culvert (ED-03)



Photo 8. ED-01 location





Photo 9. SB-1 area



Photo 10. Sample Point 2 location





Photo 11. Potential Burrowing Owl Burrow - No Sign



**APPENDIX B**

## Plant Species Observed

<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>
<i>Agave americana</i> *	century plant
<i>Ambrosia acanthicarpa</i>	annual bursage
<i>Ambrosia dumosa</i>	white bursage
<i>Ambrosia salsola</i>	cheesebush
<i>Atriplex canescens</i>	fourwing saltbush
<i>Baccharis salicifolia</i>	mulefat
<i>Brassica tournefortii</i> *	Saharan mustard
<i>Bromus</i> sp.*	brome grass
<i>Distichlis spicata</i>	salt grass
<i>Ericameria nauseosa</i>	Rubber rabbitbrush
<i>Eriogonum fasciculatum</i>	California buckwheat
<i>Erodium cicutarium</i> *	coastal heron's bill
<i>Juncus</i> sp.	rush sp.
<i>Larrea tridentata</i>	creosote bush
<i>Liquidambar styraciflua</i> *	sweetgum
<i>Peritoma arborea</i>	bladderpod
<i>Pinus</i> sp.	pine sp.
<i>Platanus racemosa</i>	Western sycamore
<i>Populus fremontii</i>	Fremont's cottonwood
<i>Rosmarinus</i> sp.*	rosemary
<i>Salix exigua</i>	narrowleaf willow
<i>Salix gooddingii</i>	Goodding's black willow
<i>Salsola tragus</i> *	Russian thistle
<i>Schismus</i> sp.*	Mediterranean grass
<i>Stephanomeria</i> sp.	wirelettuce
<i>Tamarix</i> sp.*	tamarisk

\*Nonnative species

**APPENDIX C**

## Wildlife Species Observed

<b>SCIENTIFIC NAME</b>	<b>COMMON NAME</b>
<i>Apis mellifera</i> *	European honey bee
<i>Vanessa cardui</i>	painted lady
<i>Uta stansburiana</i>	Western side-blotched lizard
<i>Anthus rubescens</i>	American pipit
<i>Haemorhous mexicanus</i>	house finch
<i>Junco hyemalis</i>	dark-eyed junco
<i>Melospiza crissalis</i>	California towhee
<i>Regulus calendula</i>	ruby-crowned kinglet
<i>Salpinctes obsoletus</i>	rock wren
<i>Sayornis nigricans</i>	black phoebe
<i>Sturnus vulgaris</i> *	European starling
<i>Accipiter cooperii</i>	Cooper's hawk
<i>Artemisiospiza belli</i>	Bell's sparrow
<i>Calypte anna</i>	Anna's hummingbird
<i>Charadrius vociferus</i>	killdeer
<i>Colaptes auratus</i>	Northern flicker
<i>Corvus corax</i>	common raven
<i>Mimus polyglottos</i>	Northern mockingbird
<i>Sayornis saya</i>	Say's Phoebe
<i>Streptopelia decaocto</i> *	Eurasian collared-dove
<i>Sturnella neglecta</i>	Western meadowlark
<i>Turdus migratorius</i>	American robin
<i>Zenaidura macroura</i>	mourning dove
<i>Zonotrichia leucophrys</i>	white-crowned sparrow
<i>Felis catus</i> *	feral cat
<i>Sylvilagus audubonii</i>	desert cottontail

