APPENDIX B
Biological Resources Reports

BIOLOGICAL TECHNICAL REPORT

FOR

HOFF PROPERTY PROJECT

LOCATED IN THE CITY OF YORBA LINDA, ORANGE COUNTY, CALIFORNIA

Prepared For:

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July 11, 2019
(Revised November 11, 2020)

INFORMATION SUMMARY

A. Report Date: July 11, 2019 (revised November 11, 2020)

B. Report Title: Biological Technical Report for the Hoff Property Project, Located in the City of Yorba Linda, Orange County, California

C. Project Site Location: The Project is located north of Fairmont Boulevard, east of Rimcrest Drive, south of South Ridge Trail, and west of Fairmont Boulevard and Little Canyon Lane in the city of Yorba Linda, Orange County, California. The site is depicted on the U.S. Geological Survey (USGS) Yorba Linda, California topographic quadrangle (dated 1964 and photorevised in 1981) within unsectioned areas of Township 3S, Range 9W. The Project site is located at latitude 33.908234 and longitude -117.7722826 (center reading).

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F. **Report Summary:** A biological study was performed for the proposed Hoff Property Project, located in the City of Yorba Linda, Orange County, California. The Project Applicant is proposing to build a single family residence with associated utilities, road access, and fuel modification zones. The Project would impact 14.20 acres in total, including 0.13 acres of RWQCB jurisdictional features and 0.17 acres of CDFW non-riparian jurisdictional features. The Project would avoid and preserve 28.45 acres of land. This document provides the results of a field study performed to evaluate the potential occurrence of biological resources and the requirements triggered by environmental laws and regulations. Habitat assessments were performed for special-status plants and animals and a jurisdictional waters and wetlands delineation was conducted. Six focused survey visits were performed for the endangered coastal

California gnatcatcher, with no coastal California gnatcatchers detected. There is no potential for special-status plants or animals to occur in constraining roles. The Project site contains 0.13 acres of RWQCB jurisdictional waters (none of which are wetlands) and 0.17 acres of CDFW jurisdictional waters (non-riparian, non-wetland). Additionally, 13.94 acres of federally designated Critical Habitat for the coastal California gnatcatcher (*Polioptila californica californica*; CAGN) would be permanently impacted. Usually, as per the federal Endangered Species Act, a Section 10 Consultation would have to be prepared and coordination with the USFWS would be necessary; however, the Project does not constitute adverse modification of the Critical Habitat, and therefore no action is required. Implementation of the biological measures listed below in Section 6 of this report would reduce the impacts of the Project to less than significant.

G. Individuals Conducting Fieldwork: David Smith, Lesley Lokovic-Gamber, Jeff Ahrens

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1.0 INTRODUCTION

1.1 Background and Scope of Work

This document provides the results of general biological surveys and focused biological surveys for the approximately 42.65-acre Hoff Property Project (the Project) located in the City of Yorba Linda, Orange County, California. This report identifies and evaluates impacts to biological resources associated with the proposed Project in the context of the California Environmental Quality Act (CEQA), and State and Federal regulations such as the Endangered Species Act (ESA), Clean Water Act (CWA), and the California Fish and Game Code.

The scope of this report includes a discussion of existing conditions for the approximately 42.65-acre Project Study Area, all methods employed regarding the general biological surveys and focused biological surveys, the documentation of botanical and wildlife resources identified (including special-status species), and an analysis of impacts to biological resources. Methods of the study include a review of relevant literature, field surveys, and a Geographical Information System (GIS)-based analysis of vegetation communities. As appropriate, this report is consistent with accepted scientific and technical standards and survey guideline requirements issued by the U.S. Fish and Wildlife Service (USFWS), the California Department of Fish and Wildlife (CDFW), the California Native Plant Society (CNPS), and other applicable agencies/organizations.

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

1.2 Project Location

The Project Study Area comprises approximately 42.65 acres in the City of Yorba Linda, Orange County, California [Exhibit 1 – Regional Map] and is located within unsectioned areas of Township 3S, Range 9W, of the U.S. Geological Survey (USGS) 7.5" quadrangle map Yorba Linda (dated 1964 and photorevised in 1981) Exhibit 2 – Vicinity Map]. The Project Study Area is generally located north Fairmont Boulevard, east of Rimcrest Drive, south of South Ridge Trail, and west of Fairmont Boulevard and Little Canyon Lane.

1.3 Project Description

The Project Study Area encompasses approximately 42.65 acres. The Project Site is located on the eastern portion of the Project Study Area and comprises approximately 14.20 acres. The Project Applicant is proposing to build a one-family residential house on the subject property. Impacts will include all utilities, roads, and fuel modifications zones associated with the house construction. Remaining acreage associated with the Project Study Area (totaling approximately 28.45) acres would be avoided and preserved [Exhibit 3 – Site Plan].

2.0 METHODOLOGY

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

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

The focus of the biological surveys was determined through initial site reconnaissance, a review of the CNDDB [CDFW 2019], CNPS 8th edition online inventory (CNPS 2019), Natural Resource Conservation Service (NRCS) soil data, other pertinent literature, and knowledge of the region. Site-specific general surveys within the Project Study Area were conducted on foot in the proposed development areas for each target plant or animal species identified below.

Vegetation was mapped directly onto a 250-scale (1"=250') aerial photograph following the Habitat Classification System Natural Resources Geographic Information System (GIS) Project (Gray and Bramlet, 1992). All flora and fauna identified on site during vegetation mapping was included in floral and faunal compendia prepared for the Project (Appendices A and B). Vegetation communities not listed under the above-mentioned vegetation classification systems were named based on the dominant plant species present. All vegetation mapping was imported into ArcGIS for acreage analysis.

2.1 Summary of Surveys

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

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

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

Table 2-1. Summary of Biological Surveys for the Project Study Area.

Survey Type	2019 Survey Dates	Biologists
Habitat Assessment	3/12	DS
General Biological Surveys	2/19 3/12	LLG DS
Jurisdictional Delineation	4/2	DS
Focused California Gnatcatcher surveys	3/21, 3/28, 4/9, 5/14, 6/15, 6/25	JA

DS = David Smith, JA = Jeff Ahrens, LLG = Lesley Lokovic-Gamber

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

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

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

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

Vegetation communities and habitats were considered "special-status" based on one or more of the following criteria:

- Global (G) and/or State (S) ranking of category 3 or less based on CDFW (see Section 3.2.2 below for further explanation); and
- Riparian habitat.

2.2 Botanical Resources

A site-specific survey program was designed to accurately document the botanical resources within the Project Study Area, and consisted of five components: (1) a literature search; (2) preparation of a list of target special-status plant species and sensitive vegetation communities that could occur within the Project Study Area; (3) general field reconnaissance surveys; (4) vegetation mapping; and (5) habitat assessments and focused surveys for special-status plants.

2.2.1 Literature Search

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

- California Native Plant Society, Rare Plant Program. 2017. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39) (CNPS 2019); and

- CNDDB for the USGS 7.5' quadrangles: Anaheim, Baldwin Park, Black Star Canyon, La Habra, Ontario, Orange, Prado Dam, San Dimas, and Yorba Linda (CNDDB 2019).

2.2.2 Vegetation Mapping

Vegetation was mapped directly onto a 250-scale (1"=250') aerial photograph following the Habitat Classification System Natural Resources Geographic Information System (GIS) Project (Gray and Bramlet, 1992). All flora and fauna identified on site during vegetation mapping was included in floral and faunal compendia prepared for the Project (Appendices A and B). Vegetation communities not listed under the above-mentioned vegetation classification systems were named based on the dominant plant species present. A vegetation map is included as Exhibit 4. Representative site photographs are included as Exhibit 5.

2.2.3 Special-Status Plant Species and Habitats Evaluated for the Project Study Area

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

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

2.2.5 Botanical Surveys

GLA biologist David Smith visited the site on March 12, 2019 to conduct a general plant survey. The survey was conducted in accordance with accepted botanical survey guidelines (CDFG 2009, CNPS 2001, USFWS 2000). As applicable, the survey was conducted at an appropriate time based on precipitation and flowering periods. An aerial photograph, a soil map, and/or a topographic map were used to determine the community types and other physical features that may support sensitive and uncommon taxa or communities within the Project Study Area. The

survey was conducted by following meandering transects within target areas of suitable habitat. All plant species encountered during the field surveys were identified and recorded following the above-referenced guidelines adopted by CNPS (2010) and CDFW by Nelson (1984). A complete list of the plant species observed is provided in Appendix A. Scientific nomenclature and common names used in this report follow Baldwin et al (2012), and Munz (1974).

2.3 Wildlife Resources

Wildlife species were evaluated and detected during field surveys by sight, call, tracks, and scat. Site reconnaissance was conducted in such a manner as to allow inspection of the entire Project Study Area by direct observation, including the use of binoculars. Observations of physical evidence and direct sightings of wildlife were recorded in field notes during the visit. A complete list of wildlife species observed within the Project Study Area is provided in Appendix B. Scientific nomenclature and common names for vertebrate species referred to in this report follow the Complete List of Amphibian, Reptile, Bird, and Mammal Species in California (CDFG 2008), Standard Common and Scientific Names for North American Amphibians, Turtles, Reptiles, and Crocodilians 6th Edition, Collins and Taggert (2009) for amphibians and reptiles, and the American Ornithologists' Union Checklist 7th Edition (2009) for birds. The methodology (including any applicable survey protocols) utilized to conduct general surveys, habitat assessments, and/or focused surveys for special-status animals are included below.

2.3.1 General Surveys

Birds

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

Mammals

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

Reptiles and Amphibians

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

2.3.2 Special-Status Animal Species Reviewed

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

2.3.3 Habitat Assessment for Special Status Animal Species

GLA biologist David Smith conducted a habitat assessment for special-status animal species on March 12, 2019. An aerial photograph, soil map and/or topographic map were used to determine the community types and other physical features that may support special-status and uncommon taxa within the Project Study Area.

2.3.4 Focused Surveys for Special-Status Animals Species

Focused surveys were conducted for coastal California gnatcatcher.

Coastal California Gnatcatcher

GLA biologist Jeff Ahrens (TE 052159-5) conducted focused surveys for the coastal California gnatcatcher (*Polioptila californica californica*) for all suitable habitat areas within the Project Study Area. Surveys were conducted in accordance with the 1997 USFWS survey guidelines, which during the breeding season (March 15 through June 30) require a minimum of six surveys (per survey polygon) with at least one week separating each survey visit. The survey guidelines limit individual biologists to surveying a maximum of 80 acres per day. The Project Study Area contains approximately 0.99 acres of suitable habitat (brittle bush scrub, California brittle bush scrub, and coast prickly pear scrub) for the gnatcatcher. Therefore, the survey area was divided into 1 survey polygon.

Focused surveys were conducted on March 21 and 28, April 9, May 14, and June 15 and 25, 2019. Pursuant to the survey guidelines, the surveys were conducted between sunrise and 12:00 p.m. Weather conditions during the surveys were conducive to a high level of bird activity. Table 2-2 summarizes the gnatcatcher survey visits. The results of the gnatcatcher surveys are documented in Section 4.0 of this report, and in Appendix C. A graphic depicting the survey area is provided as Exhibt7.

Table 2-2. Summary of Coastal California Gnatcatcher Surveys

Survey Date	Biologist	Start/End Time	Start/End Temperature	Start/End Wind Speed (mph)	Cloud Cover
3/21/2019	JA	0645/1040	49°F/52°F	1-3/1-3	Clouded
3/28/2019	JA	0620/0940	60°F/58°F	1-2/1-2	Partly Clouded
4/9/2019	JA	0730/0945	60°F/67°F	2-4/1-3	Clear
5/14/2019	JA	0530/0930	59°F/65°F	1-3/2-3	Partly Clouded
6/15/2019	JA	0540/0820	63°F/66°F	1-3/0-4	Clouded
6/25/2019	JA	0550/0820	62°F/63°F	0-1/1-3	Clouded

2.4 Jurisdictional Delineation

Prior to beginning the field delineation a 200-scale color aerial photograph and the previously cited USGS topographic maps were examined to determine the locations of potential areas of Corps/Regional Board/CDFW jurisdiction. Suspected jurisdictional areas were field checked for the presence of definable channels and/or wetland vegetation, soils and hydrology. Potential wetland habitats at the subject site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual[1] (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement)[2]. The presence of an Ordinary High Water Mark (OHWM) was determined using the 2008 Field Guide to Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States[3] in conjunction with the Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States.[4] While in the field the limits of the OHWM, wetlands, and CDFW jurisdiction were recorded using GPS technology and/or on copies of the aerial photography. Other data were recorded onto the appropriate datasheets. The results of the Jurisdictional Delineation are depicted on Exhibit 6A and Exhibit 6B. Jurisdictional delineation field studies and analyses were limited to the Project site.

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

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

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

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

3.0 REGULATORY SETTING

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

3.1 State and/or Federally Listed Plants or Animals

3.1.1 State of California Endangered Species Act

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

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

3.1.2 Federal Endangered Species Act

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

3.1.3 State and Federal Take Authorizations for Listed Species

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

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

3.2 California Environmental Quality Act

3.2.1 CEQA Guidelines Section 15380

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

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

Federally Designated Special-Status Species

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

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

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

State-Designated Special-Status Species

Some mammals and birds are protected by the state as Fully Protected (SFP) Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively. California SSC are designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. This list is primarily a working document for the CDFW's CNDDB project. Informally listed taxa are not protected, but warrant

consideration in the preparation of biotic assessments. For some species, the CNDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites.

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

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

California Native Plant Society

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

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

CNPS Rank	Comments
Rank 1A – Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere	Thought to be extinct in California based on a lack of observation or detection for many years.
Rank 1B – Plants Rare, Threatened, or Endangered in California and Elsewhere	Species, which are generally rare throughout their range that are also judged to be vulnerable to other threats such as declining habitat.
Rank 2A – Plants presumed Extirpated in California, But Common Elsewhere	Species that are presumed extinct in California but more common outside of California
Rank 2B – Plants Rare, Threatened or Endangered in California, But More Common Elsewhere	Species that are rare in California but more common outside of California
Rank 3 – Plants About Which More Information Is Needed (A Review List)	Species that are thought to be rare or in decline but CNPS lacks the information needed to assign to the appropriate list. In most instances, the extent of surveys for these species is not sufficient to allow CNPS to accurately assess whether these species should be assigned to a specific rank. In addition, many of the Rank 3 species have associated taxonomic problems such that the validity of their current taxonomy is unclear.

Rank 4 – Plants of Limited Distribution (A Watch List)	Species that are currently thought to be limited in distribution or range whose vulnerability or susceptibility to threat is currently low. In some cases, as noted above for Rank 3 species, CNPS lacks survey data to accurately determine status in California. Many species have been placed on Rank 4 in previous editions of the "Inventory" and have been removed as survey data has indicated that the species are more common than previously thought. CNPS recommends that species currently included on this list should be monitored to ensure that future substantial declines are minimized.
Extension	**Comments**
.1 – Seriously endangered in California	Species with over 80% of occurrences threatened and/or have a high degree and immediacy of threat.
.2 – Fairly endangered in California	Species with 20-80% of occurrences threatened.
.3 – Not very endangered in California	Species with <20% of occurrences threatened or with no current threats known.

3.3 Jurisdictional Waters

3.3.1 Army Corps of Engineers

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a), pursuant to the *Navigable Waters Protection Rule*[5] (NWPR), as:

(a) Jurisdictional waters. For purposes of the Clean Water Act, 33 U.S.C. 1251 *et seq.* and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term ''waters of the United States'' means:

(1) The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;
(2) Tributaries;
(3) Lakes and ponds, and impoundments of jurisdictional waters; and
(4) Adjacent wetlands.

(b) Non-jurisdictional waters. The following are not ''waters of the United States'':

(1) Waters or water features that are
not identified in paragraph (a)(1), (2), (3), or (4) of this section;
(2) Groundwater, including groundwater drained through subsurface drainage systems;
(3) Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;
(4) Diffuse stormwater run-off and directional sheet flow over upland;
(5) Ditches that are not waters identified in paragraph (a)(1) or (2) of this section, and those portions of ditches constructed in waters identified in paragraph (a)(4) of this section that do not satisfy the conditions of paragraph (c)(1) of this section;

[5] U.S. Environmental Protection Agency & Department of Defense. 2020. Federal Register / Vol. 85, No. 77 / Tuesday, April 21, 2020 / Rules and Regulations.

(6) Prior converted cropland;
(7) Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease;
(8) Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of paragraph (c)(6) of this section;
(9) Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;
(10) Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;
(11) Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and
(12) Waste treatment systems.

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

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

1. Wetland Definition Pursuant to Section 404 of the Clean Water Act

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

* More than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the Arid West 2016 Regional Wetland Plant List[6],[7]);

[6] Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. Arid West 2016 Regional Wetland Plant List. Phytoneuron 2016-30: 1-17. Published 28 April 2016.
[7] Note the Corps also publishes a National List of Plant Species that Occur in Wetlands (Lichvar, R.W., D.L. Banks, W.N. Kirchner, and N.C. Melvin. 2016. The National Wetland Plant List: 2016 wetland ratings. Phytoneuron 2016-

* Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and

* Whereas the Wetland Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with "problematic hydrophytic vegetation", which require a minimum of 14 days of ponding to be considered a wetland.

3.3.2 Regional Water Quality Control Board

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

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

1. State Wetland Definition

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

30: 1-17. Published 28 April 2016.); however, the Regional Wetland Plant List should be used for wetland delineations within the Arid West Region.

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

The following wetlands are waters of the State:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;*[9] *and*
3. *Artificial wetlands*[10] *that meet any of the following criteria:*

a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
b. Specifically identified in a water quality control plan as a wetland or other water of the state;
c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):

i. Industrial or municipal wastewater treatment or disposal,
ii. Settling of sediment,
iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
iv. Treatment of surface waters,
v. Agricultural crop irrigation or stock watering,
vi. Fire suppression,
vii. Industrial processing or cooling,
viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
ix. Log storage,
x. Treatment, storage, or distribution of recycled water, or
xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or
xii. Fields flooded for rice growing.[11]

[9] "Created by modification of a surface water of the state" means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically, but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.
[10] Artificial wetlands are wetlands that result from human activity.
[11] Fields used for the cultivation of rice (including wild rice) that have not been abandoned due to five consecutive years of non-use for the cultivation of rice (including wild rice) that are determined to be a water of the state in accordance with these Procedures shall not have beneficial use designations applied to them through the Water Quality Control Plan for the Sacramento and San Joaquin River Basins, except as otherwise required by federal law for fields that are considered to be waters of the United States. Further, agricultural inputs legally applied to fields used for the cultivation of rice (including wild rice) shall not constitute a discharge of waste to a water of the state. Agricultural inputs that migrate to a surface water or groundwater may be considered a discharge of waste and are

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

3.3.3 California Department of Fish and Wildlife

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

CDFW defines a stream (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW also defines a stream as “a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators.”

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

4.0 RESULTS

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

4.1 Existing Conditions

The Project Study Area occurs north Fairmont Boulevard, east of Rimcrest Drive, south of South Ridge Trail, and west of Fairmont Boulevard and Little Canyon Lane. The topography consists of various canyons sloping downwards from north to south with elevation on the site ranging from 794 feet above mean sea level (amsl) to 1,028 feet amsl. Based on a review of satellite images dating back to 1994, parts of the site have been subject to human disturbances, such as the establishment of utility easements for the Yorba Linda Water District and Southern California Edison, including associated roads and annual mowing associated with fuel modification zones.

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subject to waste discharge requirements or waivers of such requirements pursuant to the Water Board’s authority to issue or waive waste discharge requirements or take other actions as applicable.

The majority of the site, though primarily dominated by non-native vegetation, has not been subject to recent human disturbance.