\*nonnative species

Wetland Determination Data Forms

## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Stephen Sorensen Park City/County: Lake Los Angeles/Los Angeles Sampling Date: 1/29/2020  
 Applicant/Owner: Los Angeles County State: CA Sampling Point: SP 1  
 Investigator(s): Scott Taylor Section, Township, Range: S16, T6N, R9W  
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): Concave Slope (%): 5  
 Subregion (LRR): LRR-D Lat: 34.605097 Long: -117.831003 Datum: NAD83  
 Soil Map Unit Name: Cajon loamy fine sand NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? N Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? N (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Tamarix parviflora</u>	<u>80</u>	<u>Y</u>	<u>FAC</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>3</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>100</u> (A/B)
2. _____				
3. _____				
4. _____				
	<u>80</u>	= Total Cover		
<b>Sapling/Shrub Stratum (Plot size: <u>200 sq ft</u>)</b>				
1. <u>Tamarix parviflora</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>90</u> x 3 = <u>270</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>56</u> x 5 = <u>280</u> Column Totals: <u>146</u> (A) <u>550</u> (B)  Prevalence Index = B/A = <u>3.77</u>
2. <u>Ericameria nauseosa</u>	<u>1</u>	<u>N</u>	<u>N/L</u>	
3. <u>Baccharis salicifolia</u>	<u>5</u>	<u>Y</u>	<u>FAC</u>	
4. _____				
5. _____				
	<u>11</u>	= Total Cover		
<b>Herb Stratum (Plot size: <u>200 sq ft</u>)</b>				
1. <u>Salsola tragus</u>	<u>5</u>	<u>N</u>	<u>N/L</u>	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is <u>3.0</u> <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. <u>Bromus madritensis ssp. rubens</u>	<u>50</u>	<u>Y</u>	<u>N/L</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
	<u>55</u>	= Total Cover		
<b>Woody Vine Stratum (Plot size: _____)</b>				
1. <u>N/A</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. _____				
% Bare Ground in Herb Stratum <u>5</u> % Cover of Biotic Crust <u>0</u>				
Remarks:				



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

Project/Site: Stephen Sorensen Park City/County: Lake Los Angeles/Los Angeles Sampling Date: 1/29/2020  
 Applicant/Owner: Los Angeles County State: CA Sampling Point: SP 2  
 Investigator(s): Scott Taylor Section, Township, Range: S16, T6N, R9W  
 Landform (hillslope, terrace, etc.): flat bench Local relief (concave, convex, none): Concave Slope (%): 1  
 Subregion (LRR): LRR-D Lat: 34.605469 Long: -117.831207 Datum: NAD83  
 Soil Map Unit Name: Cajon loamy fine sand NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? N Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? N (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:   	

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

Tree Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>				<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A)  Total Number of Dominant Species Across All Strata: <u>2</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>0</u> (A/B)
2. _____				
3. _____				
4. _____				
_____ = Total Cover				
<u>Sapling/Shrub Stratum</u> (Plot size: <u>200 sq ft</u> )				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>5</u> x 3 = <u>15</u> FACU species <u>70</u> x 4 = <u>280</u> UPL species <u>20</u> x 5 = <u>100</u> Column Totals: <u>95</u> (A) <u>395</u> (B)  Prevalence Index = B/A = <u>4.15</u>
1. <u>Chilopsis linearis</u>	<u>5</u>	<u>N</u>	<u>FAC</u>	
2. <u>Ericameria nauseosa</u>	<u>10</u>	<u>Y</u>	<u>N/L</u>	
3. _____				
4. _____				
5. _____				
<u>15</u> = Total Cover				
<u>Herb Stratum</u> (Plot size: <u>200 sq ft</u> )				<b>Hydrophytic Vegetation Indicators:</b> <input type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)  <sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.  <b>Hydrophytic Vegetation Present?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
1. <u>Trifolium ripens</u>	<u>70</u>	<u>Y</u>	<u>FACU</u>	
2. <u>Bromus madritensis ssp. rubens</u>	<u>10</u>	<u>N</u>	<u>N/L</u>	
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
<u>80</u> = Total Cover				
<u>Woody Vine Stratum</u> (Plot size: _____)				
1. <u>N/A</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>10</u> % Cover of Biotic Crust <u>50</u>				
Remarks: Algal mats present				





## WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Stephen Sorensen Park City/County: Lake Los Angeles/Los Angeles Sampling Date: 1/29/2020  
 Applicant/Owner: Los Angeles County State: CA Sampling Point: SP 3  
 Investigator(s): Scott Taylor Section, Township, Range: S16, T6N, R9W  
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): Concave Slope (%): 3  
 Subregion (LRR): LRR-D Lat: 34.605586 Long: -117.830564 Datum: NAD83  
 Soil Map Unit Name: Water NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? N Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? N (If needed, explain any answers in Remarks.)

### SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks: Former site of an artificial reservoir (soil series mapped as 'water')	

### VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: <u>200 sq ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Populus fremontii</u>	40	Y	FAC	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66</u> (A/B)
2. <u>Tamarix parviflora</u>	50	Y	FAC	
3. _____				
4. _____				
<u>90</u> = Total Cover				<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>0</u> x 2 = <u>0</u> FAC species <u>90</u> x 3 = <u>270</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>5</u> x 5 = <u>25</u> Column Totals: <u>95</u> (A) <u>295</u> (B)  Prevalence Index = B/A = <u>3.11</u>
Sapling/Shrub Stratum (Plot size: <u>200 sq ft</u> )				
1. <u>Ericameria nauseosa</u>	5	Y	N/L	
2. _____				
3. _____				
4. _____				
5. _____				
<u>5</u> = Total Cover				
Herb Stratum (Plot size: _____)				<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
1. <u>N/A</u>				
2. _____				
3. _____				
4. _____				
5. _____				
6. _____				
7. _____				
8. _____				
<u>55</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)				<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
1. <u>N/A</u>				
2. _____				
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>5</u> % Cover of Biotic Crust <u>20</u>				<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

Remarks:  
 Algal mats

**SOIL**

Sampling Point: SP 3

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_  
 Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No

Remarks:

No pit dug, no surface indicators observed

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_  
 Saturation Present? (includes capillary fringe) Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_

**Wetland Hydrology Present?** Yes  No \_\_\_\_\_

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No defined bed and bank. Later determined to be the edge of a small and shallow basin that collects stormwater.

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

Project/Site: Stephen Sorensen Park City/County: Lake Los Angeles/Los Angeles Sampling Date: 1/29/2020  
 Applicant/Owner: Los Angeles County State: CA Sampling Point: SP 4  
 Investigator(s): Scott Taylor Section, Township, Range: S16, T6N, R9W  
 Landform (hillslope, terrace, etc.): slope Local relief (concave, convex, none): Concave Slope (%): 2  
 Subregion (LRR): LRR-D Lat: 34.605343 Long: -117.830537 Datum: NAD83  
 Soil Map Unit Name: Cajon loamy fine sand NWI classification: N/A

Are climatic / hydrologic conditions on the site typical for this time of year? Yes  No  (If no, explain in Remarks.)  
 Are Vegetation , Soil , or Hydrology  significantly disturbed? N Are "Normal Circumstances" present? Yes  No   
 Are Vegetation , Soil , or Hydrology  naturally problematic? N (If needed, explain any answers in Remarks.)

**SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.**

Hydrophytic Vegetation Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Hydric Soil Present? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Wetland Hydrology Present? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<b>Is the Sampled Area within a Wetland?</b> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Remarks:	

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

Tree Stratum (Plot size: <u>100 sq ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Salix goodingii</u>	<u>60</u>	<u>Y</u>	<u>FACW</u>	<b>Dominance Test worksheet:</b> Number of Dominant Species That Are OBL, FACW, or FAC: <u>2</u> (A)  Total Number of Dominant Species Across All Strata: <u>3</u> (B)  Percent of Dominant Species That Are OBL, FACW, or FAC: <u>66</u> (A/B)
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
<u>60</u> = Total Cover				
Sapling/Shrub Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>	_____	_____	_____	<b>Prevalence Index worksheet:</b> Total % Cover of: _____ Multiply by: _____ OBL species <u>0</u> x 1 = <u>0</u> FACW species <u>135</u> x 2 = <u>270</u> FAC species <u>0</u> x 3 = <u>0</u> FACU species <u>0</u> x 4 = <u>0</u> UPL species <u>0</u> x 5 = <u>0</u> Column Totals: <u>135</u> (A) <u>270</u> (B)  Prevalence Index = B/A = <u>2</u>
2. _____	_____	_____	_____	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
<u>11</u> = Total Cover				
Herb Stratum (Plot size: <u>100 sq ft</u> )	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>Juncus mexicanus</u>	<u>70</u>	<u>Y</u>	<u>FACW</u>	<b>Hydrophytic Vegetation Indicators:</b> <input checked="" type="checkbox"/> Dominance Test is >50% <input checked="" type="checkbox"/> Prevalence Index is ≤3.0 <sup>1</sup> <input type="checkbox"/> Morphological Adaptations <sup>1</sup> (Provide supporting data in Remarks or on a separate sheet) <input type="checkbox"/> Problematic Hydrophytic Vegetation <sup>1</sup> (Explain)
2. <u>Polypogon monspeliensis</u>	<u>5</u>	<u>N</u>	<u>FACW</u>	
3. _____	_____	_____	_____	
4. _____	_____	_____	_____	
5. _____	_____	_____	_____	
6. _____	_____	_____	_____	
7. _____	_____	_____	_____	
8. _____	_____	_____	_____	
<u>75</u> = Total Cover				
Woody Vine Stratum (Plot size: _____)	Absolute % Cover	Dominant Species?	Indicator Status	
1. <u>N/A</u>	_____	_____	_____	<sup>1</sup> Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.
2. _____	_____	_____	_____	
_____ = Total Cover				
% Bare Ground in Herb Stratum <u>5</u> % Cover of Biotic Crust <u>0</u>		<b>Hydrophytic Vegetation Present?</b> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		
Remarks:				