The Project Site is located on an eastern portion of the Project Study Area and comprises approximately 14.20 acres.

Soils on within the Project Study Area are mapped primarily as clay loam, with a few small points of clay and sandy loam.

The Project Study Area contains approximately three unnamed drainage features, two of which originate within the Project Study Area. One of the drainage features occurs within the Project Site. Refer to Section 4.10 for additional details.

4.2 Vegetation

During vegetation mapping of the Project Study Area, 9 different vegetation alliances/land use types were identified. Table 4-1 provides a summary of vegetation alliances/land uses and the corresponding acreage. Detailed descriptions of each vegetation type follow the table. A Vegetation Map is attached as Exhibit 4. Photographs depicting the various vegetation types and land uses are attached as Exhibit 5.

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

VEGETATION ALLIANCES/ LAND USE TYPE	ACREAGE
Brittle Bush Scrub	0.08
California Brittle Bush Scrub	0.65
Coast Prickly Pear Scrub	0.26
Developed	0.36
Disturbed	1.11
Laurel Sumac Scrub	1.44
Ornamental Plantings	3.29
Tree Tobacco Stands	1.96
Upland Mustards	33.49
TOTAL	**42.65***

*Totals may differ slightly due to rounding errors

Brittle Bush Scrub
This vegetation area is located on the eastern end of the Project. The Project Study Area supports approximately 0.08 acres of brittle bush scrub, which is dominated by brittlebush (*Encelia farinosa*). Other native species found within this area includes bush sunflower (*Encelia californica*), white sage (*Salvia apiana*), California sagebrush (*Artemisia californica*), laurel sumac (*Malosma laurina*), purple sage (*Salvia leucophylla*), and desert wishbone bush (*Mirabilis laevis*). Non-native species within this area include black mustard (*Brassica nigra*), garland chrysanthemum (*Glebionis coronaria*), and long-stemmed filaree (*Erodium botrys*).

California Brittle Bush Scrub
This vegetation area is located on the southern central portion of the Project. The Project Study Area supports approximately 0.65 acres of California brittle bush scrub, which is dominated by bush sunflower and California sagebrush. Additional native species include laurel sumac, purple sage and brittlebush. Non-native species within this area include black mustard, garland chrysanthemum, and long-stemmed filaree.

Coast Prickly Pear Scrub
This vegetation area is located on the western portion of the Project. The Project Study Area supports approximately 0.26 acres of coast prickly pear scrub, which is dominated by coast prickly pear (*Opuntia littoralis*). Additional native species include California sagebrush, laurel sumac, blue elderberry (*Sambucus nigra* ssp. *caerula*), bush mallow (*Malacothamnus fasciculatus*), and California buckwheat (*Eriogonum fasciculatum*). Non-native species within this area include black mustard, mission fig (*Opuntia ficus-indica*), Russian thistle (*Salsola tragus*), and Peruvian pepper (*Schinus molle*).

Developed
This land-use area is in the eastern end of the Project. The Project Study Area supports approximately 0.36 acres of developed areas, consisting of a paved road leading up to a disturbed pad area.

Disturbed
This land-use area is in the northern portion of the eastern third of the Project. The Project Study Area supports approximately 1.11 acres of disturbed lands, consisting of relatively bare areas associated with fuel modification zones near residences and a pad containing a water storage facility. Unlike the developed areas, these areas contain herbaceous vegetation consisting primarily of non-native grasses such as Bermuda grass (*Cynodon dactylon*) and red brome (*Bromus madritensis* ssp. *rubens*), as well as other non-native species such as long-stemmed filaree.

Laurel Sumac Scrub
This vegetation area is located on the eastern third of the Project Study Area within a large drainage feature. The Project Study Area supports approximately 1.44 acres of laurel sumac scrub, which is dominated by laurel sumac. Additional native species within this area include California sagebrush, toyon (*Heteromeles arbutifolia*), poison oak (*Toxicodendron diversilobum*), blue elderberry, black sage (*Salvia mallifera*), giant wild rye (*Elymus condensatus*), and bush mallow. Non-native species within this area include black mustard, garland chrysanthemum, and Mexican fan palm (*Washingtonia robusta*).

Ornamental Plantings
These areas occur adjacent to the existing residential developments on the southern side of the Project. The Project Study Area supports approximately 3.29 acres of ornamental planting, which are dominated primarily by Peruvian pepper tree in the west, ornamental acacia (*Acacia* sp.) in the central area and maintained grassland in the east.

Tree Tobacco Stands
These vegetation areas are located within the eastern and western drainages of the Project. The Project Study Area supports approximately 1.96 acres of tree tobacco stands, dominated by tree tobacco (*Nicotiana glauca*), a non-native species. Native species within this area includes laurel sumac, blue elderberry and a single arroyo willow (*Salix lasiolepis*) in the western drainage. Additional non-native species within this area include black mustard and garland chrysanthemum.

Upland Mustards
The majority of the Project Study Area is dominated by this vegetation type. The Project Study Area supports approximately 33.49 acres of upland mustards, which are heavily dominated by black mustard growing to a height in excess of eight feet. The native shrubs and trees within this area are in small clumps or are individuals and include laurel sumac and blue elderberry. Native herbaceous species have been mostly excluded, with only a few individuals of wild cucumber (*Marah watsonii*), lupine (*Lupinus* sp.), prickly pear, loco weed (*Astragalus gambelianus*), blue dicks (*Dichelostemma capitatum*), and horseweed (*Erigeron canadensis*) present. Additional non-native species in this area include garland chrysanthemum, shortpod mustard (*Hirschfeldia incana*), long-stemmed filaree, yellow sweetclover (*Melilotus indicus*), tocalote (*Centaurea melitensis*), acacia (*Acacia* sp.), pine (*Pinus* sp.), fennel (*Foeniculum vulgare*), gum (*Eucalyptus* sp.), Peruvian pepper, non-native oats (*Avena* sp.), dwarf nettle (*Urtica urens*), spiny sowthistle (*Sonchus asper*), California burclover (*Medicago polymorpha*), ripgut brome (*Bromus diandrus*), and milk thistle (*Silybum marianum*).

4.3 Wildlife

A total of 44 faunal species were detected within the Project Study Area, none of which are special status species. A list of species detected is included as Appendix B.

4.4 Special-Status Vegetation Communities (Habitats)

The CNDDB identifies the following 10 special-status vegetation communities for the Anaheim, Baldwin Park, Black Star Canyon, La Habra, Ontario, Orange, Prado Dam, San Dimas, and Yorba Linda quadrangle maps: Southern California Arroyo Chub/Santa Ana Sucker Stream, Riversidian Alluvial Fan Sage Scrub, Southern Coast Live Oak Riparian Forest, Southern Cottonwood Willow Riparian Forest, Southern Sycamore Alder Riparian Woodland, Southern Riparian Scrub, Southern Willow Scrub, California Walnut Woodland, Walnut Forest, and Southern Interior Cypress Forest. The Project Study Area does not contain any special-status vegetation types, including those identified by the CNDDB.

4.5 Special-Status Plants

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

Table 4-2. Special-Status Plants Evaluated for the Project Study Area

Status

Federal
FE – Federally Endangered
FT – Federally Threatened
FC – Federal Candidate

State
SE – State Endangered
ST – State Threatened

CNPS
Rank 1A – Plants presumed extirpated in California and either rare or extinct elsewhere.
Rank 1B – Plants rare, threatened, or endangered in California and elsewhere.
Rank 2A – Plants presumed extirpated in California, but common elsewhere.
Rank 2B – Plants rare, threatened, or endangered in California, but more common elsewhere.
Rank 3 – Plants about which more information is needed (a review list).
Rank 4 – Plants of limited distribution (a watch list).

CNPS Threat Code extension
.1 – Seriously endangered in California (over 80% occurrences threatened)
.2 – Fairly endangered in California (20-80% occurrences threatened)
.3 – Not very endangered in California (<20% of occurrences threatened or no current threats known)

Occurrence

- Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.
- Present – The species was detected onsite incidentally or through focused surveys.

Species Name	Status	Habitat Requirements	Occurrence
Allen's pentachaeta *aurea* ssp. *allenii*	Federal: None State: None CNPS: Rank 1B.1	Openings in coastal sage scrub, and valley and foothill grasslands.	Not expected to occur due to the disturbed nature of the site.

Species Name	Status	Habitat Requirements	Occurrence
Brand's star phacelia *Phacelia stellaris*	Federal: None State: None CNPS: Rank 1B.1	Coastal dunes and coastal sage scrub.	Not expected to occur due to the disturbed nature of the site.
Braunton's milk-vetch *Astragalus brauntonii*	Federal: FE State: None CNPS: Rank 1B.1	Closed-cone coniferous forest, chaparral, coastal sage scrub, valley and foothill grassland. Usually carbonate soils. Recent burn or disturbed areas.	Does not occur due to a lack of suitable soils.
California beardtongue *Penstemon californicus*	Federal: None State: None CNPS: Rank 1B.2	Sandy soils in chaparral, lower montane coniferous forest, and pinyon and juniper woodland.	Does not occur due to a lack of suitable habitat.
California muhly *Muhlenbergia californica*	Federal: None State: None CNPS: Rank 4.3	Mesic habitats, including seeps and streambanks, in chaparral, coastal scrub, lower montane coniferous forest, and meadows.	Does not occur due to a lack of suitable habitat.
California saw-grass *Cladium californicum*	Federal: None State: None CNPS: Rank 2B.2	Meadows and seeps, and alkaline or freshwater marshes and swamps.	Does not occur due to a lack of suitable habitat.
Chaparral nolina *cismontana*	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub. Occurring on sandstone or gabbro substrates.	Does not occur due to a lack of suitable soils.
Chaparral ragwort *Senecio aphanactis*	Federal: None State: None CNPS: Rank 2B.2	Chaparral, cismontane woodland, coastal scrub. Sometimes associated with alkaline soils.	Does not occur due to a lack of suitable soils.
Chaparral sand-verbena *Abronia villosa* var. *aurita*	Federal: None State: None CNPS: Rank 1B.1	Sandy soils in chaparral, coastal sage scrub.	Does not occur due to a lack of suitable soils.
Coulter's goldfields *Lasthenia glabrata* ssp. *coulteri*	Federal: None State: None CNPS: Rank 1B.1	Playas, vernal pools, marshes and swamps (coastal salt).	Does not occur due to a lack of suitable hydrology.
Coulter's saltbush *Atriplex coulteri*	Federal: None State: None CNPS: Rank 1B.2	Coastal bluff scrub, coastal dunes, coastal sage scrub, valley and foothill grassland. Occurring on alkaline or clay soils.	Not expected to occur due to the disturbed nature of the site.
Gambel's water cress *Nasturtium gambelii*	Federal: FE State: ST CNPS: Rank 1B.1	Marshes and swamps (freshwater or brackish).	Does not occur due to a lack of suitable hydrology.
Heart-leaved pitcher sage *Lepechinia cardiophylla*	Federal: None State: None CNPS: Rank 1B.2	Closed-cone coniferous forest, chaparral, and cismontane woodland.	Does not occur due to a lack of suitable habitat.
Intermediate mariposa-lily *Calochortus weedii* var. *intermedius*	Federal: None State: None CNPS: Rank 1B.2	Rocky soils in chaparral, coastal sage scrub, valley and foothill grassland.	Does not occur due to a lack of suitable soils.

Species Name	Status	Habitat Requirements	Occurrence
Intermediate monardella *hypoleuca ssp.intermedia*	Federal: None State: None CNPS: Rank 1B.3	Usually in the understory of chaparral, cismontane woodland, and lower montane coniferous forest (sometimes)	Does not occur due to a lack of suitable habitat.
Jokerst's monardella *Monardella australis* ssp. *jokerstii*	Federal: None State: None CNPS: Rank 1B.1	Steep scree or talus slopes between breccia, secondary alluvial benches along drainages and washes. Chaparral, lower montane coniferous forest.	Does not occur due to a lack of suitable habitat.
Long-spined spineflower *Chorizanthe polygonoides* var. *longispina*	Federal: None State: None CNPS: Rank 1B.2	Clay soils in chaparral, coastal sage scrub, meadows and seeps,and valley and foothill grasslands	Not expected to occur due to the disturbed nature of the site.
Lucky morning-glory *Calystegia felix*	Federal: None State: None CNPS: Rank 3.1	Historically associated with wetland and marshy places, but possibly in drier situations as well. Possibly silty loam and alkaline soils. Meadows and seeps (sometimes alkaline), riparian scrub (alluvial).	Does not occur due to a lack of suitable habitat.
Malibu baccharis *Baccharis malibuensis*	Federal: None State: None CNPS: Rank 1B.1	Chaparral, cismontane woodland, coastal sage scrub.	Not expected to occur due to the disturbed nature of the site.
Many-stemmed dudleya *Dudleya multicaulis*	Federal: None State: None CNPS: Rank 1B.2	Chaparral, coastal sage scrub, valley and foothill grassland. Often occurring in clay soils.	Not expected to occur due to the disturbed nature of the site.
Mesa horkelia *cuneata* var. *puberula*	Federal: None State: None CNPS: Rank 1B.1	Sandy or gravelly soils in chaparral (maritime), cismontane woodland, and coastal scrub.	Does not occur due to a lack of suitable soils.
Nevin's barberry *Berberis nevinii*	Federal: FE State: SE CNPS: Rank 1B.1	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian scrub.	Does not occur due to a lack of suitable soils.
Parish's brittlescale *Atriplex parishii*	Federal: None State: None CNPS: Rank 1B.1	Chenopod scrub, playas, vernal pools.	Does not occur due to a lack of suitable habitat.
Plummer's mariposa lily *Calochortus plummerae*	Federal: None State: None CNPS: Rank 4.2	Granitic, rock soils within chaparral, cismontane woodland, coastal sage scrub, lower montane coniferous forest, valley and foothill grassland.	Does not occur due to a lack of suitable soils.
Prostrate vernal pool navarretia *Navarretia prostrata*	Federal: None State: None CNPS: Rank 1B.1	Coastal sage scrub, valley and foothill grassland (alkaline), vernal pools. Occurring in mesic soils.	Does not occur due to a lack of suitable soils.
Rigid fringepod *Thysanocarpus rigidus*	Federal: None State: None CNPS: Rank 1B.2	Dry rocky slopes in pinyon and juniper woodland.	Does not occur due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Robinson's pepper grass *Lepidium virginicum* var. *robinsonii*	Federal: None State: None CNPS: Rank 4.3	Chaparral, coastal sage scrub	Not expected to occur due to the disturbed nature of the site.
Salt Spring checkerbloom *Sidalcea neomexicana*	Federal: None State: None CNPS: Rank 2B.2	Mesic, alkaline soils in chaparral, coastal sage scrub, lower montane coniferous forest, Mojavean desert scrub, and playas.	Does not occur due to a lack of suitable soils.
San Bernardino aster *Symphyotrichum defoliatum*	Federal: None State: None CNPS: Rank 1B.2	Cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic).	Not expected to occur due to the disturbed nature of the site.
San Fernando Valley spineflower *Chorizanthe parryi* var. *fernandina*	Federal: Candidate State: SE CNPS: Rank 1B.1	Coastal sage scrub, occurring on sandy soils.	Does not occur due to a lack of suitable soils.
Santa Ana River woolly star *Eriastrum densifolium* ssp. *sanctorum*	Federal: FE State: SE CNPS: Rank 1B.1	Alluvial fan sage scrub, chaparral. Occurring on sandy or rocky soils.	Does not occur due to a lack of suitable habitat.
Slender-horned spineflower *Dodecahema leptoceras*	Federal: FE State: SE CNPS: Rank 1B.1	Sandy soils in alluvial scrub, chaparral, cismontane woodland.	Does not occur due to a lack of suitable habitat.
Smooth tarplant *Centromadia pungens* ssp. *laevis*	Federal: None State: None CNPS: Rank 1B.1	Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, disturbed habitats.	Does not occur due to a lack of suitable habitat.
Southern tarplant *Centromadia parryi* ssp. *australis*	Federal: None State: None CNPS: Rank 1B.1	Disturbed habitats, margins of marshes and swamps, vernally mesic valley and foothill grassland, vernal pools.	Does not occur due to a lack of suitable hydrology.
Tecate cypress *Hesperocyparis forbesii*	Federal: None State: None CNPS: Rank 1B.1	Closed-cone coniferous forest, chaparral.	Does not occur due to a lack of suitable habitat.
White rabbit-tobacco *Pseudognaphalium leucocephalum*	Federal: None State: None CNPS: Rank 2B.2	Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, and riparian woodland.	Does not occur due to a lack of suitable soils.

4.5.1 Special-Status Plants Detected at the Project Study Area

No special status plants were detected at the Project Study Area.

4.6 Special-Status Animals

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

Table 4-3. Special Status Animals Evaluated for the Project Study Area

Status

Federal	**State**
FE – Federally Endangered	SE – State Endangered
FT – Federally Threatened	ST – State Threatened
FPT – Federally Proposed Threatened	SC– State Candidate
FC – Federal Candidate	CFP – California Fully-Protected Species
BGEPA– Bald and Golden Eagle Protection Act	SSC – Species of Special Concern

Western Bat Working Group (WBWG)
H – High Priority
LM – Low-Medium Priority
M – Medium Priority
MH – Medium-High Priority

Occurrence

- Does not occur – The site does not contain habitat for the species and/or the site does not occur within the geographic range of the species.
- Absent – The site contains suitable habitat for the species, but the species has been confirmed absent through focused surveys.
- Not expected to occur – The species is not expected to occur onsite due to low habitat quality, however absence cannot be ruled out.
- Potential to occur – The species has a potential to occur onsite based on suitable habitat, however its presence/absence could not be confirmed.
- Present – The species was detected onsite incidentally or through focused surveys.

Species Name	Status	Habitat Requirements	Occurrence
Invertebrates			
Quino checkerspot butterfly *Euphydryas editha quino*	Federal: FE State: None	Larval and adult phases each have distinct habitat requirements tied to host plant species and topography. Larval host plants include *Plantago erecta* and *Castilleja exserta*. Adults occur on sparsely vegetated rounded hilltops and ridgelines, and are known to disperse through disturbed habitats to reach suitable nectar plants.	Does not occur on site due to a lack of suitable habitat.
San Diego fairy shrimp *Branchinecta sandiegonensis*	Federal: FE State: None	Seasonal vernal pools	Does not occur on site due to a lack of suitable habitat.
Fish			
Arroyo chub *Gila orcutti*	Federal: None State: SSC	Slow-moving or backwater sections of warm to cool streams with substrates of sand or mud.	Does not occur on site due to a lack of suitable habitat.
Santa Ana sucker *Catostomus santaanae*	Federal: FT State: None	Small, shallow streams, less than 7 meters in width, with currents ranging from swift in the canyons to sluggish in the bottom lands. Preferred substrates are generally coarse and consist of gravel, rubble, and boulders with growths of filamentous algae, but occasionally they are found on sand/mud substrates.	Does not occur on site due to a lack of suitable habitat.
Southern steelhead - southern California DPS *Oncorhynchus mykiss irideus*	Federal: FE State: None	Clear, swift moving streams with gravel for spawning. Federal listing refers to populations from Santa Maria river south to southern extent of range (San Mateo Creek in San Diego county.)	Does not occur on site due to a lack of suitable habitat.
Amphibians			
Coast Range newt *Taricha torosa*	Federal: None State: SSC	Found in wet forests, oak forests, chaparral, and rolling grasslands. In southern California, drier chaparral, oak woodland, and grasslands are used.	Does not occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Northern leopard frog *Lithobates pipiens*	Federal: None State: SSC	Inhabits grassland, wet meadows, potholes, forests, woodland, brushlands, springs, canals, bogs, marshes, reservoirs. Generally prefers permanent water with abundant aquatic vegetation.	Does not occur on site due to a lack of suitable habitat.
Western spadefoot *Spea hammondii*	Federal: None State: SSC	Seasonal pools in coastal sage scrub, chaparral, and grassland habitats.	Does not occur on site due to a lack of suitable habitat.
Reptiles			
California glossy snake *Arizona elegans occidentalis*	Federal: None State: SSC	Inhabits arid scrub, rocky washes, grasslands, chaparral.	Does not occur on site due to a lack of suitable habitat.
Coastal whiptail *Aspidoscelis tigris stejnegeri (multiscutatus)*	Federal: None State: SSC	Open, often rocky areas with little vegetation, or sunny microhabitats within shrub or grassland associations.	Does not occur on site due to a lack of suitable habitat.
Coast horned lizard *Phrynosoma blainvillii*	Federal: None State: SSC	Occurs in a variety of vegetation types including coastal sage scrub, chaparral, annual grassland, oak woodland, and riparian woodlands.	Not expected to occur on site due to low quality habitat.
Coast patch-nosed snake *Salvadora hexalepis virgultea*	Federal: None State: SSC	Occurs in coastal chaparral, desert scrub, washes, sandy flats, and rocky areas.	Does not occur on site due to a lack of suitable habitat.
Red-diamond rattlesnake *Crotalus ruber*	Federal: None State: SSC	Habitats with heavy brush and rock outcrops, including coastal sage scrub and chaparral.	Not expected to occur on site due to low quality habitat.
Southern California legless lizard *Anniella stebbinsi*	Federal: None State: SSC	Broadleaved upland forest, chaparral, coastal dunes, coastal scrub; found in a broader range of habitats that any of the other species in the genus. Often locally abundant, specimens are found in coastal sand dunes and a variety of interior habitats, including sandy washes and alluvial fans	Does not occur on site due to a lack of suitable habitat.
Two-striped garter snake *Thamnophis hammondii*	Federal: None State: SSC	Aquatic snake typically associated with wetland habitats such as streams, creeks, and pools.	Does not occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Western pond turtle *Emys marmorata*	Federal: None State: SSC	Slow-moving permanent or intermittent streams, small ponds and lakes, reservoirs, abandoned gravel pits, permanent and ephemeral shallow wetlands, stock ponds, and treatment lagoons. Abundant basking sites and cover necessary, including logs, rocks, submerged vegetation, and undercut banks.	Does not occur on site due to a lack of suitable habitat.
Birds			
American peregrine falcon (nesting) *Falco peregrinus anatum*	Federal: Delisted, BCC State: Delisted, FP	Breeding habitat consists of high cliffs, tall buildings, and bridges along the coast and inland. Foraging habitat primarily includes open areas near wetlands, marshes, and adjacent urban landscapes.	Not expected to occur or forage on site due to low quality habitat.
Bald eagle (nesting & wintering) *Haliaeetus leucocephalus*	Federal: Delisted State: SE, FP	Primarily in or near seacoasts, rivers, swamps, and large lakes. Perching sites consist of large trees or snags with heavy limbs or broken tops.	Does not occur on site due to a lack of suitable habitat.
Burrowing owl (burrow sites & some wintering sites) *Athene cunicularia*	Federal: BCC State: SSC	Shortgrass prairies, grasslands, lowland scrub, agricultural lands (particularly rangelands), coastal dunes, desert floors, and some artificial, open areas as a year-long resident. Occupies abandoned ground squirrel burrows as well as artificial structures such as culverts and underpasses.	Does not occur on site due to a lack of suitable habitat.
California black rail *Laterallus jamaicensis coturniculus*	Federal: BCC State: ST, FP	Nests in high portions of salt marshes, shallow freshwater marshes, wet meadows, and flooded grassy vegetation.	Does not occur on site due to a lack of suitable habitat.
California least tern (nesting colony) *Sterna antillarum browni*	Federal: FE State: SE, FP	Flat, vegetated substrates near the coast. Occurs near estuaries, bays, or harbors where fish is abundant.	Does not occur on site due to a lack of suitable habitat.
Coastal cactus wren (San Diego & Orange County only)	Federal: BCC State: SSC	Occurs almost exclusively in cactus (cholla and	Not expected to occur on site due to the limited size of suitable habitat on site.

Species Name	Status	Habitat Requirements	Occurrence
Campylorhynchus brunneicapillus sandiegensis		prickly pear) dominated coastal sage scrub.	
Coastal California gnatcatcher *Polioptila californica*	Federal: FT State: SSC	Low elevation coastal sage scrub and coastal bluff scrub.	Confirmed absent through focused surveys.
Golden eagle (nesting & wintering) *Aquila chrysaetos*	Federal: BCC State: WL, FP	In southern California, occupies grasslands, brushlands, deserts, oak savannas, open coniferous forests, and montane valleys. Nests on rock outcrops and ledges.	Low potential to forage on site.
Grasshopper sparrow (nesting) *Ammodramus savannarum*	Federal: None State: SSC	Open grassland and prairies with patches of bare ground.	Does not occur on site due to a lack of suitable habitat.
Least Bell's vireo (nesting) *Vireo bellii pusillus*	Federal: FE State: SE	Dense riparian habitats with a stratified canopy, including southern willow scrub, mule fat scrub, and riparian forest.	Does not occur on site due to a lack of suitable habitat.
Long-eared owl (nesting) *Asio otus*	Federal: None State: SSC	Riparian habitats are required by the long-eared owl, but it also uses live-oak thickets and other dense stands of trees.	Does not occur on site due to a lack of suitable habitat.
Northern harrier (nesting) *Circus hudsonius*	Federal: None State: SSC	A variety of habitats, including open wetlands, grasslands, wet pasture, old fields, dry uplands, and croplands.	Present on site. This species was observed foraging on site. This species is not expected to nest on site due to the density of vegetation on site.
Southwestern willow flycatcher (nesting) *Empidonax traillii extimus*	Federal: FE State: SE	Riparian woodlands along streams and rivers with mature dense thickets of trees and shrubs.	Does not occur on site due to a lack of suitable habitat.
Swainson's hawk (nesting) *Buteo swainsoni*	Federal: BCC State: ST	Summer in wide open spaces of the American West. Nest in grasslands, but can use sage flats and agricultural lands. Nests are placed in lone trees.	Low potential to forage on site.
Tricolored blackbird (nesting colony) *Agelaius tricolor*	Federal: BCC State: CE, SSC	Breeding colonies require nearby water, a suitable nesting substrate, and open-range foraging habitat of natural grassland, woodland, or agricultural cropland.	Does not occur on site due to a lack of suitable habitat.
Western yellow-billed cuckoo (nesting)	Federal: FT, BCC State: SE	Dense, wide riparian woodlands with well-developed understories.	Does not occur on site due to a lack of suitable habitat.

Species Name	Status	Habitat Requirements	Occurrence
Coccyzus americanus occidentalis			
White-tailed kite (nesting) *Elanus leucurus*	Federal: None State: FP	Low elevation open grasslands, savannah-like habitats, agricultural areas, wetlands, and oak woodlands. Dense canopies used for nesting and cover.	Low potential to forage on site.
Yellow-breasted chat (nesting) *Icteria virens*	Federal: None State: SSC	Dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush with well-developed understories.	Does not occur on site due to a lack of suitable habitat.
Yellow rail *Coturnicops noveboracensis*	Federal: BCC State: SSC	Shallow marshes, and wet meadows; in winter, drier freshwater and brackish marshes, as well as dense, deep grass, and rice fields.	Does not occur on site due to a lack of suitable habitat.
Yellow warbler (nesting) *Setophaga petechia*	Federal: BCC State: SSC	Breed in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, forages in woodland, forest, and shrub habitats.	Does not occur on site due to a lack of suitable habitat.
Mammals			
American badger *Taxidea taxus*	Federal: None State: SSC	Most abundant in drier open stages of most scrub, forest, and herbaceous habitats, with friable soils.	Low potential to occur on site.
Big free-tailed bat *Nyctinomops macrotis*	Federal: None State: SSC WBWG: MH	Roost mainly in crevices and rocks in cliff situations; also utilize buildings, caves, and tree cavitites.	Does not occur on site due to a lack of suitable habitat.
Mexican long-tongued bat *Choeronycteris mexicana*	Federal: None State: SSC WBWG: H	Variety of habitats ranging from desert, montane, riparian, to pinyon-juniper habitats. Found roosting in desert canyons, deep caves, mines, or rock crevicies. Can use abandoned buildings.	Does not occur on site due to a lack of suitable habitat.
Northwestern San Diego pocket mouse *Chaetodipus fallax*	Federal: None State: SSC	Prefers sandy herbaceous areas. Coastal sage scrub, sage scrub/grassland ecotones, and chaparral.	Does not occur on site due to a lack of suitable habitat. Project Study

Species Name	Status	Habitat Requirements	Occurrence
			Area occurs outside of known range of species.
Pallid bat *Antrozous pallidus*	Federal: None State: SSC WBWG: H	Deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting.	Does not occur on site due to a lack of suitable habitat.
Pocketed free-tailed bat *Nyctinomops femorosaccus*	Federal: None State: SSC WBWG: M	Rocky areas with high cliffs in pine-juniper woodlands, desert scrub, palm oasis, desert wash, and desert riparian.	Does not occur on site due to a lack of suitable habitat.
San Bernardino kangaroo rat *Dipodomys merriami parvus*	Federal: FE State: SSC	Typically found in Riversidean alluvial fan sage scrub and sandy loam soils, alluvial fans and floodplains, and along washes with nearby sage scrub.	Does not occur on site due to a lack of suitable habitat.
San Diego black-tailed jackrabbit *Lepus californicus bennettii*	Federal: None State: SSC	Occupies a variety of habitats, but is most common among shortgrass habitats. Also occurs in sage scrub, but needs open habitats.	Does not occur on site due to a lack of suitable habitat.
San Diego desert woodrat *Neotoma lepida intermedia*	Federal: None State: SSC	Occurs in a variety of shrub and desert habitats, primarily associated with rock outcrops, boulders, cacti, or areas of dense undergrowth.	Does not occur on site due to a lack of suitable habitat.
Western mastiff bat *Eumops perotis californicus*	Federal: None State: SSC WBWG: H	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces, high buildings, trees, and tunnels.	Does not occur on site due to a lack of suitable habitat.
Western yellow bat *Lasiurus xanthinus*	Federal: None State: SSC WBWG: H	Found in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats. Roosts in trees, particularly palms. Forages over water and among trees.	Does not occur on site due to a lack of suitable habitat.

4.6.1 Special-Status Wildlife Species Observed within the Project Study Area

Northern Harrier (*Circus hudsonius*) - The northern harrier is designated as a CDFW California Species of Special Concern when nesting. The northern harrier frequents open wetlands, wet and lightly grazed pastures, old fields, dry uplands, upland prairies, mesic grasslands, drained marshlands, croplands, shrub-steppe, meadows, grasslands, open rangelands, desert sinks, fresh and saltwater emergent wetlands and is seldom found in wooded areas (Bent 1937; MacWhirter and Bildstein 1996). It uses tall grasses and forbs in wetlands, or at wetland/field borders for cover; it roosts on the ground (Bent 1937). The home range usually includes fresh water. It is mostly found in flat, or hummocky, open areas of tall, dense grasses, moist or dry shrubs, and edges for nesting, cover, and feeding (Bent 1937). While it seems to prefer to nest in the vicinity of marshes, rivers, or ponds, it may be found nesting in grassy valleys or on grass and sagebrush flats many miles from the nearest water (Call 1978).

There is approximately 33.49 acres of potential foraging habitat (Upland Mustards) on the Project Study Area. The northern harrier was detected once during surveys foraging within the upland mustards on site. This species is not expected to nest on site due to the density of onsite vegetation.

4.6.2 Special-Status Wildlife Species not Observed but with a Potential to Occur at the Project Study Area

Golden Eagle (*Aquila chrysaetos*) – The golden eagle is designated as a California Fully Protected Species and is considered a sensitive species when nesting or wintering. Range-wide, golden eagles occur locally in open country (*e.g.*, tundra, open coniferous forest, desert, barren areas), especially in hills and mountainous regions (AOU 1998). Within Southern California, the species prefers grasslands, brushlands (coastal sage scrub and sparse chaparral), deserts, oak savannas, open coniferous forests, and montane valleys (Garrett and Dunn 1981). It uses rolling foothills and mountain terrain, wide arid plateaus deeply cut by streams and canyons, open mountain slopes, and cliffs and rock outcrops. Habitat for the golden eagle is typically rolling foothills, mountain areas, sage-juniper flats, and desert within its range in California (Zeiner, *et al*. 1990).

There is approximately 33.49 acres of potential foraging habitat (Upland Mustards) on the Project Study Area. The golden eagle was not detected during surveys and has a low potential to forage within the upland mustards on site.

Swainson's Hawk (*Buteo swainsoni*) – The Swainson's hawk is designated as a state-listed threatened species. Typical habitat of the Swainson's hawk is open desert, sparse shrub lands, grassland, or cropland containing scattered, large trees or small groves. The species cannot forage in most perennial crops or in annual crops that grow much higher than native grasses, which makes prey more difficult to find (England *et al*. 1997). The species appears to increase in density as the percent of habitat in cultivation increases up to 30 percent in some areas or even up to 75 percent in North Dakota (Schmutz 1989). It roosts in large trees, but will roost on the ground if trees are not available. It nests in scattered trees within these grassland, shrubland, or agricultural landscapes especially along stream courses or in open woodlands.

There is approximately 33.49 acres of potential foraging habitat (Upland Mustards) on the Project Study Area. The Swainson's hawk was not detected during surveys and has a low potential to forage within the upland mustards on site.

White-Tailed Kite (*Elanus leucurus*) - The white-tailed kite is designated as a California Fully Protected Species and is considered a sensitive species when nesting. In California, the white-tailed kite is a common to uncommon, year-long resident in coastal and valley lowlands; rarely found away from agricultural areas (Grinnell and Miller 1944). It inhabits herbaceous and open stages of most habitats mostly in cismontane California. It has extended its range and increased numbers in California in recent decades (Eisenmann 1971). In Southern California, it also roosts in salt grass and Bermuda grass. It uses herbaceous lowlands with variable tree growth, shrubs, sparse chaparral, almost any upland with sparse cover of shrubs to grassland with a dense population of voles (Waian and Stendell 1970). Substantial groves of dense, broad-leafed deciduous trees are used for nesting and roosting (Brown and Amadon 1968).

There is approximately 33.49 acres of potential foraging habitat (Upland Mustards) on the Project Study Area. The white-tailed kite was not detected during surveys and has a low potential to forage within the upland mustards on site.

American Badger (*Taxidea taxus*) - The American badger is designated as a CDFW Species of Special Concern. The American badger prefers open areas and may also frequent brushlands with little groundcover. When inactive, occupies underground burrow. Young are born in underground burrows.

There is approximately 34.48 acres of potential habitat (Brittle bush Scrub, California Brittle Bush Scrub, Coast Prickly Pear Scrub, Upland Mustards) on the Project Study Area. The American badger was not incidentally detected during surveys and has a low potential to occur within the brittle bush scrub, California brittle bush scrub, coast prickly pear scrub, and upland mustards on site.

4.6.3 Special-Status Wildlife Species Confirmed Absent Through Focused Surveys/Evaluations at the Project Study Area

Coastal California Gnatcatcher (*Polioptila californica californica*) – The coastal California gnatcatcher (CAGN) is designated as a federally threatened species and a CDFW California Species of Special Concern. The gnatcatcher typically occurs in or near sage scrub habitat, which is a broad category of vegetation that includes the following plant communities as classified by Holland (1986): Venturan coastal sage scrub, Diegan coastal sage scrub, maritime succulent scrub, Riversidean sage scrub, Riversidean alluvial fan sage scrub, southern coastal bluff scrub, and coastal sage-chaparral scrub. Coastal sage scrub is composed of relatively low-growing, dry-season deciduous, and succulent plants. Characteristic plants of this community include California sagebrush (*Artemisia californica*), various species of sage (*Salvia* sp.), California buckwheat (*Eriogonum fasciculatum*), lemonade berry (*Rhus integrifolia*), California encelia (*Encelia californica*), and *Opuntia* spp.

There is approximately 0.99 acres of potential habitat (brittle bush scrub, California brittle bush scrub, and coast prickly pear scrub) on the Project Study Area. The coastal California gnatcatcher was not detected during focused surveys and has been confirmed absent within the Project Study Area.

4.6.4 Critical Habitat

Approximately 39.36 acre of the Project Study Area occurs within Unit 9 of the existing critical habitat for coastal California gnatcatcher designated by the U.S. Fish and Wildlife Service. No CAGN have been detected within the Study Area during protocol surveys in 2019. Additionally, primary constituent elements (PCEs) for CAGN previously noted are severely reduced or lacking due to the high degree of disturbance to native habitats, with only approximately 0.99 acres being considered suitable habitat.

4.7 Raptor Use

The Project Study Area provides suitable foraging and breeding habitat for a number of raptor species, including special-status raptors.

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

The Project Study Area provides potential foraging habitat (e.g., mature trees, shrubs) for many common raptor species, such as the red-tailed hawk, American kestrel, Cooper's hawk, and red-shouldered hawk.

The Project Study Area also provides potential foraging habitat for special status raptor species, such as the golden eagle, northern harrier, Swainson's hawk, and white-tailed kite.

4.8 Nesting Birds

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

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

Birds anticipated to nest on the Project Study Area would be those that are common to disturbed habitats, brittle bush scrubs, laurel sumac scrub, and disturbed habitats. These birds include but are not limited to mourning dove, killdeer, house finch, lesser goldfinch, bushtit, and European Starling.

4.9 Wildlife Movement

The Project Study Area contains habitat that supports a number of species of invertebrates, amphibians, reptiles, birds, and mammals, and movement on a local scale occurs throughout the surrounding vicinity as well as within the Project Study Area itself. From a regional perspective, the Project Study Area abuts existing residential developments to the west, south, and east, and connects to Chino Hills State Park to the north and is located approximately 2.6 miles northwest of the Santa Ana River.

The Chino Hills State Park General Plan (1999) includes a lengthy discussion of wildlife corridors within Chino Hills State Park (CHSP) north of the Project Study Area. As stated in the General Plan, there are three importation corridors that connect Chino Hills State Park with adjacent projected open space: (1) Coal Canyon, (2) Sonome and Tonner Canyons, and (3) the Prado Basin.

The Coal Canyon Corridor connects CHSP and surrounding Puente-Chino Hills on the north to Cleveland National Forest and the Santa Ana Mountains on the south. This corridor extends roughly west to southeast within CHSP boundaries through Brush and Water Canyons. It does not traverse the Project Study Area nor does it connect the Project Study Area to adjacent habitat areas.

The Sonome and Tonner Canyon corridors link CHSP with open space areas in Puente and Whittier Hills north and west of CHSP. These corridors also do not traverse the Project Study Area or connect it to adjacent habitat areas.

The Prado Basin corridor links CHSP with habitat within Prado Basin and the upper reaches of the Santa Area River to the east. Again, this corridor does not traverse the Project Study Area or connect it to adjacent habitat areas.

4.10 Jurisdictional Delineation

A jurisdictional delineation was performed for the Project site by GLA in April 2019 and was limited to an approximate 20-acre study area, which includes the proposed 14.20-acre Project impact area. Areas outside of the approximate 20-acre jurisdictional delineation study area were not included as part of this separate analysis. A copy of the Jurisdictional Delineation report is attached as Appendix D.

4.10.1 Corps Jurisdiction

No Corps jurisdiction is associated with the Project Site. The Project Site contains an ephemeral feature(s) that originates onsite and extends in a southerly/southwesterly direction for

approximately 970 linear feet before terminating onsite at the edge of a dirt access road located in the southeastern portion of the property. Pursuant to the *Navigable Waters Protection Rule*, ephemeral features, including ephemeral streams, swales, gullies, rills, and pools are not considered waters of the U.S. regardless of the presence or absence of an OHWM. Tributaries must satisfy the flow conditions of the definition described in 33 U.S.C. 1251 et seq. and its implementing regulations (33 CFR Part 328.3). As a result, this feature(s) is not subject to Corps jurisdiction pursuant to Section 404 of the CWA.

4.10.2 Regional Water Quality Control Board Jurisdiction

Regional Board jurisdiction associated with the Project Site totals 0.13 acre, none of which is State wetland. A total of 970 linear feet of ephemeral stream is present.

Regional Board jurisdiction contained within the Project Site is limited to one erosional feature, defined herein as Drainage A and its associated tributary (Tributary A-1). Drainage A and its associated tributary originate onsite and extend in a southerly/southwesterly direction for a collective 970 linear feet before terminating onsite at the edge of a dirt access road located in the southeastern portion of the property. This feature(s) is an ephemeral drainage characterized by the presence of erosional bed and banks and convey surface water only in direct response to precipitation (e.g., rain). Furthermore, this feature(s) terminates onsite at a dirt road (i.e. is "isolated") and does not connect to any downstream water. As a result, this feature does not meet the criteria for regulation by the Corps or Regional Board under Sections 404 and 401 of the CWA. However, since this feature conveys surface flow with the potential to support beneficial uses, it is considered a water of the State that would be regulated by the Regional Board pursuant to Section 13260 of the California Water Code (CWC)/the Porter-Cologne Act.

Drainage A and its associated tributary are generally unvegetated in the low flow channel. The banks are dominated by non-native upland species including tree tobacco (*Nicotiana glauca*), black mustard (*Brassica nigra*), and garland chrysanthemum (*Glebionis coronaria*). Native upland species are limited to a few stands of blue elderberry (*Sambucus nigra* ssp. *caerulea*).

The extent of Regional Board jurisdiction is depicted on Exhibit 6A.

4.10.3 CDFW Jurisdiction

CDFW jurisdiction associated with the Project Site totals 0.17 acre, none of which is riparian. A total of 970 linear feet of ephemeral streambed is present.

CDFW jurisdiction contained within the Project Site is limited to one erosional feature, defined herein as Drainage A and its associated tributary (Tributary A-1). Drainage A and its associated tributary originate onsite and extend in a southerly/southwesterly direction for a collective 970 linear feet before terminating onsite at the edge of a dirt access road located in the southeastern portion of the property. The feature(s) is characterized by the presence of erosional bed and banks and only conveys brief surficial flow during high storm events. The feature terminates onsite at a dirt road (i.e. is "isolated") and does not connect to any downstream water.

Drainage A and its associated tributary are generally unvegetated in the low flow channel. The banks are dominated by non-native upland species including tree tobacco (*Nicotiana glauca*), black mustard (*Brassica nigra*), and crown daisy (*Glebionis coronaria*). Native upland species are limited to a few stands of blue elderberry (*Sambucus nigra* ssp. *caerulea*).

The extent of CDFW jurisdiction is depicted on Exhibit 6B.

5.0 IMPACT ANALYSIS

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

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

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

5.1 California Environmental Quality Act (CEQA)

5.1.1 Thresholds of Significance

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

> *"Prevent the elimination of fish or wildlife species due to man's activities, ensure that fish and wildlife populations do not drop below self-perpetuating levels, and preserve for future generations representations of all plant and animal communities..."*

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

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

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

5.1.2 Criteria for Determining Significance Pursuant to CEQA

Appendix G of the 2017 State CEQA guidelines indicate that a project may be deemed to have a significant effect on the environment if the project is likely to:

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

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

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

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

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

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

5.2 Impacts to Native Vegetation

The proposed Project will not result in any impacts to native vegetation communities. The proposed Project would permanently remove 14.20 acres of disturbed habitat types, including isturbed areas, Ornamental vegetation, Tree Tobacco Stands, and Upland Mustards. Impacts to these four land covers would be less than significant under CEQA. . Table 5-1 provides a summary of vegetation community impacts and avoidance/preservation.

Table 5-1. Summary of Vegetation/Land Use Impacts

Vegetation Alliance/Land Use Type	Permanent Impacts	Avoided/ Preserved
Brittle Bush Scrub	-	0.08
California Brittle Bush Scrub	-	0.65
Coast Prickly Pear Scrub	-	0.26
Developed	0.0005-	0.36
Disturbed	0.28	0.83
Laurel Sumac Scrub	-	1.44
Ornamental	0.40	2.90
Tree Tobacco Stands	1.44	0.52
Upland Mustards	12.09	21.40
Total*	**14.20**	**28.45**

*Totals may not equal sum of individual parts due to rounding error.

5.3 Impacts to Special-Status Plants

No special-status plants are present on the Project site; thus, no impacts to these resources would occur.

5.4 Impacts to Special-Status Animals

The proposed Project will result in the loss of 12.09 acres of potential habitat (upland mustards) capable of supporting special-status species, including the following: golden eagle, northern harrier, Swainson's hawk, and white-tailed kite. The northern harrier was detected once during surveys foraging in the upland mustards onsite but is not expected to nest onsite due to the density of vegetation. The loss of 12.09 acres of upland mustards would not be a significant impact under CEQA. This is based on the degraded quality of the foraging habitat and the low number of individuals potentially affected.

The proposed Project would remove 12.09 acres of potential habitat (upland mustards) capable of supporting American badger. The loss of 12.09 acres of upland mustards would not be a significant impact under CEQA. This is based on the low quality of this habitat and a lack of incidental detection of this species during general surveys.

5.5 Impacts to Critical Habitat

The proposed Project will impact approximately 13.94 acres of lands designated as critical habitat by the USFWS. Of these areas, approximately 0.28 acres are disturbed, 0.13 acres are ornamental, 1.44 acres are tree tobacco stands, and 12.09 acres are upland mustards. Primary constituent elements (PCEs) for CAGN are severely reduced or lacking due to the high degree of disturbance to native habitats, with only approximately 0.99 acres being considered suitable habitat within the Project Study Area, and none within the Project Site.

According to the 2007 Final Rule for the Designation of Critical Habitat for the Coastal California Gnatcatcher, "*The key factor related to the adverse modification determination is whether with implementation of the proposed Federal action, the affected critical habitat would continue to serve its intended conservation role for the species, or would retain its current ability for the primary constituent elements to be functionally established."* The Project Site occurs on private property and does not support a federal nexus as impacts to the drainage on the Project Site are limited to RWQCB and CDFW jurisdiction. As such, impacts to areas designated as Critical Habitat within the Project Site are not considered to be a Federal Action. Additionally, areas within the Project Site lack the PCEs for CAGN. Additionally, no CAGN have been detected within the Study Area during protocol surveys performed in 2019. As per the definition, no adverse modification to CAGN Critical Habitat would occur. Impacts to critical habitat would be considered less than significant under CEQA.

5.6 Impacts to Nesting Birds

The project has the potential to impact active bird nests if vegetation is removed during the nesting season (February 1 to August 31). Impacts to nesting birds are prohibited by the MBTA

and California Fish and Game Code. A project-specific mitigation measure is identified in Section 6.0 of this report to avoid impacts to nesting birds. Although impacts to native birds are prohibited by MBTA and similar provisions of California Fish and Game Code, impacts to native birds by the proposed project would be considered less than significant under CEQA, as the project site does not support appropriate habitat for rookeries or other nursery sites.

5.7 Impacts to Wildlife Movement

The project does not occur within any area targeted for preservation as a wildlife corridor, and it occurs adjacent to residential development to the south. The project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species with established native resident or wildlife corridors.

Impacts to wildlife movement within the Project site would be considered less than significant under CEQA.

5.8 Impacts Associated with Local Ordinances

The project will not conflict with any local policies or ordinances protecting biological resources. As such, there will be no impact associated with local ordinances.

5.9 Impacts to Associated with Existing Conservation Plans

The project is not located within a Habitat Conservation Plan, a Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. As such, the project would have no impact on biological resources associated with such a plan.

5.10 Impacts to Jurisdictional Waters

Based on files provided by the client, the Project, as proposed, will result in impacts to approximately 0.13 acre of Regional Board jurisdiction and 0.17 acre of CDFW jurisdiction. Up to 970 linear feet of ephemeral streambed may be permanently impacted from Project activities. Impacts to jurisdiction are anticipated to occur as a result of soil borrow and/or slope grading within the site.

Impacts to waters of the State will require a Section 13260 waste discharge requirement (WDR) from the Regional Board and a Section 1600 Streambed Alteration Agreement (Agreement) from the CDFW. Additionally, no state or federally protected wetlands occur onsite.

Impacts of waters of the state would be considered less than significant under CEQA as no state or federally protected wetlands occur onsite.

5.11 Indirect Impacts to Biological Resources

In the context of biological resources, indirect effects are those effects associated with developing areas adjacent to adjacent native open space. Potential indirect effects associated

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

The Project has the potential for both temporary and permanent indirect effects. Indirect effects are less than significant with mitigation incorporated. Section 6.0 of this report identifies measures to reduce indirect effects to below a level of significance.

5.11.1 Temporary Indirect Impacts to Biological Resources

Temporary indirect impacts to biological resources as a result of Project activities include all those associated with construction activities, including noise and dust during construction. These temporary indirect impacts are less than significant under CEQA.

5.11.2 Permanent Indirect Impacts to Biological Resources

Permanent indirect impacts to biological resources include an increase in ambient light into the surrounding habitat, increased human activity in adjacent areas, a reduction in quality of habitat due to edge effects, an increase in litter or debris, and increased invasion from other non-native plants and pets.

5.12 Cumulative Impacts to Biological Resources

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

The Project Study Area provides approximately 42.65 acres of potential habitat for special-status species and species common to Orange County. As discussed in this document, the 14.20 acres proposed for removal consist of relatively disturbed lands. There are 4 special status wildlife species with potential to occur/forage on site (golden eagle, Swainson's hawk, white-tailed kite, American badger); none were detected on site. The Project Site is not expected to provide valuable habitat for any of these species due to the degraded condition of the site and the developed nature of surrounding adjacent habitat. Given the low number of individuals potentially affected, the low potential for wildlife movement given the surrounding lands, the status of each species in Orange County, and the small amount of potential habitat proposed for removal, the Project would not make a cumulatively considerable contribution to the regional decline of these species of special-status plants or wildlife. The removal of the limited number of individuals potentially on the Project Site would not be cumulatively significant to the regional population due to the small size and disturbed nature of the Project Site.

6.0 MITIGATION/AVOIDANCE MEASURES

The following section discusses actual or potential impacts to sensitive resources that would be considered potentially significant prior to mitigation. As applicable, specific mitigation measures are provided to ensure that impacts to sensitive biological resources, as a result of the Project, are less than significant after mitigation

6.1 RWQCB and CDFW Jurisdiction

Impacts to waters of the state shall be mitigated at a minimum 1:1 ratio, subject to approval of the RWQCB and CDFW, and include one, or a combination of, the following:

- On-site Preservation;
- Off-site creation, enhancement, or restoration;
- Off-site acquisition and preservation; and/or
- Purchase of credits at an agency-approved mitigation bank or in-lie fee program.

6.2 Nesting Birds

This measure is a recommendation to further reduce potential impacts to native nesting birds, as potential impacts to native nesting birds was not judged significant under CEQA. Vegetation clearing should be conducted outside of the nesting season (February 1 through August 31). If avoidance of the nesting season is not feasible, then a qualified biologist shall conduct a nesting bird survey within three days prior to any disturbance of the site, including disking, demolition activities, and grading. If active nests are identified, the biologist shall establish suitable buffers around the nests. The buffer areas shall be avoided until the nests are no longer occupied and the juvenile birds can survive independently from the nests. Because potential impacts to nesting birds from development of the site is judged not biologically significant, this measure may be superseded by CDFW nesting bird measures provided during the streambed permitting effort.

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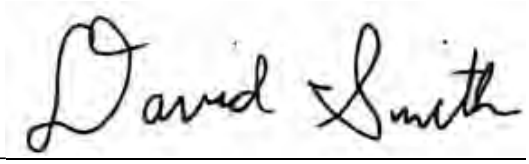
8.0 CERTIFICATION

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

Signed:  Date: November 11, 2020

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Source: ESRI World Street Map

N

0 2 4 8 Miles

HOFF PROPERTY

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1

Adapted from USGS Yorba Linda, CA quadrangle

N

0 1,000 2,000 4,000

Feet

HOFF PROPERTY

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2

Property/Project Study Area

Proposed Project Impact Area

N

0 125 250 500

Feet

1 inch = 250 feet

HOFF PROPERTY

Project Site Plan Map

GLENN LUKOS ASSOCIATES

Exhibit 3

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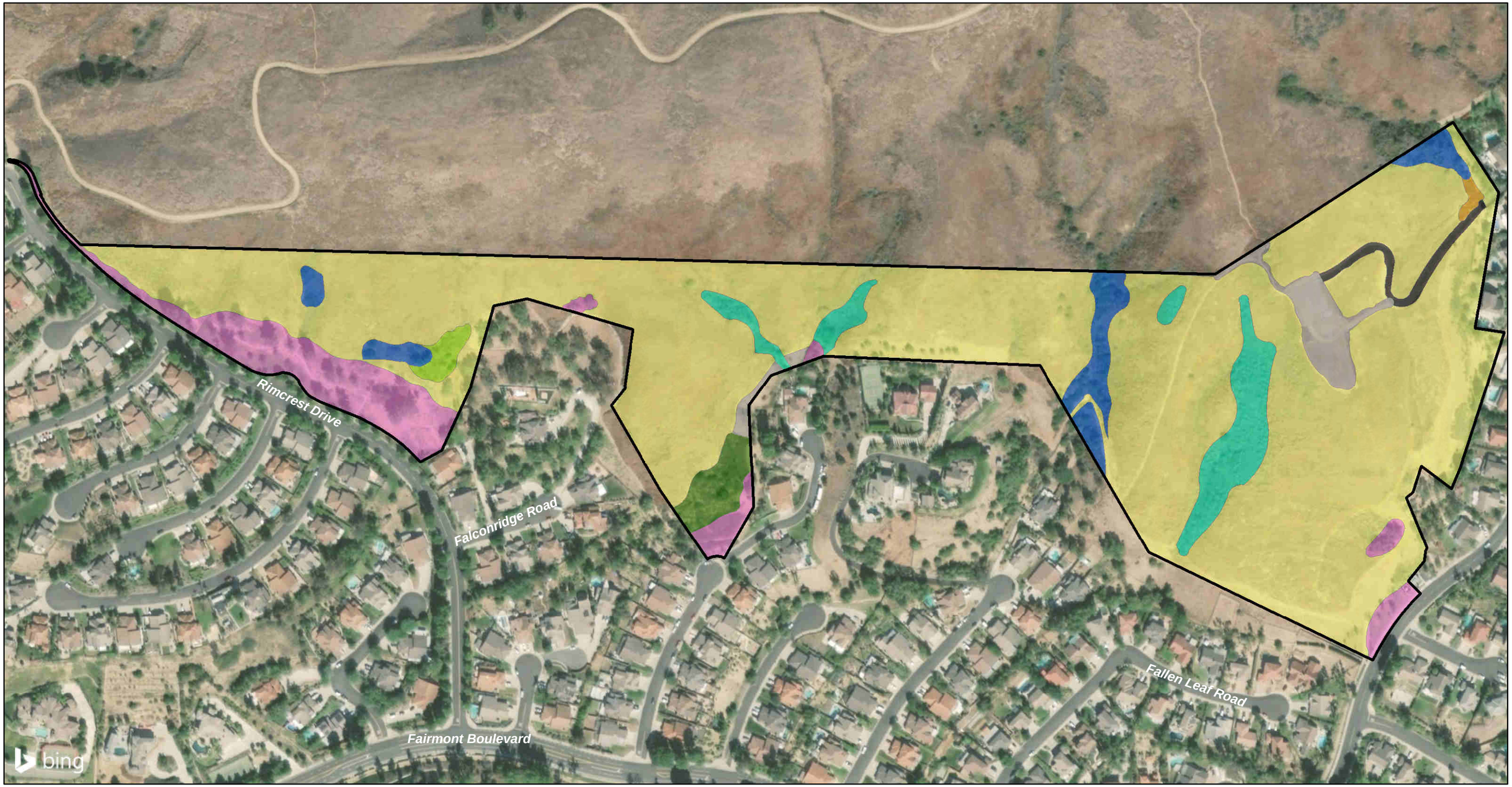

- Project Boundary
- Brittle Bush Scrub
- California Brittle Bush Scrub
- Coast Prickly Pear Scrub
- Developed
- Disturbed
- Laurel Sumac Scrub
- Ornamental
- Tree Tobacco Stands
- Upland Mustards

N

0 125 250 500

Feet

1 inch = 250 feet

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Vegetation Map

GLENN LUKOS ASSOCIATES

Exhibit 4

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Photograph 1: View depicting southerly extent of Drainage A looking north/northeast. Taken April 2019.

Photograph 2: View depicting Drainage A and associated Tributary A-1 looking northeast. Taken April 2019.

GLENN LUKOS ASSOCIATES

Exhibit 5

Photograph 3: View of bed/bank within drainage A.

Photograph 4: View depicting central portion of Drainage A looking north.

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Site Photographs

Photograph 5: Additional view of bed/bank within drainage A.

Photograph 6: Representative view of vegetation associated with Drainage A. Note the area is overgrown with non-native and/or upland vegetation.

Photograph 7: View depicting Tributary A-1 looking northeast. Note the incised and eroded nature of the left bank.

GLENN LUKOS ASSOCIATES

Exhibit 5

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Site Photographs

Property Boundary

JD Study Area

RWQCB Non-Wetland Waters

4 Width of Non-Wetland Waters in Feet

1 Photo Location

N

0 125 250 500

Feet

1 inch = 250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: May 1, 2019

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RWQCB Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

Exhibit 6A

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Property Boundary

JD Study Area

CDFW Non-Riparian Stream

4 Width of Non-Riparian Stream in Feet

1 Photo Location

N

0 125 250 500

Feet

1 inch = 250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: May 1, 2019

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CDFW Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

Exhibit 6B

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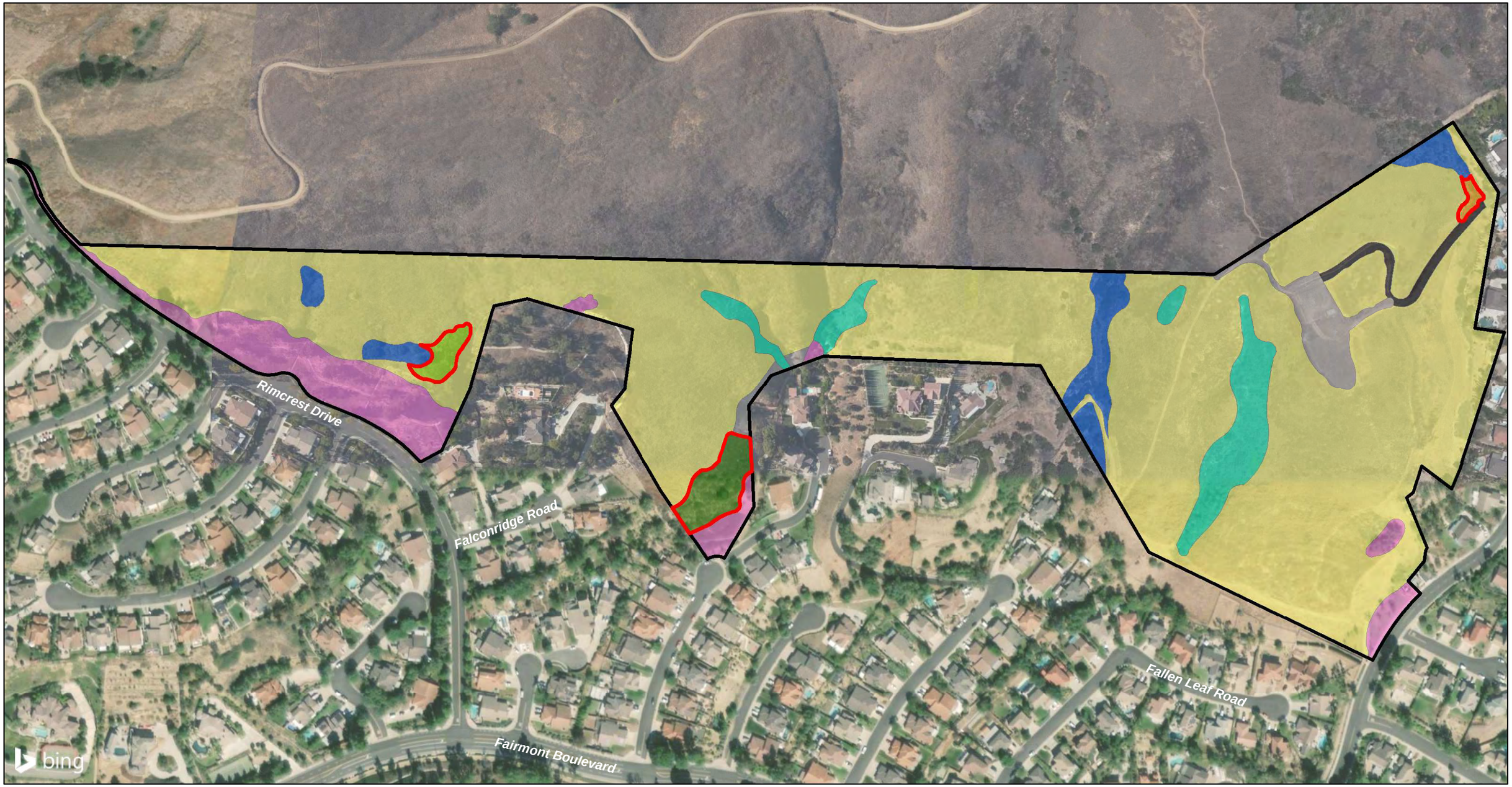

- Project Boundary
- California Gnatcatcher Survey Area
- Brittle Bush Scrub
- California Brittle Bush Scrub
- Coast Prickly Pear Scrub
- Developed
- Disturbed
- Laurel Sumac Scrub
- Ornamental
- Tree Tobacco Stands
- Upland Mustards

N

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Feet

1 inch = 250 feet

HOFF PROPERTY

California Gnatcatcher Survey Area Map

GLENN LUKOS ASSOCIATES

Exhibit 7

X:\1100 AFTER THE REST\1424-01HOFF\1424-1_GIS\BirdsGIS\1424-1_CAGNSurveyArea.mxd

APPENDIX A

FLORAL COMPENDIUM

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

SCIENTIFIC NAME	COMMON NAME
GYMNOSPERMS	
CONIFEROPHYTA	**CONE-BEARING PLANTS**
PINACEAE	**Pine Family**
* *Pinus* sp.	non-native pine
MAGNOLIOPHYTA	**FLOWERING PLANTS**
MONOCOTYLEDONS	**MONOCOTS**
ARECACEAE	**Palm Family**
* *Washingtonia robusta*	Mexican fan palm
POACEAE	**Grass Family**
* *Avena fatua*	common wild oat
* *Bromus diandrus*	ripgut grass
* *Bromus madritensis* subsp. *rubens*	foxtail chess
Elymus condensatus	giant wildrye
* *Hordeum vulgare*	cultivated barley
Stipa pulchra	purple needlegrass
THEMIDACEAE	**Brodiaea Family**
Dichelostemma capitatum	blue dicks
EUDICOTYLEDONS	**EUDICOTS**
ADOXACEAE	**Elderberry Family**
Sambucus nigra subsp. *caerulea*	blue elderberry

ANACARDIACEAE		**Sumac Family**
	Malosma laurina	laurel sumac
*	*Schinus molle*	Peruvian pepper tree
APIACEAE		**Carrot Family**
*	*Foeniculum vulgare*	sweet fennel
ASTERACEAE		**Sunflower Family**
	Ambrosia acanthicarpa	annual bur-sage
	Artemisia californica	California sagebrush
	Artemisia tridentata	Great Basin sagebrush
*	*Centaurea melitensis*	tocalote
*	*Centaurea solstitialis*	yellow star-thistle
*	*Chrysanthemum coronarium*	garland chrysanthemum
	Encelia californica	California encelia
	Erigeron canadensis	common horseweed
*	*Silybum marianum*	milk thistle
*	*Sonchus oleraceus*	common sow-thistle
BRASSICACEAE		**Mustard Family**
*	*Brassica nigra*	black mustard
*	*Hirschfeldia incana*	shortpod mustard
CACTACEAE		**Cactus Family**
*	*Opuntia ficus-indica*	indian fig
	Opuntia littoralis	coastal prickly pear
CUCURBITACEAE		**Gourd Family**
	Marah macrocarpus	wild cucumber
FABACEAE		**Legume Family**
*	*Acacia* sp.	acacia
	Astragalus tricopodus var. *tricopodus*	southern California locoweed
	Lupinus bicolor	miniature lupine
*	*Medicago polymorpha*	California burclover
*	*Melilotus indica*	yellow sweetclover
GERANIACEAE		**Geranium Family**
*	*Erodium cicutarium*	red-stemmed filaree
LAMIACEAE		**Mint Family**
*	*Marrubium vulgare*	horehound
	Salvia apiana	white sage
	Salvia leucophylla	purple sage
	Salvia mellifera	black sage

MALVACEAE	**Mallow Family**
Malacothamnus fasciculatus	chaparral bush mallow
MYRTACEAE	**Myrtle Family**
* *Eucalyptus globulus*	Tasmanian blue gum
NYCTAGINACEAE	**Four O'Clock Family**
Mirabilis laevis var. *crassifolia*	California wishbone bush
ROSACEAE	**Rose Family**
Heteromeles arbutifolia	toyon
SALICACEAE	**Willow Family**
Salix lasiolepis	arroyo willow
SOLANACEAE	**Nightshade Family**
* *Nicotiana glauca*	tree tobacco
URTICACEAE	**Nettle Family**
* *Urtica urens*	dwarf nettle

APPENDIX B
FAUNAL COMPENDIUM

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

LEPIDOPTERA	**BUTTERFLIES**
HESPERIIDAE	**Skippers**
Erynnis funeralis	funereal duskywing
NYMPHALIDAE	**Brush-Footed Butterflies**
Vanessa cardui	painted lady
REPTILIA	**REPTILES**
PHRYNOSOMATIDAE	**Phrynosomatid Lizards**
Uta stansburiana	common side-blotched lizard
AVES	**BIRDS**
ODONTOPHORIDAE	**New World Quail**
Callipepla californica	California quail
ACCIPITRIDAE	**Hawks And Old World Vultures**
Accipiter cooperii	Cooper's hawk
Buteo jamaicensis	red-tailed hawk
Circus hudsonius	northern harrier
COLUMBIDAE	**Pigeons And doves**
* *Columba livia*	rock pigeon
Zenaida macroura	mourning dove
CUCULIDAE	**Cuckoos, Roadrunners, and Anis**
Geococcyx californianus	greater roadrunner
APODIDAE	**Swifts**
Aeronautes saxatilis	white-throated swift

TROCHILIDAE		**Hummingbirds**
	Calypte anna	Anna's hummingbird
	Selasphorus sasin	Allen's hummingbird
PICIDAE		**Woodpeckers And Allies**
	Colaptes auratus	northern flicker
	Picoides nuttallii	Nuttall's woodpecker
TYRANNIDAE		**Tyrant Flycatchers**
	Empidonax difficilis	Pacific-slope flycatcher
	Sayornis nigricans	black phoebe
	Sayornis saya	Say's phoebe
	Tyrannus vociferans	Cassin's kingbird
CORVIDAE		**Crows And Jays**
	Aphelocoma californica	California scrub-jay
	Corvus brachyrhynchos	American crow
	Corvus corax	common raven
HIRUNDINIDAE		**Swallows**
	Stelgidopteryx serripennis	northern rough-winged swallow
AEGITHALIDAE		**Long-Tailed Tits And Bushtits**
	Psaltriparus minimus	bushtit
TROGLODYTIDAE		**Wrens**
	Thryomanes bewickii	Bewick's wren
	Troglodytes aedon	house wren
SYLVIIDAE		**Old World Warblers And Gnatcatchers**
	Polioptila caerulea	blue-gray gnatcatcher
TURDIDAE		**Thrushes**
	Catharus guttatus	hermit thrush
TIMALIIDAE		**Babblers**
	Chamaea fasciata	wrentit
MIMIDAE		**Mockingbirds And Thrashers**
	Mimus polyglottos	northern mockingbird
STURNIDAE		**Starlings**
*	*Sturnus vulgaris*	European starling

PARULIDAE	**Wood Warblers And Relatives**
Dendroica coronata	yellow-rumped warbler
Geothlypis trichas	common yellowthroat
EMBERIZIDAE	**Emberizids**
Melospiza melodia	song sparrow
Pipilo crissalis	California towhee
Pipilo maculatus	spotted towhee
Zonotrichia leucophrys	white-crowned sparrow
ICTERIDAE	**Blackbirds**
Sturnella neglecta	western meadowlark
FRINGILLIDAE	**Fringilline And Cardueline Finches and Allies**
Carpodacus mexicanus	house finch
Spinus psaltria	lesser goldfinch
MAMMALIA	**MAMMALS**
LEPORIDAE	**Rabbits And Hares**
Sylvilagus audubonii	desert (Audubon's) cottontail
GEOMYIDAE	**Pocket Gophers**
Thomomys bottae	Botta's pocket gopher
MURIDAE	**Mice, Rats And Voles**
Neotoma fuscipes	dusky-footed woodrat
SCIURIDAE	**Squirrels, Chipmunks, And Marmots**
Spermophilus beecheyi	California ground squirrel

APPENDIX C

GLENN LUKOS ASSOCIATES

Regulatory Services

July 23, 2019

Stacey Love
U.S. Fish and Wildlife Service
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

SUBJECT: Submittal Report for Coastal California Gnatcatcher Surveys for the Coastal California Gnatcatcher for the Hoff Property, an approximate 43-Acre Property Located in the City of Yorba Linda, Orange County, California

Dear Ms. Love:

This letter report summarizes the methodology and findings of presence/absence surveys for the federally listed threatened coastal California gnatcatcher (***Polioptila californica californica***) [gnatcatcher] conducted by Glenn Lukos Associates, Inc. (GLA) within the above referenced property [Study Area] located in the City of Yorba Linda, Orange County, California.

Surveys were conducted on site from March 21 to June 25, 2019 in all areas of suitable habitat in accordance with U.S. Fish and Wildlife Service (USFWS) guidelines. No gnatcatchers were observed.

1.0 SITE LOCATION AND DESCRIPTION

The Study Area comprises approximately 43 acres in the City of Yorba Linda, Orange County, California [Exhibit 1 – Regional Map] and is located within unsectioned areas of Township 3S, Range 9W, of the U.S. Geological Survey (USGS) 7.5" quadrangle map Yorba Linda (dated 1964 and photorevised in 1981) Exhibit 2 – Vicinity Map]. The Study Area is generally located north Fairmont Boulevard, east of Rimcrest Drive, south of South Ridge Trail, and west of Fairmont Boulevard and Little Canyon Lane.

The Study Area occurs north Fairmont Boulevard, east of Rimcrest Drive, south of South Ridge Trail, and west of Fairmont Boulevard and Little Canyon Lane. The topography consists of various canyons sloping downwards from north to south with elevation on the site ranging from 794 feet above mean sea level (amsl) to 1,028 feet amsl. Based on a review of satellite images dating back to 1994, parts of the site have been subject to human disturbances, such as the establishment of utility easements for the Yorba Linda Water District and Southern California Edison, including associated roads and annual mowing associated with fuel modification zones.

The majority of the site, though primarily dominated by non-native vegetation, has not been subject to recent human disturbance.

The majority of the Study Area is located within critical habitat (Unit 9) for the gnatcatcher.

2.0 VEGETATION

The Study Area supports three small areas of coastal sage scrub communities including: brittle bush scrub, California brittle bush scrub and coat prickly pear scrub.

Brittle Bush Scrub
This vegetation area is located on the eastern end of the Project. The Study Area supports approximately 0.08 acre of brittle bush scrub, which is dominated by brittlebush (***Encelia farinosa***). Other native species found within this area includes bush sunflower (***Encelia californica***), white sage (***Salvia apiana***), California sagebrush (***Artemisia californica***), laurel sumac (***Malosma laurina***), purple sage (***Salvia leucophylla***), and desert wishbone bush (***Mirabilis laevis***). Non-native species within this area include black mustard (***Brassica nigra***), garland chrysanthemum (***Glebionis coronaria***), and long-stemmed filaree (***Erodium botrys***).

California Brittle Bush Scrub
This vegetation area is located on the southern central portion of the Project. The Study Area supports approximately 0.65 acre of California brittle bush scrub, which is dominated by bush sunflower and California sagebrush. Additional native species include laurel sumac, purple sage and brittlebush. Non-native species within this area include black mustard, garland chrysanthemum, and long-stemmed filaree.

Coast Prickly Pear Scrub
This vegetation area is located on the western portion of the Project. The Study Area supports approximately 0.26 acre of coast prickly pear scrub, which is dominated by coast prickly pear (***Opuntia littoralis***). Additional native species include California sagebrush, laurel sumac, blue elderberry (***Sambucus nigra*** ssp. ***caerula***), bush mallow (***Malacothamnus fasciculatus***), and California buckwheat (***Eriogonum fasciculatum***). Non-native species within this area include black mustard, mission fig (***Opuntia ficus-indica***), Russian thistle (***Salsola tragus***), and Peruvian pepper (***Schinus molle***).

3.0 METHODOLOGY

Protocol breeding surveys for the gnatcatcher were performed in all suitable areas of coastal sage scrub habitat within the study area. Surveys were conducted in accordance with the USFWS guidelines, which stipulate that during the breeding season, six surveys shall be conducted in all areas of suitable habitat with at least seven days between site visits. The USFWS survey guidelines also stipulate that no more than 80 acres of suitable habitat shall be surveyed per biologist per day. Focused surveys consisted of one survey polygon, as less than 80 acres of suitable habitat occurs within the study area.

GLA biologist Jeff Ahrens (TE-052159-5) conducted the protocol surveys between March 21, 2019 and June 25, 2019. All surveys were conducted during the morning hours and were completed before 12:00 P.M. No surveys were conducted during extreme weather conditions (i.e., winds exceeding 15 miles per hour, rain, or temperatures in excess of 35ºC). All areas of suitable habitat were surveyed on foot by walking slowly and methodically. Taped vocalizations and "pishing" sounds were utilized to elicit a response from gnatcatchers that might be present. Table 1 summarizes survey dates and weather conditions.

Table 1. Summary of Survey Dates and Weather Conditions

Date	Start Time	End Time	Permitted Surveyor	Temp ºF (start/end)	Wind speed mph (start/end)	Percent Cloud Cover (start/end)
3/21/19	0645	1040	JA	49/55	1-3/1-3	80/100
3/28/19	0620	0940	JA	60/64	1-2/1-2	20/20
4/9/19	0730	0945	JA	60/67	2-4/1-3	0/0
5/14/19	0530	0930	JA	59/65	1-3/2-3	20/30
6/15/19	0540	0820	JA	63/66	1-3/0-4	100/70
6/25/19	0550	0820	JA	62/63	0-1/1-3	100/100

JA – Jeff Ahrens

4.0 RESULTS

GLA did not detect the gnatcatcher within the study area during the focused surveys.

Birds commonly observed on site include California towhee (***Melozone crissalis***), spotted towhee (***Pipilo maculatus***), Bewick's wren (***Thryomanes bewickii***), bushtit (***Psaltriparus minimus***), Anna's hummingbird (***Calypte anna***), Allen's hummingbird (***Selasphorus sasin***), California quail (***Callipepla californica***), Say's phoebe (***Sayornis saya***), white-crowned sparrow (***Zonotrichia leucophrys***), Nuttall's woodpecker (***Drobates nuttallii***), lesser goldfinch (***Spinus psaltria***), house

finch (***Haemorhous mexicanus***), Cassin's kingbird (***Tyrannus vociferans***), mourning dove (***Zenaida macroura***), and black phoebe (***Sayornis nigricans***). An avian compendium is included as Appendix A.

If you have any questions regarding the methodology or findings of this report, please contact me at (949) 340-2521.

I certify that the information in this survey report and attached exhibits fully and accurately represents my work.

GLENN LUKOS ASSOCIATES, INC.

	TE 052159-5	July 23, 2019
Jeff Ahrens	Permit #	Date
Biologist		

APPENDIX A

AVIAN COMPENDIUM

The avian compendium lists bird species identified on the Site.

* = non-native species

ACCIPITERIDAE	**Hawks, Old World Vultures and Harriers**
Accipiter cooperii	Cooper's hawk
Buteo jamaicensis	red-tailed hawk
Circus cyaneus	northern harrier
AEGITHALIDAE	**Bushtit**
Psaltriparus minimus	bushtit
APODIDAE	**Swifts**
Aeronautes saxatalis	white-throated swift
COLUMBIDAE	**Pigeons and Doves**
* ***Columba livia***	rock pigeon
Zenaida macroura	mourning dove
CORVIDAE	**Jays, Magpies and Crows**
Corvus brachyrhynchos	American crow
Corvus corax	common raven
CUCULIDAE	**Cuckoos**
Geococcyx californianus	greater roadrunner
EMBERIZIDAE	**Emberizines**
Melospiza melodia	song sparrow
Melozone crissalis	California towhee
Pipilo maculatus	spotted towhee
Zonotrichia leucophrys	white-crowned sparrow
FRINGILLIDAE	**Finches**
Carduelis psaltria	lesser goldfinch
Carpodacus mexicanus	house finch

HIRUNDINIDAE		**Swallows**
	Steigidopteryx serripennis	northern rough-winged swallow
ICTERIDAE		**Blackbirds and Allies**
	Sturnella neglecta	western meadowlark
MIMIDAE		**Mockingbirds and Thrashers**
	Mimus polyglottos	northern mockingbird
ODONTOPHORIDAE		**New World Quail**
	Callipepla californica	California quail
PARULIDAE		**Wood Warblers and Relatives**
	Geothlypis trichas	common yellowthroat
	Setophaga coronata	yellow-rumped warbler
PICIDAE		**Woodpeckers and Wrynecks**
	Colaptes auratus	northern flicker
	Picoides nuttallii	Nuttall's woodpecker
POLIOPTILIDAE		**Gnatcatchers**
	Polioptila caerulea	blue-gray gnatcatcher
STURNIDAE		**Starlings and Allies**
*	***Sturnus vulgaris***	European starling
TROCHILIDAE		**Hummingbirds**
	Calypte anna	Anna's hummingbird
	Selasphorus sasin	Allen's hummingbird
TROGLODYTIDAE		**Wrens**
	Thryomanes bewickii	Bewick's wren
	Troglodytes aedon	house wren
TURDIDAE		**Thrushes**
	Catharus guttatus	hermit thrush
TYRANNIDAE		**Tyrant Flycatchers**
	Empidonax difficilis	Pacific-slope flycatcher
	Myiarchus cinerascens	ash-throated flycatcher
	Sayornis nigricans	black phoebe
	Sayornis saya	Say's phoebe
	Tyrannus vociferans	Cassin's kingbird

Source: ESRI World Street Map

N

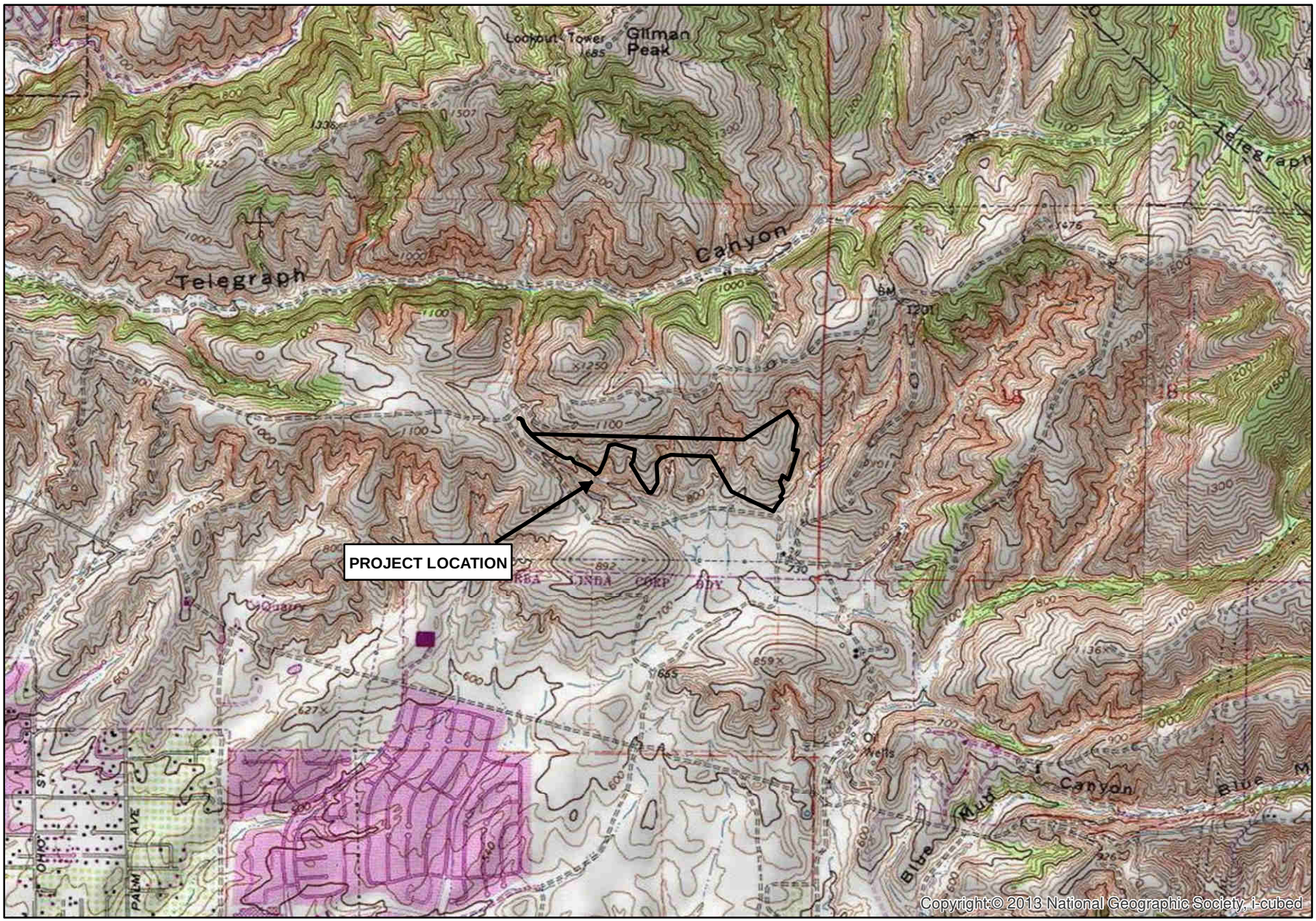
0 2 4 8 Miles

HOFF PROPERTY

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1



Adapted from USGS Yorba Linda, CA quadrangle

N

0 1,000 2,000 4,000 Feet

HOFF PROPERTY

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2

Project Boundary

N

0 125 250 500

Feet

1 inch = 250 feet

HOFF PROPERTY

Aerial Map

GLENN LUKOS ASSOCIATES

Exhibit 3

X:\1100 AFTER THE REST\1424-01HOFF\1424-1_GIS\1424-1 Aerial.mxd

APPENDIX D

GLENN LUKOS ASSOCIATES
Regulatory Services

June 11, 2019
(Revised November 11, 2020)

Mr. Robert Hoff
Property Owner/Developer
3875 Crest Drive
Yorba Linda, California 92886

SUBJECT: Results of Jurisdictional Delineation Performed for the Hoff Property Project, an Approximate 19.83-Acre Study Area Located in the City of Yorba Linda, Orange County, California

Dear Mr. Hoff:

This letter report summarizes our preliminary findings of U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and California Department of Fish and Wildlife (CDFW) jurisdiction for the Hoff Property Project (Project), an approximate 19.83-acre study area (Study Area), located in the City of Yorba Linda, Orange County, California [Exhibit 1 – Regional Map]..[1] The Study Area is limited to the proposed Project impact area and its immediate surrounds. Areas outside of the Study Area were not included as part of this analysis.

The Study Area is centrally located at approximately latitude 33.907411 and longitude -117.768863 (center reading) in the City of Yorba Linda, Orange County, California [Exhibit 1 – Regional Map]. The site is generally located north Fairmont Boulevard, east of Rimcrest Drive, south of South Ridge Trail, and west of Fairmont Boulevard and Little Canyon Lane within un-sectioned areas of Township 3S, Range 9W, as depicted on the U.S. Geological Survey (USGS) 7.5" quadrangle map Yorba Linda (dated 1964 and photorevised in 1981) Exhibit 2 – Vicinity Map].

In April 2019, regulatory specialists of Glenn Lukos Associates, Inc. (GLA) examined the site to determine the presence and limits of (1) Corps jurisdiction pursuant to Section 404 of the Clean Water Act, (2) Regional Board jurisdiction pursuant to Section 401 of the CWA and Section

[1] This report presents our best effort at estimating the subject jurisdictional boundaries using the most up-to-date regulations and written policy and guidance from the regulatory agencies. Only the regulatory agencies can make a final determination of jurisdictional boundaries.

13260 of the California Water Code (CWC), and (3) CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code. Enclosed are maps depicting the limits of jurisdiction associated with the Study Area [Exhibits 3A and 3B]. Photographs to document the topography, vegetative communities, and general widths of each of the waters are provided as Exhibit 4. A Soils map is included as Exhibit 5.

No Corps jurisdiction is associated with the Study Area.

Regional Board jurisdiction associated with the Study Area totals approximately 0.13 acre, none of which is State wetlands. A total of 970 linear feet of ephemeral streambed is present.

CDFW jurisdiction associated with the Study Area totals 0.17 acre, none of which is riparian. A total of 970 linear feet of ephemeral stream is present.

I. METHODOLOGY

Prior to beginning the field delineation, a color aerial photograph, a topographic base map of the property, the previously cited USGS topographic map, and a soils map were examined to determine the locations of potential areas of Corps, Regional Board, and CDFW jurisdiction. Suspected jurisdictional areas were field checked for evidence of stream activity and/or wetland vegetation, soils and hydrology. Where applicable, reference was made to the 2008 Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (OWHM Manual)[2] to identify the width of Corps jurisdiction and suspected federal wetland habitats on the site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual[3] (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement).[4] Reference was also made to the 2019 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (State Board Wetland Definition and Procedures) to identify suspected State wetland habitats.[5] While in the field the potential limits of jurisdiction were recorded with a sub-meter Trimble GPS device in conjunction with a color aerial photograph using visible landmarks.

[2] U.S. Army Corps of Engineers. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States
[3] Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.
[4] U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
[5] State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State.

The National Cooperative Soil Survey (NCSS) has mapped the following soil types as occurring in the general vicinity of the project site:

Balcom Clay Loam, 15 to 30 Percent Slopes; Balcom Clay Loam, 30 to 50 Percent Slopes

The Balcom series consists of moderately deep, well drained soils that formed in material that weathered from soft, calcareous shale and sandstone. Balcom soils are on hills and have slopes of 5 to 75 percent. The mean annual precipitation is about 18 inches and the mean annual air temperature is about 61 degrees F. Balcom soils are on rounded hills at elevations of 200 to 2,300 feet. Slopes range from 5 to 75 percent. This soil profile is well drained with low to high runoff, and moderate to moderately slow permeability. The soils formed in material weathered from gray, soft, calcareous shale and sandstone. Balcom soils are used primarily for range, wildlife and watershed. Natural vegetation is annual grasses and mustard.

Calleguas Clay Loam, 50 to 75 Percent Slopes

The Calleguas series consists of very shallow and shallow, well drained soils formed on uplands, hills and mountains in material weathered from sedimentary rocks. Calleguas soils have slopes of 9 to 75 percent. The mean annual precipitation is about 406 millimeters (16 inches) and the mean annual air temperature is about 16 degrees C (60 degrees F). The Calleguas soils are on exposed and often eroded south-facing slopes. Slopes are 9 to 75 percent. Elevations are 30 to 853 meters (100 to 2,800 feet). The soils formed in material weathered from sandstone, shale, and mudstone. The climate is dry sub-humid with warm dry summers and cool moist winters. This soil series is well-drained with medium or high runoff, and moderate permeability. Calleguas soils are used for grazing and watershed. Vegetation is annual grasses and forbs with some shrubs of the coastal sagebrush group.

Myford Sandy Loam. 2 to 9 Percent Slopes

The soils of the Myford Series are deep, moderately well drained soils formed on terraces. The mean annual precipitation is about 16 inches and the mean annual air temperature is about 62 degrees F. Myford soils are nearly level to moderately steep and are on terraces at elevations of less than 1,500 feet. The climate is dry sub-humid mesothermal with dry summers and cool moist winters. Mean annual precipitation is 12 to 20 inches. This soil series is moderately well drained with medium to rapid runoff, and very slow permeability. Myford soils are used for production of citrus, pasture, range, barley, and for urban development. Principal vegetation is annual grasses and forbs with some scattered low-growing brush.

II. JURISDICTION

A. Army Corps of Engineers

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a), pursuant to the *Navigable Waters Protection Rule*[6] (NWPR), as:

(a) Jurisdictional waters. For purposes of the Clean Water Act, 33 U.S.C. 1251 *et seq.* and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term ‘‘waters of the United States’’ means:

(1) The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;
(2) Tributaries;
(3) Lakes and ponds, and impoundments of jurisdictional waters; and
(4) Adjacent wetlands.

(b) Non-jurisdictional waters. The following are not ‘‘waters of the United States’’:

(1) Waters or water features that are
not identified in paragraph (a)(1), (2), (3), or (4) of this section;
(2) Groundwater, including groundwater drained through subsurface drainage systems;
(3) Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;
(4) Diffuse stormwater run-off and directional sheet flow over upland;
(5) Ditches that are not waters identified in paragraph (a)(1) or (2) of this section, and those portions of ditches constructed in waters identified in paragraph (a)(4) of this section that do not satisfy the conditions of paragraph (c)(1) of this section;
(6) Prior converted cropland;
(7) Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease;
(8) Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of paragraph (c)(6) of this section;
(9) Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;

[6] U.S. Environmental Protection Agency & Department of Defense. 2020. Federal Register / Vol. 85, No. 77 / Tuesday, April 21, 2020 / Rules and Regulations.

> *(10) Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;*
> *(11) Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and*
> *(12) Waste treatment systems.*

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

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

1. Wetland Definition Pursuant to Section 404 of the Clean Water Act

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

- More than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the Arid West 2016 Regional Wetland Plant List[7],[8]);

- Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma

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

indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and

- Whereas the Wetland Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with "problematic hydrophytic vegetation", which require a minimum of 14 days of ponding to be considered a wetland.

B. Regional Water Quality Control Board

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States[9] and waters of the State. Waters of the United States are defined above in Section II.A and waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code 13050[e]).

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

1. State Wetland Definition

The State Board Wetland Definition and Procedures define an area as wetland as follows: *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2)*

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

the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The following wetlands are waters of the State:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;*[10] *and*
3. *Artificial wetlands*[11] *that meet any of the following criteria:*

a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
b. Specifically identified in a water quality control plan as a wetland or other water of the state;
c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):

i. Industrial or municipal wastewater treatment or disposal,
ii. Settling of sediment,
iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
iv. Treatment of surface waters,
v. Agricultural crop irrigation or stock watering,
vi. Fire suppression,
vii. Industrial processing or cooling,
viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
ix. Log storage,
x. Treatment, storage, or distribution of recycled water, or

[10] "Created by modification of a surface water of the state" means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically, but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.
[11] Artificial wetlands are wetlands that result from human activity.

xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or
xii. Fields flooded for rice growing.[12]

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

C. California Department of Fish and Wildlife

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

CDFW defines a stream (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW also defines a stream as “a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators.”

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

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

III. RESULTS

A. Corps Jurisdiction

No Corps jurisdiction is present within the Study Area.

The Study Area contains an ephemeral feature that originates onsite and extends in a southerly/southwesterly direction for approximately 970 linear feet before terminating onsite at the edge of a dirt access road located in the southeastern portion of the property. The feature is characterized by the presence of erosional bed and banks but does not exhibit evidence of an OHWM or adequate flow sign even during an above average rainy season. Furthermore, the feature terminates onsite at a dirt road (i.e. is "isolated") and does not connect to any downstream water. Pursuant to the *Navigable Waters Protection Rule*, ephemeral features, including ephemeral streams, swales, gullies, rills, and pools are not considered waters of the U.S. regardless of the presence or absence of an OHWM. Tributaries must satisfy the flow conditions of the definition described in 33 U.S.C. 1251 et seq. and its implementing regulations (33 CFR Part 328.3). As a result, this feature is not subject to Corps jurisdiction pursuant to Section 404 of the CWA.

B. Regional Water Quality Control Board Jurisdiction

Regional Board jurisdiction associated with Study Area totals 0.13 acre, none of which is State wetland or riparian. A total of 970 linear feet of ephemeral stream is present.

Regional Board jurisdiction is limited to one erosional feature, defined herein as Drainage A and its associated tributary (Tributary A-1). Drainage A and its associated tributary originate onsite and extend in a southerly/southwesterly direction for a collective 970 linear feet before terminating onsite at the edge of a dirt access road located in the southeastern portion of the property. The feature(s) is characterized by the presence of erosional bed and banks and conveys surface water only in direct response to precipitation (e.g., rain). This feature was completely dry during our field investigation despite recent rainfall during an above-average rainy season. Since ephemeral features are not subject to Corps jurisdiction pursuant to Section 404 of the CWA, this feature is also not subject to Regional Board jurisdiction pursuant to Section 401 of the CWA. However, since this feature conveys surface flow with the potential to support beneficial uses, it considered to be waters of the State that would be regulated by the Regional Board pursuant to Section 13260 of the California Water Code (CWC)/the Porter-Cologne Act.

Drainage A is generally unvegetated in the low flow channel. The banks are dominated by non-native upland species including tree tobacco (*Nicotiana glauca*), black mustard (*Brassica nigra*), and crown daisy (*Glebionis coronaria*). Native upland species are limited to a few stands of blue

elderberry (*Sambucus nigra* ssp. *caerulea*). No soil pits were excavated due to a lack of wetland hydrology and a predominance of upland vegetation.

C. CDFW Jurisdiction

CDFW jurisdiction associated with the Study Area totals 0.17 acre, none of which is riparian. A total of 970 linear feet of ephemeral stream is present.

CDFW jurisdiction contained within the Study Area is limited to one erosional feature, defined herein as Drainage A and its associated tributary (Tributary A-1). Drainage A and its associated tributary originate onsite and extend in a southerly/southwesterly direction for a collective 970 linear feet before terminating onsite at the edge of a dirt access road located in the southeastern portion of the property. The feature(s) is characterized by the presence of erosional bed and banks and only conveys brief surficial flow during high storm events. The feature terminates onsite at a dirt road (i.e. is "isolated") and does not connect to any downstream water.

Drainage A and its associated tributary are generally unvegetated in the low flow channel. The banks are dominated by non-native upland species including tree tobacco, black mustard, and crown daisy. Native upland species are limited to a few stands of blue elderberry (*Sambucus nigra* ssp. *caerulea*).

The extent of CDFW jurisdiction is depicted on Exhibit 3B. Site photographs are provided as Exhibit 4.

If you have any questions about this letter report, please contact me at (949) 340-3698 or at llokovic@wetlandpermitting.com.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

Lesley Lokovic Gamber
Regulatory Specialist

p:1424-1b.jd.REV2_111120

Source: ESRI World Street Map

N

0 2 4 8 Miles

HOFF PROPERTY

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1

Adapted from USGS Yorba Linda, CA quadrangle

N

0 1,000 2,000 4,000 Feet

HOFF PROPERTY

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2

Property Boundary

Project Study Area

RWQCB Non-Wetland Waters

4 Width of Non-Wetland Waters in Feet

1 Photo Location

N

0 125 250 500

Feet

1 inch = 250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: May 1, 2019

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RWQCB Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

Exhibit 3A

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Property Boundary

Project Study Area

CDFW Non-Riparian Streambed

4 Width of Non-Riparian Streambed in Feet

1 Photo Location

N

0 125 250 500

Feet

1 inch = 250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: May 1, 2019

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CDFW Jurisdictional Delineation Map

GLENN LUKOS ASSOCIATES

Exhibit 3B

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Photograph 1: View depicting southerly extent of Drainage A looking north/northeast. Taken April 2019.

Photograph 2: View depicting Drainage A and associated Tributary A-1 looking northeast. Taken April 2019.

GLENN LUKOS ASSOCIATES

Exhibit 4

Photograph 3: View of bed/bank within drainage A.

Photograph 4: View depicting central portion of Drainage A looking north.

HOFF PROPERTY

Site Photographs

Photograph 5: Additional view of bed/bank within drainage A.

Photograph 6: Representative view of vegetation associated with Drainage A. Note the area is overgrown with non-native and/or upland vegetation.

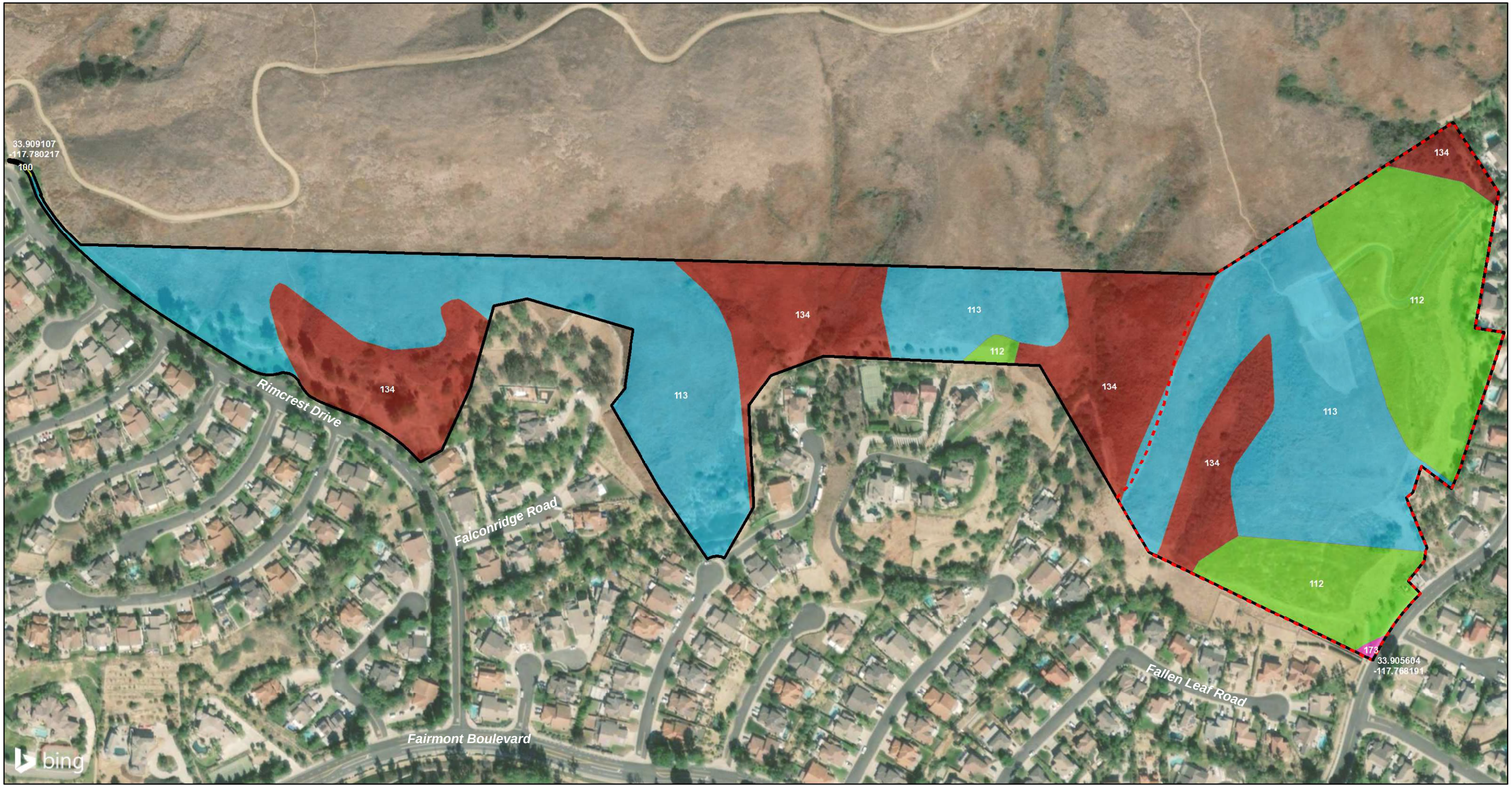
Photograph 7: View depicting Tributary A-1 looking northeast. Note the incised and eroded nature of the left bank.

GLENN LUKOS ASSOCIATES

Exhibit 4

HOFF PROPERTY

Site Photographs



- Property Boundary
- Project Study Area
- 100 - Alo Clay, 9 To 15 Percent Slopes
- 112 - Balcom Clay Loam, 15 To 30 Percent Slopes
- 113 - Balcom Clay Loam, 30 To 50 Percent Slopes
- 134 - Calleguas Clay Loam, 50 To 75 Percent Slopes, Eroded
- 173 - Myford Sandy Loam, 2 To 9 Percent Slopes

N

0 125 250 500

Feet

1 inch = 250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: May 1, 2019

HOFF PROPERTY

Soils Map

GLENN LUKOS ASSOCIATES

Exhibit 5

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GLENN LUKOS ASSOCIATES

Regulatory Services

July 23, 2019

Stacey Love
U.S. Fish and Wildlife Service
2177 Salk Avenue, Suite 250
Carlsbad, California 92008

SUBJECT: Submittal Report for Coastal California Gnatcatcher Surveys for the Coastal California Gnatcatcher for the Hoff Property, an approximate 43-Acre Property Located in the City of Yorba Linda, Orange County, California

Dear Ms. Love:

This letter report summarizes the methodology and findings of presence/absence surveys for the federally listed threatened coastal California gnatcatcher (*Polioptila californica californica*) [gnatcatcher] conducted by Glenn Lukos Associates, Inc. (GLA) within the above referenced property [Study Area] located in the City of Yorba Linda, Orange County, California.

Surveys were conducted on site from March 21 to June 25, 2019 in all areas of suitable habitat in accordance with U.S. Fish and Wildlife Service (USFWS) guidelines. No gnatcatchers were observed.

1.0 SITE LOCATION AND DESCRIPTION

The Study Area comprises approximately 43 acres in the City of Yorba Linda, Orange County, California [Exhibit 1 – Regional Map] and is located within unsectioned areas of Township 3S, Range 9W, of the U.S. Geological Survey (USGS) 7.5" quadrangle map Yorba Linda (dated 1964 and photorevised in 1981) Exhibit 2 – Vicinity Map]. The Study Area is generally located north Fairmont Boulevard, east of Rimcrest Drive, south of South Ridge Trail, and west of Fairmont Boulevard and Little Canyon Lane.

The Study Area occurs north Fairmont Boulevard, east of Rimcrest Drive, south of South Ridge Trail, and west of Fairmont Boulevard and Little Canyon Lane. The topography consists of various canyons sloping downwards from north to south with elevation on the site ranging from 794 feet above mean sea level (amsl) to 1,028 feet amsl. Based on a review of satellite images dating back to 1994, parts of the site have been subject to human disturbances, such as the establishment of utility easements for the Yorba Linda Water District and Southern California Edison, including associated roads and annual mowing associated with fuel modification zones.

The majority of the site, though primarily dominated by non-native vegetation, has not been subject to recent human disturbance.

The majority of the Study Area is located within critical habitat (Unit 9) for the gnatcatcher.

2.0 VEGETATION

The Study Area supports three small areas of coastal sage scrub communities including: brittle bush scrub, California brittle bush scrub and coat prickly pear scrub.

Brittle Bush Scrub
This vegetation area is located on the eastern end of the Project. The Study Area supports approximately 0.08 acre of brittle bush scrub, which is dominated by brittlebush (*Encelia farinosa*). Other native species found within this area includes bush sunflower (*Encelia californica*), white sage (*Salvia apiana*), California sagebrush (*Artemisia californica*), laurel sumac (*Malosma laurina*), purple sage (*Salvia leucophylla*), and desert wishbone bush (*Mirabilis laevis*). Non-native species within this area include black mustard (*Brassica nigra*), garland chrysanthemum (*Glebionis coronaria*), and long-stemmed filaree (*Erodium botrys*).

California Brittle Bush Scrub
This vegetation area is located on the southern central portion of the Project. The Study Area supports approximately 0.65 acre of California brittle bush scrub, which is dominated by bush sunflower and California sagebrush. Additional native species include laurel sumac, purple sage and brittlebush. Non-native species within this area include black mustard, garland chrysanthemum, and long-stemmed filaree.

Coast Prickly Pear Scrub
This vegetation area is located on the western portion of the Project. The Study Area supports approximately 0.26 acre of coast prickly pear scrub, which is dominated by coast prickly pear (*Opuntia littoralis*). Additional native species include California sagebrush, laurel sumac, blue elderberry (*Sambucus nigra* ssp. *caerula*), bush mallow (*Malacothamnus fasciculatus*), and California buckwheat (*Eriogonum fasciculatum*). Non-native species within this area include black mustard, mission fig (*Opuntia ficus-indica*), Russian thistle (*Salsola tragus*), and Peruvian pepper (*Schinus molle*).

3.0 METHODOLOGY

Protocol breeding surveys for the gnatcatcher were performed in all suitable areas of coastal sage scrub habitat within the study area. Surveys were conducted in accordance with the USFWS guidelines, which stipulate that during the breeding season, six surveys shall be conducted in all areas of suitable habitat with at least seven days between site visits. The USFWS survey guidelines also stipulate that no more than 80 acres of suitable habitat shall be surveyed per biologist per day. Focused surveys consisted of one survey polygon, as less than 80 acres of suitable habitat occurs within the study area.

GLA biologist Jeff Ahrens (TE-052159-5) conducted the protocol surveys between March 21, 2019 and June 25, 2019. All surveys were conducted during the morning hours and were completed before 12:00 P.M. No surveys were conducted during extreme weather conditions (i.e., winds exceeding 15 miles per hour, rain, or temperatures in excess of 35ºC). All areas of suitable habitat were surveyed on foot by walking slowly and methodically. Taped vocalizations and "pishing" sounds were utilized to elicit a response from gnatcatchers that might be present. Table 1 summarizes survey dates and weather conditions.

Table 1. Summary of Survey Dates and Weather Conditions

Date	Start Time	End Time	Permitted Surveyor	Temp ºF (start/end)	Wind speed mph (start/end)	Percent Cloud Cover (start/end)
3/21/19	0645	1040	JA	49/55	1-3/1-3	80/100
3/28/19	0620	0940	JA	60/64	1-2/1-2	20/20
4/9/19	0730	0945	JA	60/67	2-4/1-3	0/0
5/14/19	0530	0930	JA	59/65	1-3/2-3	20/30
6/15/19	0540	0820	JA	63/66	1-3/0-4	100/70
6/25/19	0550	0820	JA	62/63	0-1/1-3	100/100

JA – Jeff Ahrens

4.0 RESULTS

GLA did not detect the gnatcatcher within the study area during the focused surveys.

Birds commonly observed on site include California towhee (*Melozone crissalis*), spotted towhee (*Pipilo maculatus*), Bewick's wren (*Thryomanes bewickii*), bushtit (*Psaltriparus minimus*), Anna's hummingbird (*Calypte anna*), Allen's hummingbird (*Selasphorus sasin*), California quail (*Callipepla californica*), Say's phoebe (*Sayornis saya*), white-crowned sparrow (*Zonotrichia leucophrys*), Nuttall's woodpecker (*Drobates nuttallii*), lesser goldfinch (*Spinus psaltria*), house

finch (*Haemorhous mexicanus*), Cassin's kingbird (*Tyrannus vociferans*), mourning dove (*Zenaida macroura*), and black phoebe (*Sayornis nigricans*). An avian compendium is included as Appendix A.

If you have any questions regarding the methodology or findings of this report, please contact me at (949) 340-2521.

I certify that the information in this survey report and attached exhibits fully and accurately represents my work.

GLENN LUKOS ASSOCIATES, INC.

	TE 052159-5	July 23, 2019
Jeff Ahrens	Permit #	Date
Biologist		

APPENDIX A

AVIAN COMPENDIUM

The avian compendium lists bird species identified on the Site.

* = non-native species

ACCIPITERIDAE	**Hawks, Old World Vultures and Harriers**
Accipiter cooperii	Cooper's hawk
Buteo jamaicensis	red-tailed hawk
Circus cyaneus	northern harrier
AEGITHALIDAE	**Bushtit**
Psaltriparus minimus	bushtit
APODIDAE	**Swifts**
Aeronautes saxatalis	white-throated swift
COLUMBIDAE	**Pigeons and Doves**
* *Columba livia*	rock pigeon
Zenaida macroura	mourning dove
CORVIDAE	**Jays, Magpies and Crows**
Corvus brachyrhynchos	American crow
Corvus corax	common raven
CUCULIDAE	**Cuckoos**
Geococcyx californianus	greater roadrunner
EMBERIZIDAE	**Emberizines**
Melospiza melodia	song sparrow
Melozone crissalis	California towhee
Pipilo maculatus	spotted towhee
Zonotrichia leucophrys	white-crowned sparrow
FRINGILLIDAE	**Finches**
Carduelis psaltria	lesser goldfinch
Carpodacus mexicanus	house finch

HIRUNDINIDAE		**Swallows**
	Steigidopteryx serripennis	northern rough-winged swallow
ICTERIDAE		**Blackbirds and Allies**
	Sturnella neglecta	western meadowlark
MIMIDAE		**Mockingbirds and Thrashers**
	Mimus polyglottos	northern mockingbird
ODONTOPHORIDAE		**New World Quail**
	Callipepla californica	California quail
PARULIDAE		**Wood Warblers and Relatives**
	Geothlypis trichas	common yellowthroat
	Setophaga coronata	yellow-rumped warbler
PICIDAE		**Woodpeckers and Wrynecks**
	Colaptes auratus	northern flicker
	Picoides nuttallii	Nuttall's woodpecker
POLIOPTILIDAE		**Gnatcatchers**
	Polioptila caerulea	blue-gray gnatcatcher
STURNIDAE		**Starlings and Allies**
*	*Sturnus vulgaris*	European starling
TROCHILIDAE		**Hummingbirds**
	Calypte anna	Anna's hummingbird
	Selasphorus sasin	Allen's hummingbird
TROGLODYTIDAE		**Wrens**
	Thryomanes bewickii	Bewick's wren
	Troglodytes aedon	house wren
TURDIDAE		**Thrushes**
	Catharus guttatus	hermit thrush
TYRANNIDAE		**Tyrant Flycatchers**
	Empidonax difficilis	Pacific-slope flycatcher
	Myiarchus cinerascens	ash-throated flycatcher
	Sayornis nigricans	black phoebe
	Sayornis saya	Say's phoebe
	Tyrannus vociferans	Cassin's kingbird

Source: ESRI World Street Map

N

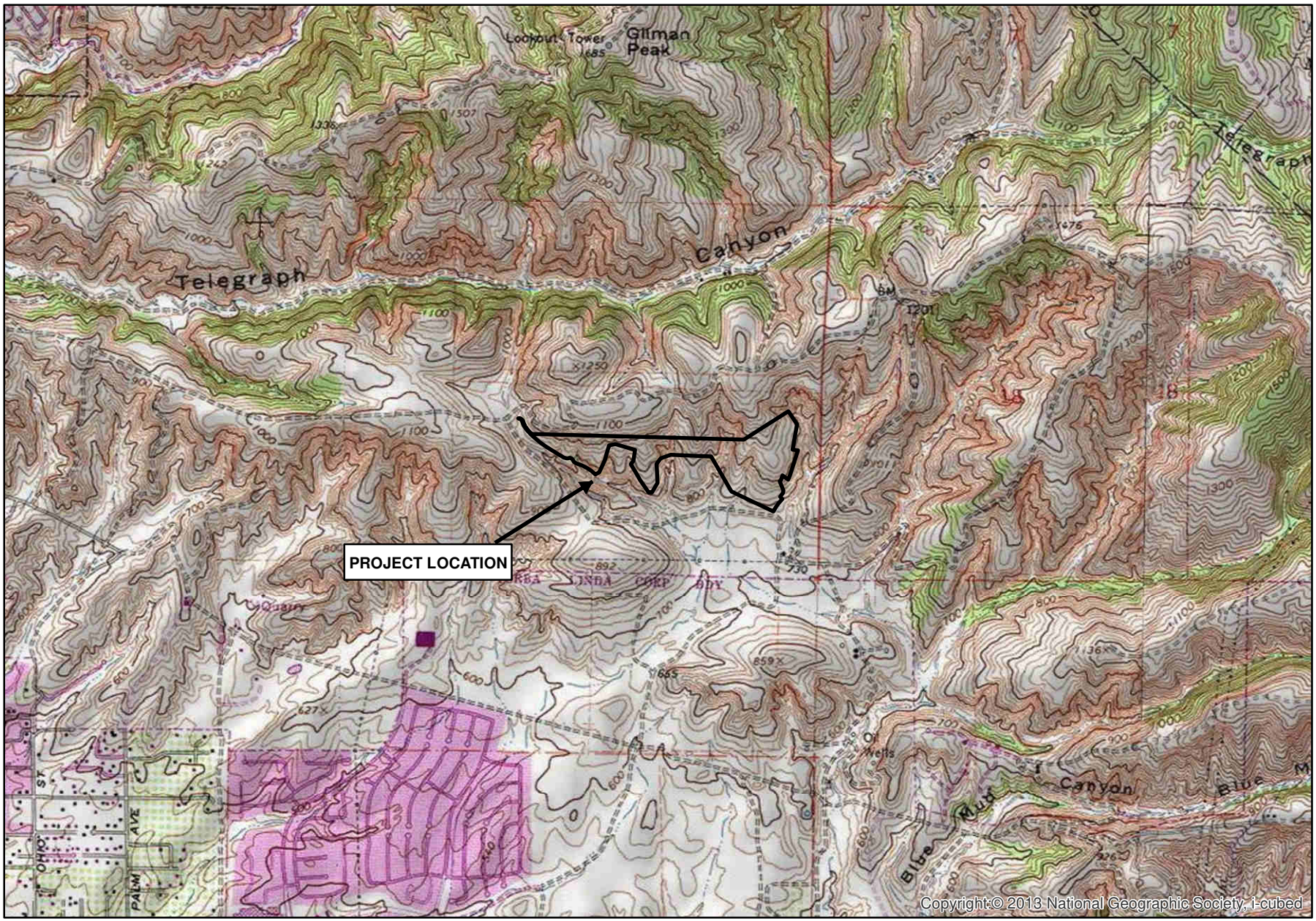
0 2 4 8 Miles

HOFF PROPERTY

Regional Map

GLENN LUKOS ASSOCIATES

Exhibit 1



Adapted from USGS Yorba Linda, CA quadrangle

N

0 1,000 2,000 4,000 Feet

HOFF PROPERTY

Vicinity Map

GLENN LUKOS ASSOCIATES

Exhibit 2

Project Boundary

N

0 125 250 500

Feet

1 inch = 250 feet

HOFF PROPERTY

Aerial Map

GLENN LUKOS ASSOCIATES

Exhibit 3

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GLENN LUKOS ASSOCIATES
Regulatory Services

June 11, 2019
(Revised November 11, 2020)

Mr. Robert Hoff
Property Owner/Developer
3875 Crest Drive
Yorba Linda, California 92886

SUBJECT: Results of Jurisdictional Delineation Performed for the Hoff Property Project, an Approximate 19.83-Acre Study Area Located in the City of Yorba Linda, Orange County, California

Dear Mr. Hoff:

This letter report summarizes our preliminary findings of U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (Regional Board), and California Department of Fish and Wildlife (CDFW) jurisdiction for the Hoff Property Project (Project), an approximate 19.83-acre study area (Study Area), located in the City of Yorba Linda, Orange County, California [Exhibit 1 – Regional Map]..[1] The Study Area is limited to the proposed Project impact area and its immediate surrounds. Areas outside of the Study Area were not included as part of this analysis.

The Study Area is centrally located at approximately latitude 33.907411 and longitude -117.768863 (center reading) in the City of Yorba Linda, Orange County, California [Exhibit 1 – Regional Map]. The site is generally located north Fairmont Boulevard, east of Rimcrest Drive, south of South Ridge Trail, and west of Fairmont Boulevard and Little Canyon Lane within un-sectioned areas of Township 3S, Range 9W, as depicted on the U.S. Geological Survey (USGS) 7.5" quadrangle map Yorba Linda (dated 1964 and photorevised in 1981) Exhibit 2 – Vicinity Map].

In April 2019, regulatory specialists of Glenn Lukos Associates, Inc. (GLA) examined the site to determine the presence and limits of (1) Corps jurisdiction pursuant to Section 404 of the Clean Water Act, (2) Regional Board jurisdiction pursuant to Section 401 of the CWA and Section

[1] This report presents our best effort at estimating the subject jurisdictional boundaries using the most up-to-date regulations and written policy and guidance from the regulatory agencies. Only the regulatory agencies can make a final determination of jurisdictional boundaries.

13260 of the California Water Code (CWC), and (3) CDFW jurisdiction pursuant to Division 2, Chapter 6, Section 1600 of the Fish and Game Code. Enclosed are maps depicting the limits of jurisdiction associated with the Study Area [Exhibits 3A and 3B]. Photographs to document the topography, vegetative communities, and general widths of each of the waters are provided as Exhibit 4. A Soils map is included as Exhibit 5.

No Corps jurisdiction is associated with the Study Area.

Regional Board jurisdiction associated with the Study Area totals approximately 0.13 acre, none of which is State wetlands. A total of 970 linear feet of ephemeral streambed is present.

CDFW jurisdiction associated with the Study Area totals 0.17 acre, none of which is riparian. A total of 970 linear feet of ephemeral stream is present.

I. METHODOLOGY

Prior to beginning the field delineation, a color aerial photograph, a topographic base map of the property, the previously cited USGS topographic map, and a soils map were examined to determine the locations of potential areas of Corps, Regional Board, and CDFW jurisdiction. Suspected jurisdictional areas were field checked for evidence of stream activity and/or wetland vegetation, soils and hydrology. Where applicable, reference was made to the 2008 Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States (OWHM Manual)[2] to identify the width of Corps jurisdiction and suspected federal wetland habitats on the site were evaluated using the methodology set forth in the U.S. Army Corps of Engineers 1987 Wetland Delineation Manual[3] (Wetland Manual) and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Supplement (Arid West Supplement).[4] Reference was also made to the 2019 State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (State Board Wetland Definition and Procedures) to identify suspected State wetland habitats.[5] While in the field the potential limits of jurisdiction were recorded with a sub-meter Trimble GPS device in conjunction with a color aerial photograph using visible landmarks.

[2] U.S. Army Corps of Engineers. 2008. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States
[3] Environmental Laboratory. 1987. Corps of Engineers Wetlands Delineation Manual, Technical Report Y-87-1, U.S. Army Engineer Waterways Experimental Station, Vicksburg, Mississippi.
[4] U.S. Army Corps of Engineers. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0), ed. J. S. Wakeley, R. W. Lichvar, and C. V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
[5] State Water Resources Control Board. 2019. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State.

The National Cooperative Soil Survey (NCSS) has mapped the following soil types as occurring in the general vicinity of the project site:

Balcom Clay Loam, 15 to 30 Percent Slopes; Balcom Clay Loam, 30 to 50 Percent Slopes

The Balcom series consists of moderately deep, well drained soils that formed in material that weathered from soft, calcareous shale and sandstone. Balcom soils are on hills and have slopes of 5 to 75 percent. The mean annual precipitation is about 18 inches and the mean annual air temperature is about 61 degrees F. Balcom soils are on rounded hills at elevations of 200 to 2,300 feet. Slopes range from 5 to 75 percent. This soil profile is well drained with low to high runoff, and moderate to moderately slow permeability. The soils formed in material weathered from gray, soft, calcareous shale and sandstone. Balcom soils are used primarily for range, wildlife and watershed. Natural vegetation is annual grasses and mustard.

Calleguas Clay Loam, 50 to 75 Percent Slopes

The Calleguas series consists of very shallow and shallow, well drained soils formed on uplands, hills and mountains in material weathered from sedimentary rocks. Calleguas soils have slopes of 9 to 75 percent. The mean annual precipitation is about 406 millimeters (16 inches) and the mean annual air temperature is about 16 degrees C (60 degrees F). The Calleguas soils are on exposed and often eroded south-facing slopes. Slopes are 9 to 75 percent. Elevations are 30 to 853 meters (100 to 2,800 feet). The soils formed in material weathered from sandstone, shale, and mudstone. The climate is dry sub-humid with warm dry summers and cool moist winters. This soil series is well-drained with medium or high runoff, and moderate permeability. Calleguas soils are used for grazing and watershed. Vegetation is annual grasses and forbs with some shrubs of the coastal sagebrush group.

Myford Sandy Loam. 2 to 9 Percent Slopes

The soils of the Myford Series are deep, moderately well drained soils formed on terraces. The mean annual precipitation is about 16 inches and the mean annual air temperature is about 62 degrees F. Myford soils are nearly level to moderately steep and are on terraces at elevations of less than 1,500 feet. The climate is dry sub-humid mesothermal with dry summers and cool moist winters. Mean annual precipitation is 12 to 20 inches. This soil series is moderately well drained with medium to rapid runoff, and very slow permeability. Myford soils are used for production of citrus, pasture, range, barley, and for urban development. Principal vegetation is annual grasses and forbs with some scattered low-growing brush.

II. JURISDICTION

A. Army Corps of Engineers

Pursuant to Section 404 of the Clean Water Act, the Corps regulates the discharge of dredged and/or fill material into waters of the United States. The term "waters of the United States" is defined in Corps regulations at 33 CFR Part 328.3(a), pursuant to the *Navigable Waters Protection Rule*[6] (NWPR), as:

(a) Jurisdictional waters. For purposes of the Clean Water Act, 33 U.S.C. 1251 *et seq.* and its implementing regulations, subject to the exclusions in paragraph (b) of this section, the term ‘‘waters of the United States’’ means:

(1) The territorial seas, and waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including waters which are subject to the ebb and flow of the tide;
(2) Tributaries;
(3) Lakes and ponds, and impoundments of jurisdictional waters; and
(4) Adjacent wetlands.

(b) Non-jurisdictional waters. The following are not ‘‘waters of the United States’’:

(1) Waters or water features that are
not identified in paragraph (a)(1), (2), (3), or (4) of this section;
(2) Groundwater, including groundwater drained through subsurface drainage systems;
(3) Ephemeral features, including ephemeral streams, swales, gullies, rills, and pools;
(4) Diffuse stormwater run-off and directional sheet flow over upland;
(5) Ditches that are not waters identified in paragraph (a)(1) or (2) of this section, and those portions of ditches constructed in waters identified in paragraph (a)(4) of this section that do not satisfy the conditions of paragraph (c)(1) of this section;
(6) Prior converted cropland;
(7) Artificially irrigated areas, including fields flooded for agricultural production, that would revert to upland should application of irrigation water to that area cease;
(8) Artificial lakes and ponds, including water storage reservoirs and farm, irrigation, stock watering, and log cleaning ponds, constructed or excavated in upland or in non-jurisdictional waters, so long as those artificial lakes and ponds are not impoundments of jurisdictional waters that meet the conditions of paragraph (c)(6) of this section;
(9) Water-filled depressions constructed or excavated in upland or in non-jurisdictional waters incidental to mining or construction activity, and pits excavated in upland or in non-jurisdictional waters for the purpose of obtaining fill, sand, or gravel;

[6] U.S. Environmental Protection Agency & Department of Defense. 2020. Federal Register / Vol. 85, No. 77 / Tuesday, April 21, 2020 / Rules and Regulations.

> *(10) Stormwater control features constructed or excavated in upland or in non-jurisdictional waters to convey, treat, infiltrate, or store stormwater runoff;*
> *(11) Groundwater recharge, water reuse, and wastewater recycling structures, including detention, retention, and infiltration basins and ponds, constructed or excavated in upland or in non-jurisdictional waters; and*
> *(12) Waste treatment systems.*

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

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

1. Wetland Definition Pursuant to Section 404 of the Clean Water Act

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

- More than 50 percent of the dominant plant species at the site must be typical of wetlands (i.e., rated as facultative or wetter in the Arid West 2016 Regional Wetland Plant List[7],[8]);

- Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation (e.g., a gleyed color, or mottles with a matrix of low chroma

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

indicating a relatively consistent fluctuation between aerobic and anaerobic conditions); and

- Whereas the Wetland Manual requires that hydrologic characteristics indicate that the ground is saturated to within 12 inches of the surface for at least five percent of the growing season during a normal rainfall year, the Arid West Supplement does not include a quantitative criteria with the exception for areas with "problematic hydrophytic vegetation", which require a minimum of 14 days of ponding to be considered a wetland.

B. Regional Water Quality Control Board

The State Water Resource Control Board and each of its nine Regional Boards regulate the discharge of waste (dredged or fill material) into waters of the United States[9] and waters of the State. Waters of the United States are defined above in Section II.A and waters of the State are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code 13050[e]).

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

1. State Wetland Definition

The State Board Wetland Definition and Procedures define an area as wetland as follows: *An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2)*

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

the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation.

The following wetlands are waters of the State:

1. *Natural wetlands;*
2. *Wetlands created by modification of a surface water of the state;*[10] *and*
3. *Artificial wetlands*[11] *that meet any of the following criteria:*

a. Approved by an agency as compensatory mitigation for impacts to other waters of the state, except where the approving agency explicitly identifies the mitigation as being of limited duration;
b. Specifically identified in a water quality control plan as a wetland or other water of the state;
c. Resulted from historic human activity, is not subject to ongoing operation and maintenance, and has become a relatively permanent part of the natural landscape; or
d. Greater than or equal to one acre in size, unless the artificial wetland was constructed, and is currently used and maintained, primarily for one or more of the following purposes (i.e., the following artificial wetlands are not waters of the state unless they also satisfy the criteria set forth in 2, 3a, or 3b):

i. Industrial or municipal wastewater treatment or disposal,
ii. Settling of sediment,
iii. Detention, retention, infiltration, or treatment of stormwater runoff and other pollutants or runoff subject to regulation under a municipal, construction, or industrial stormwater permitting program,
iv. Treatment of surface waters,
v. Agricultural crop irrigation or stock watering,
vi. Fire suppression,
vii. Industrial processing or cooling,
viii. Active surface mining – even if the site is managed for interim wetlands functions and values,
ix. Log storage,
x. Treatment, storage, or distribution of recycled water, or

[10] "Created by modification of a surface water of the state" means that the wetland that is being evaluated was created by modifying an area that was a surface water of the state at the time of such modification. It does not include a wetland that is created in a location where a water of the state had existed historically, but had already been completely eliminated at some time prior to the creation of the wetland. The wetland being evaluated does not become a water of the state due solely to a diversion of water from a different water of the state.
[11] Artificial wetlands are wetlands that result from human activity.

xi. Maximizing groundwater recharge (this does not include wetlands that have incidental groundwater recharge benefits); or
xii. Fields flooded for rice growing.[12]

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

C. California Department of Fish and Wildlife

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

CDFW defines a stream (including creeks and rivers) as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of "lake" includes "natural lakes or man-made reservoirs." CDFW also defines a stream as “a body of water that flows, or has flowed, over a given course during the historic hydrologic regime, and where the width of its course can reasonably be identified by physical or biological indicators.”

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

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

III. RESULTS

A. Corps Jurisdiction

No Corps jurisdiction is present within the Study Area.

The Study Area contains an ephemeral feature that originates onsite and extends in a southerly/southwesterly direction for approximately 970 linear feet before terminating onsite at the edge of a dirt access road located in the southeastern portion of the property. The feature is characterized by the presence of erosional bed and banks but does not exhibit evidence of an OHWM or adequate flow sign even during an above average rainy season. Furthermore, the feature terminates onsite at a dirt road (i.e. is "isolated") and does not connect to any downstream water. Pursuant to the *Navigable Waters Protection Rule*, ephemeral features, including ephemeral streams, swales, gullies, rills, and pools are not considered waters of the U.S. regardless of the presence or absence of an OHWM. Tributaries must satisfy the flow conditions of the definition described in 33 U.S.C. 1251 et seq. and its implementing regulations (33 CFR Part 328.3). As a result, this feature is not subject to Corps jurisdiction pursuant to Section 404 of the CWA.

B. Regional Water Quality Control Board Jurisdiction

Regional Board jurisdiction associated with Study Area totals 0.13 acre, none of which is State wetland or riparian. A total of 970 linear feet of ephemeral stream is present.

Regional Board jurisdiction is limited to one erosional feature, defined herein as Drainage A and its associated tributary (Tributary A-1). Drainage A and its associated tributary originate onsite and extend in a southerly/southwesterly direction for a collective 970 linear feet before terminating onsite at the edge of a dirt access road located in the southeastern portion of the property. The feature(s) is characterized by the presence of erosional bed and banks and conveys surface water only in direct response to precipitation (e.g., rain). This feature was completely dry during our field investigation despite recent rainfall during an above-average rainy season. Since ephemeral features are not subject to Corps jurisdiction pursuant to Section 404 of the CWA, this feature is also not subject to Regional Board jurisdiction pursuant to Section 401 of the CWA. However, since this feature conveys surface flow with the potential to support beneficial uses, it considered to be waters of the State that would be regulated by the Regional Board pursuant to Section 13260 of the California Water Code (CWC)/the Porter-Cologne Act.

Drainage A is generally unvegetated in the low flow channel. The banks are dominated by non-native upland species including tree tobacco (*Nicotiana glauca*), black mustard (*Brassica nigra*), and crown daisy (*Glebionis coronaria*). Native upland species are limited to a few stands of blue

elderberry (*Sambucus nigra* ssp. *caerulea*). No soil pits were excavated due to a lack of wetland hydrology and a predominance of upland vegetation.

C. CDFW Jurisdiction

CDFW jurisdiction associated with the Study Area totals 0.17 acre, none of which is riparian. A total of 970 linear feet of ephemeral stream is present.

CDFW jurisdiction contained within the Study Area is limited to one erosional feature, defined herein as Drainage A and its associated tributary (Tributary A-1). Drainage A and its associated tributary originate onsite and extend in a southerly/southwesterly direction for a collective 970 linear feet before terminating onsite at the edge of a dirt access road located in the southeastern portion of the property. The feature(s) is characterized by the presence of erosional bed and banks and only conveys brief surficial flow during high storm events. The feature terminates onsite at a dirt road (i.e. is "isolated") and does not connect to any downstream water.

Drainage A and its associated tributary are generally unvegetated in the low flow channel. The banks are dominated by non-native upland species including tree tobacco, black mustard, and crown daisy. Native upland species are limited to a few stands of blue elderberry (*Sambucus nigra* ssp. *caerulea*).

The extent of CDFW jurisdiction is depicted on Exhibit 3B. Site photographs are provided as Exhibit 4.

If you have any questions about this letter report, please contact me at (949) 340-3698 or at llokovic@wetlandpermitting.com.

Sincerely,

GLENN LUKOS ASSOCIATES, INC.

Lesley Lokovic Gamber
Regulatory Specialist

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Source: ESRI World Street Map

N

0 2 4 8 Miles

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Regional Map

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Exhibit 1

Adapted from USGS Yorba Linda, CA quadrangle

N

0 1,000 2,000 4,000 Feet

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Vicinity Map

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Exhibit 2

Property Boundary

Project Study Area

RWQCB Non-Wetland Waters

4 Width of Non-Wetland Waters in Feet

1 Photo Location

N

0 125 250 500

Feet

1 inch = 250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: May 1, 2019

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RWQCB Jurisdictional Delineation Map

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Exhibit 3A

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Property Boundary

Project Study Area

CDFW Non-Riparian Streambed

4 Width of Non-Riparian Streambed in Feet

1 Photo Location

N

0 125 250 500

Feet

1 inch = 250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: May 1, 2019

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CDFW Jurisdictional Delineation Map

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Exhibit 3B

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Photograph 1: View depicting southerly extent of Drainage A looking north/northeast. Taken April 2019.

Photograph 2: View depicting Drainage A and associated Tributary A-1 looking northeast. Taken April 2019.

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Exhibit 4

Photograph 3: View of bed/bank within drainage A.

Photograph 4: View depicting central portion of Drainage A looking north.

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Site Photographs

Photograph 5: Additional view of bed/bank within drainage A.

Photograph 6: Representative view of vegetation associated with Drainage A. Note the area is overgrown with non-native and/or upland vegetation.

Photograph 7: View depicting Tributary A-1 looking northeast. Note the incised and eroded nature of the left bank.

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Exhibit 4

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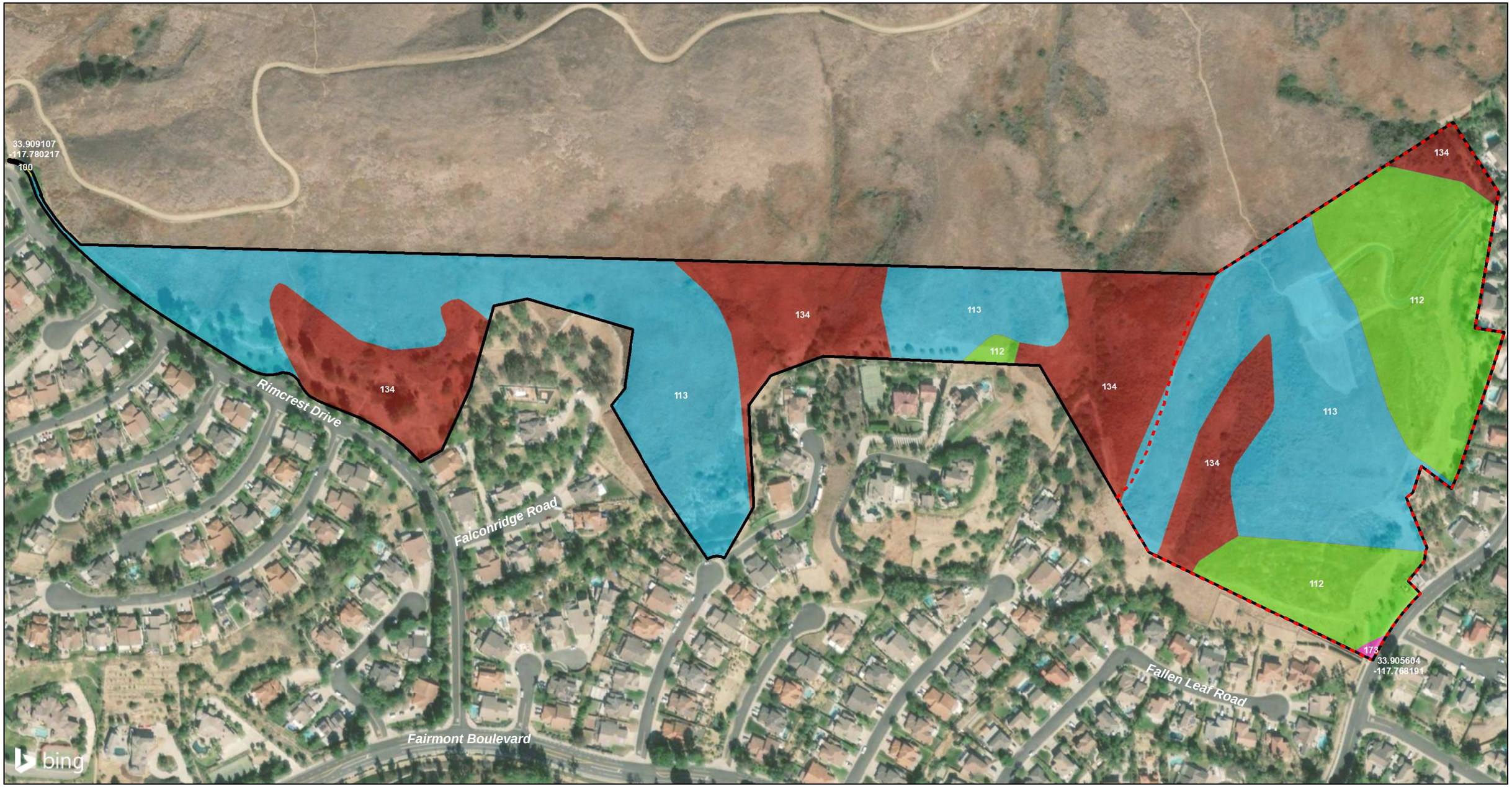
Site Photographs



- Property Boundary
- Project Study Area
- 100 - Alo Clay, 9 To 15 Percent Slopes
- 112 - Balcom Clay Loam, 15 To 30 Percent Slopes
- 113 - Balcom Clay Loam, 30 To 50 Percent Slopes
- 134 - Calleguas Clay Loam, 50 To 75 Percent Slopes, Eroded
- 173 - Myford Sandy Loam, 2 To 9 Percent Slopes

N

0 125 250 500

Feet

1 inch = 250 feet

Coordinate System: State Plane 6 NAD 83
Projection: Lambert Conformal Conic
Datum: NAD83
Map Prepared by: K. Kartunen, GLA
Date Prepared: May 1, 2019

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Soils Map

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Exhibit 5

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