**SOIL**

Sampling Point: SP 4

**Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)**

Depth (inches)	Matrix		Redox Features				Texture	Remarks
	Color (moist)	%	Color (moist)	%	Type <sup>1</sup>	Loc <sup>2</sup>		

<sup>1</sup>Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains.      <sup>2</sup>Location: PL=Pore Lining, M=Matrix.

**Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)**

- Histosol (A1)
- Histic Epipedon (A2)
- Black Histic (A3)
- Hydrogen Sulfide (A4)
- Stratified Layers (A5) **(LRR C)**
- 1 cm Muck (A9) **(LRR D)**
- Depleted Below Dark Surface (A11)
- Thick Dark Surface (A12)
- Sandy Mucky Mineral (S1)
- Sandy Gleyed Matrix (S4)

- Sandy Redox (S5)
- Stripped Matrix (S6)
- Loamy Mucky Mineral (F1)
- Loamy Gleyed Matrix (F2)
- Depleted Matrix (F3)
- Redox Dark Surface (F6)
- Depleted Dark Surface (F7)
- Redox Depressions (F8)
- Vernal Pools (F9)

**Indicators for Problematic Hydric Soils<sup>3</sup>:**

- 1 cm Muck (A9) **(LRR C)**
- 2 cm Muck (A10) **(LRR B)**
- Reduced Vertic (F18)
- Red Parent Material (TF2)
- Other (Explain in Remarks)

<sup>3</sup>Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

**Restrictive Layer (if present):**

Type: \_\_\_\_\_  
Depth (inches): \_\_\_\_\_

**Hydric Soil Present?** Yes \_\_\_\_\_ No

Remarks:

No pit dug, no surface indicators observed

**HYDROLOGY**

**Wetland Hydrology Indicators:**

Primary Indicators (minimum of one required; check all that apply)

- Surface Water (A1)
- High Water Table (A2)
- Saturation (A3)
- Water Marks (B1) **(Nonriverine)**
- Sediment Deposits (B2) **(Nonriverine)**
- Drift Deposits (B3) **(Nonriverine)**
- Surface Soil Cracks (B6)
- Inundation Visible on Aerial Imagery (B7)
- Water-Stained Leaves (B9)

- Salt Crust (B11)
- Biotic Crust (B12)
- Aquatic Invertebrates (B13)
- Hydrogen Sulfide Odor (C1)
- Oxidized Rhizospheres along Living Roots (C3)
- Presence of Reduced Iron (C4)
- Recent Iron Reduction in Tilled Soils (C6)
- Thin Muck Surface (C7)
- Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- Water Marks (B1) **(Riverine)**
- Sediment Deposits (B2) **(Riverine)**
- Drift Deposits (B3) **(Riverine)**
- Drainage Patterns (B10)
- Dry-Season Water Table (C2)
- Crayfish Burrows (C8)
- Saturation Visible on Aerial Imagery (C9)
- Shallow Aquitard (D3)
- FAC-Neutral Test (D5)

**Field Observations:**

Surface Water Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_  
 Water Table Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_  
 Saturation Present? Yes \_\_\_\_\_ No \_\_\_\_\_ Depth (inches): \_\_\_\_\_  
 (includes capillary fringe)

**Wetland Hydrology Present?** Yes  No \_\_\_\_\_

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks: