

Appendix A

Biological Resources Assessment

Final

2354 SAN CLEMENTE STREET, LAGUNA BEACH, CALIFORNIA

Biological Resources Assessment

Prepared for
Kevin Aaronson
32741 Seven Seas
Dana Point, California 92629

June 2022 (Revised November 2023)



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2354 SAN CLEMENTE STREET, LAGUNA BEACH, CALIFORNIA

Biological Resources Assessment

Executive Summary

The purpose of this study is to document the existing biological resources located at 2354 San Clemente Street (APNs 656-122-04 and 656-122-05) in the City of Laguna Beach, Orange County, California. The proposed project is the demolition of an existing single-family residence and the replacement construction of a new single-family residence on the property. Biological field studies were completed on October 31, 2018, August 7, 2019, February 25, 2022, and on June 16, 2023. High Value Habitat, as defined in the City's General Plan, is present within the study area in the form of lemonade berry scrub. The proposed single-family residence, replacing the existing single-family residence, will not be located within a High Value Habitat area but is proposed to be located within a designated Open Space Preserve Area, albeit surrounded by existing residential uses. Construction will not occur within a significant watercourse or within a 25-foot drainage course buffer area. Fuel modification will be conducted in accordance with the project's AMM, and will avoid impacts to High Value Habitat in the form of lemonade berry scrub. New vegetation changes resulting from fuel modification implementation will concentrate on removal of non-native or selected non-dominant species occurring within the lemonade berry scrub. Selective thinning of species for fuel modification will avoid or minimize impacts to the biological resources, and associated Alternate Materials, Design, and Methods of construction described in a separate report will minimize overall impacts to High Value Habitat within the study area. Impacts to biological resources can be avoided or minimized with the implementation of the recommendations provided in this report. A significant watercourse is present within the study area, but there will be no encroachment within this significant drainage or the 25-foot setback buffer.

CHAPTER 1

Introduction

Background and Purpose

This report presents the findings of a general biological survey conducted by **Environmental Science Associates (ESA)** for the property located at 2354 San Clemente Street (Assessor Parcel Numbers [APNs] 656-122-04 and 656-122-05, main parcel and fuel modification parcel respectively; referred to collectively as the study area) in the City of Laguna Beach (City), Orange County, California. The purpose of this study is to document the existing biological resources and assess the potential biological and regulatory constraints associated with the future construction of a proposed single-family home to replace the existing single-family residence on the property. The submittal of this report is intended to satisfy documentation according to the City of Laguna Beach Biological Report Requirements (City of Laguna Beach 2006a).

The proposed single family home will consist of a new 3,583 square-foot single-family residence and an attached 528 square-foot, two-car garage in the R-1 (Residential Low Density) zone. The proposed new residence will include a new two-level residential structure, additional covered/tandem parking, lot coverage, interconnected concrete decking (1,377 square feet), skylights, grading, retaining walls, pool and spa, and landscaping/fuel modification. These facilities are proposed within the main parcel. A second adjacent parcel is non-buildable and is to remain as a natural open space zone.

Fuel modification within both parcels will also be required as part of the project, and include a 20-foot irrigated zone surrounding all proposed constructed residential facilities identified as Zone A. Zone B is a 50-foot irrigated, non-buildable zone that consists of an area beyond Zone A. Zone B separates Zone A from the 25-foot setback that avoids the significant watercourse. Zone C consists of the area contained within the 25-foot setback on either side of the significant watercourse, which is non-irrigated and consists of a 50-percent thinning fuel management zone. Fuel modification Zones A and B overlap portions of High Value Habitat associated with lemonade berry scrub. The project proposes the use of water cannons for fire protection in areas outside of Zone A.

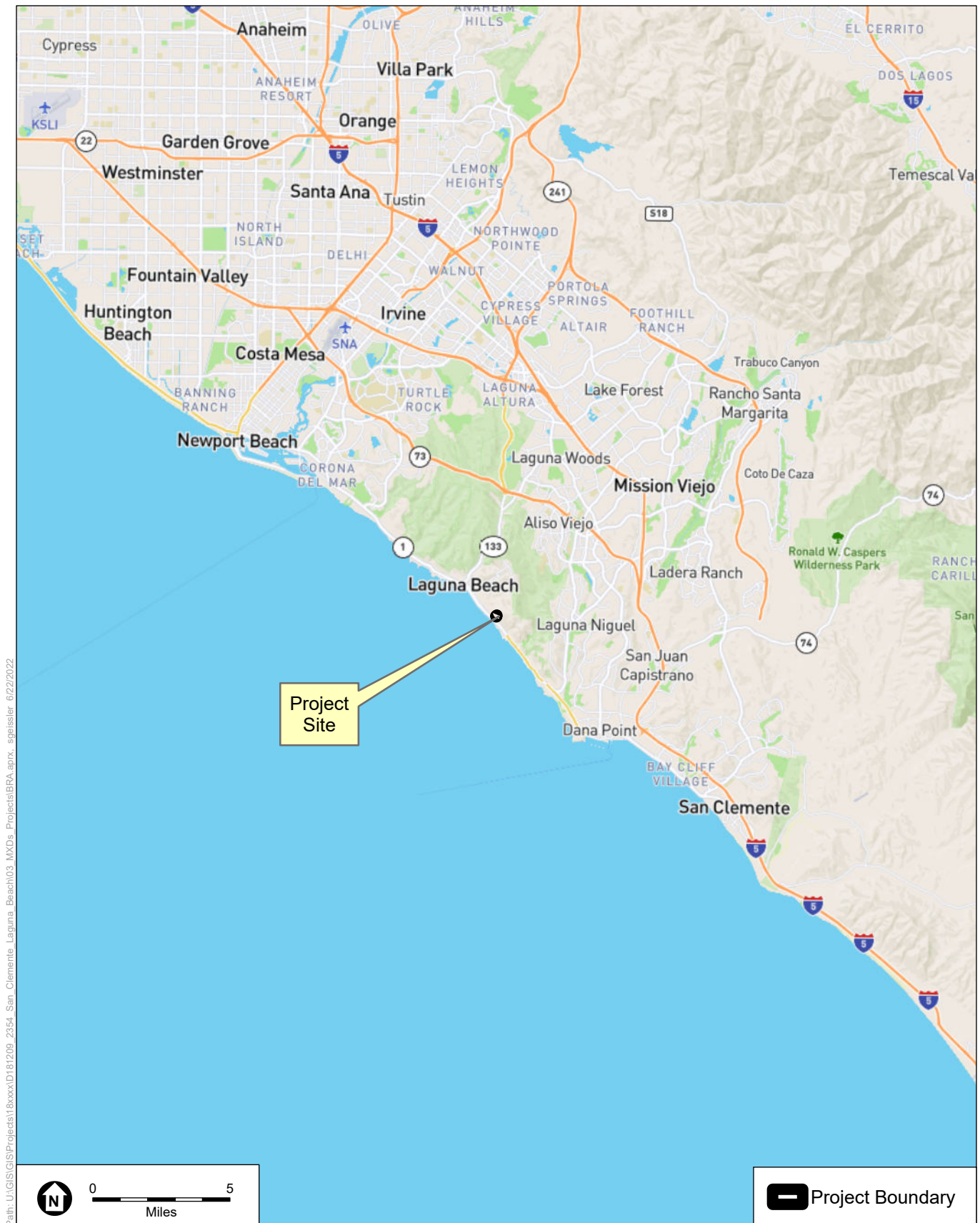
The existing single-family residence will be demolished and removed from the project site. In addition to the new residential structure, the project will provide a cul-de-sac turnaround at the end of San Clemente Street. Stormwater flows from the roadway will be directed downslope to the offsite, adjacent drainage course to the north.

Study Area Location

The study area consists of approximately 0.51 acres located at 2354 San Clemente Street in Laguna Beach, as shown in **Figure 1, Regional Map**. The study area can be found within U.S. Geological Survey (USGS) 7.5' Laguna Beach topographic quadrangle, Section 31, Township 7 S., Range 8 W. and Section 36, Township 7 S., Range 9 W. Elevation on-site ranges from approximately 250 feet (75 meters) above mean sea level (MSL) in the northern portion of the study area to approximately 330 feet (98 meters) above MSL in the eastern portion of the study area. The Project Site at 2354 San Clemente Street is approximate 900 feet east of South Coast Highway (State Highway 1) and 1.65 miles southeast of Laguna Canyon Road (Highway 133), **Figure 2, Project Location Map**.

Scope of Study

The scope of this assessment is to document the existing biological resources within the study area, and to identify any potential sensitive biological resources that may pose constraints to future development within the study area. This report incorporates the findings of a literature review and four general biological surveys of the property conducted on October 31, 2018, August 7, 2019, February 25, 2022, and June 16, 2023. This documentation is consistent with accepted scientific and professional standards pursuant to the California Environmental Quality Act (CEQA) and congruent with technical requirements of the U.S. Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW), where appropriate. While general biological resources are discussed in a comprehensive manner, the focus of this assessment is on those resources considered to be sensitive.



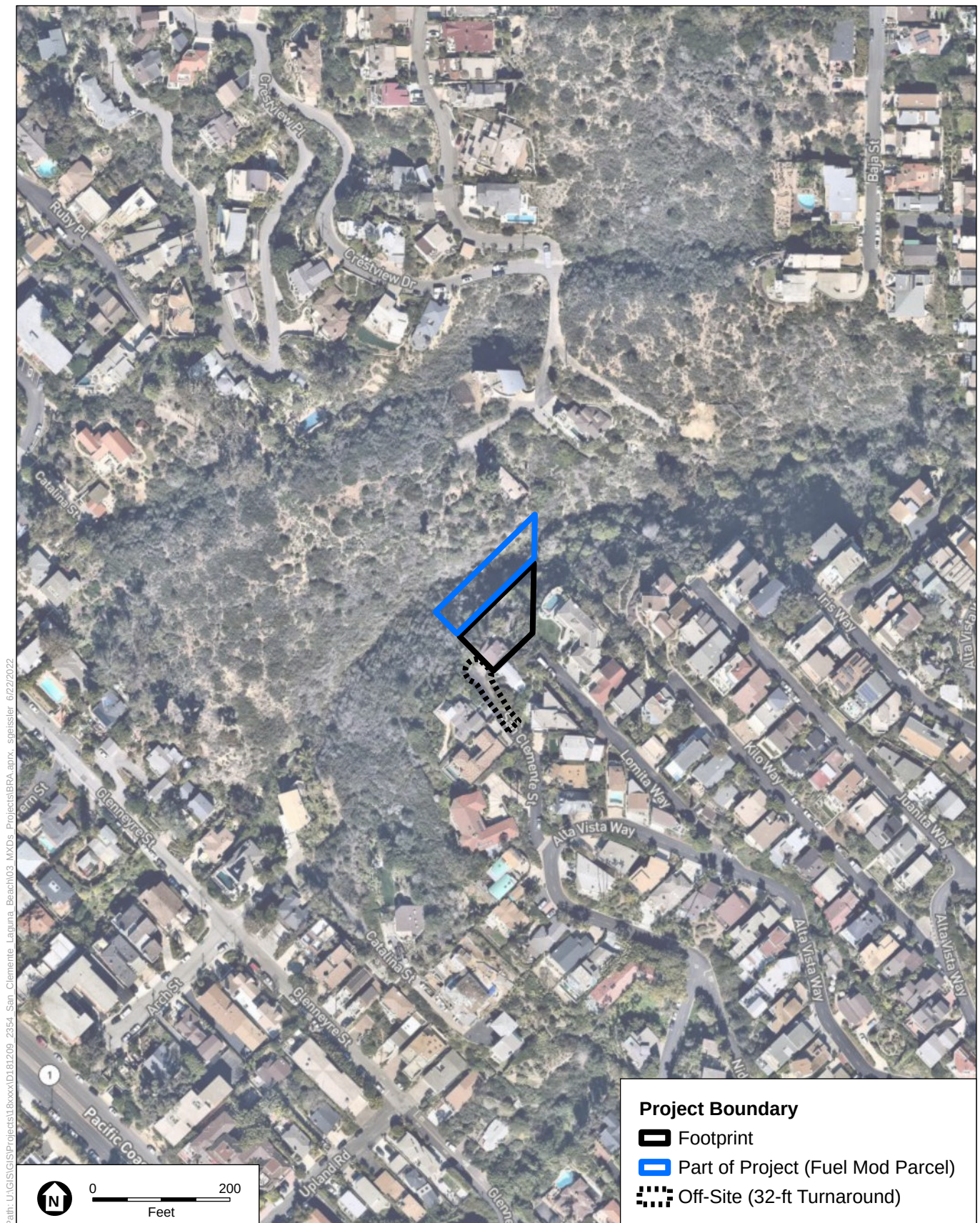
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SOURCE: Open Street Map, 2018.

2354 San Clemente Project

Figure 1
Regional Map





SOURCE: Mapbox, 2021

2354 San Clemente Project

Figure 2
Project Location Map



CHAPTER 2

Methodology

Literature Review

Prior to conducting the field assessment, ESA biologists conducted a query of available resource inventory databases to analyze the potential for sensitive natural resources to occur within the study area. The California Natural Diversity Database (CNDDDB), a CDFW species account database, was reviewed for pertinent information regarding the localities of known observations of sensitive species in the vicinity of the study area (CDFW 2022). Federal register listings, protocols, the Laguna Beach General Plan Open Space and Conservation Element (City of Laguna Beach 2006b), the Laguna Beach Biological Resources Inventory (Marsh et al. 1983), as well as species data provided by the USFWS and CDFW occurrences databases were reviewed in conjunction with anticipated federally and State listed species potentially occurring within the vicinity. In addition, regional flora and fauna field guides were utilized in the identification of species and suitable habitats. These sources and other references reviewed provided a baseline from which to inventory the biological resources potentially occurring within the study area, and are listed in Section 5.0, *References*.

Field Investigation

A biological field assessment of parcel APN 656-122-04 was initially conducted on October 31, 2018. The survey consisted of walking the property footprint to assess the potential for the site to support sensitive biological resources and to map the vegetation on the property. On August 7, 2019, a second survey was conducted by ESA biologist Karla Flores on two parcels (APNs 656-122-04 and 656-122-05) to identify woody shrubs allowed within the fuel modification requirements of the city of Laguna Beach. In addition, observations were made of the vegetation on the adjacent parcel to the north APN 656-122-003. On February 25, 2022 a third survey was conducted by ESA botanist Douglas Gordon-Blackwood to assess the site for special-status plants, including big-leaved crownbeard (*Verbesina dissita*) and intermediate mariposa lily (*Calochortus weedii* var. *intermedius*). On June 16, 2023 a fourth survey was conducted by Mr. Gordon-Blackwood to reassess the vegetation on both parcels and to conduct a focused rare plant surveys for big-leaved crownbeard and intermediate mariposa lily. During the course of each survey, an inventory of plant and wildlife species observed on-site was compiled and special attention was paid to areas potentially supporting sensitive habitat, special-status plant and wildlife species, and areas that may be under the jurisdiction of Federal and State regulatory agencies.

Natural Community Classification and Mapping

During the 2018 assessment, natural communities were mapped with the aid of a 1"=60' scale aerial photograph. Plant community designations follow the Orange County Habitat Classification System (OCHCS) (Gray and Bramlet 1992). After completing the fieldwork, the plant community polygons were digitized using Geographic Information System (GIS) technology to calculate acreages. During the 2023 site visit, vegetation was remapped and characterized in the field in accordance with *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009). A detailed description of each plant community and land use is provided in Chapter 3 of this report.

General Plant Inventory

All plant species observed within the study area were identified and recorded in field notes or collected and later identified using taxonomic keys. Plant taxonomy follows Baldwin et al (2012). Common plant names, when not available from Baldwin, were taken from Roberts (1998), or Clarke et al (2007). Because common names vary significantly between references, scientific names are included during the first mention of a species; common names consistent within the report are used thereafter. A complete list of observed plant species is provided in **Appendix A, Species Compendia**. Special-status plant species are discussed in the following section.

Special-Status Plant Surveys

Special-Status plants include those listed by the USFWS, CDFW, and California Native Plant Society (CNPS) (particularly species with a California Rare Plant Rank (CPRP) of Ranks 1A, 1B, 2A, and 2B). It should be noted that a focused special-status plant survey was not conducted during the October 21, 2018 and August 7, 2019 site visits because of the late season surveys. In accordance with the City's biological reporting requirement, a presence/absence focused survey was made for the Federal and State-threatened big-leaved crownbeard during the February 25, 2022 site visit. A reference site for big-leaved crownbeard was visited to confirm plant phenology during the time of the February 2022 survey¹. A second focused survey for rare or special-status species was conducted in June 2023. Reference sites were visited prior to the June 2023 focused survey for intermediate mariposa lily² and big-leaved crownbeard, during their peak bloom period.

General Wildlife Inventory

All wildlife species observed during the field investigation either by sight, call, tracks, nests, scat, remains, or other sign were recorded in field notes. Binoculars were utilized in the field for the

¹ Calflora Observation:
<https://www.calflora.org/entry/occdetail.html?seq_num=po145453&taxon=Verbesina+dissita>

² Calflora Observation:
< https://www.calflora.org/entry/occdetail.html?seq_num=oe407&taxon=Calochortus+weedii+var.+intermedius>

identification of wildlife, as necessary. Wildlife species observed within the study area are provided in Appendix A, *Species Compendia*.

Wildlife taxonomy in this report followed Stebbins (2003) for amphibians and reptiles, the American Ornithologists' Union (2013) for birds, and Jameson and Peeters (1988) for mammals. Because common names vary significantly between references, scientific names are included during the first mention of a species; common names are used thereafter. Sensitive wildlife species are discussed in the following section

Special-Status Wildlife Surveys

As previously mentioned, all wildlife species observed on-site were recorded during the field investigation; however, no focused protocol surveys for special-status wildlife species were conducted.

Regional Connectivity/Wildlife Movement Corridor Assessment

The analysis of wildlife movement corridors associated with the study area and its immediate vicinity is based on information compiled from the literature and analysis of aerial photographs and topographic maps. Little quantitative data exists on the movements of animals through corridors. A literature review was conducted that included documents on island biogeography (studies of fragmented and isolated habitat "islands"), reports on wildlife home range sizes and migration patterns, and studies on wildlife dispersal. Wildlife movement studies conducted in southern California were also reviewed. The relationship of the study area to large open space areas in the immediate vicinity was also evaluated in terms of connectivity and habitat linkages. Relative to corridor issues, the discussions in this report are intended to focus on wildlife movement associated with the study area and the immediate vicinity.

The focus of this study is to determine if the alteration of current land use within the study area will have significant impacts on the regional movement of wildlife. This study did not include the use of track plates, camera stations, scent stations, or snares. Where applicable, notes were made during the field investigation of any animal sign found, and if any wildlife movement patterns exist. The conclusions drawn from the assessment are based on the knowledge of desired topography and resource requirements for wildlife potentially utilizing the study area and vicinity. It is noted that a portion of the study area, parcel APN 626-122-005, is currently developed with a single-family residence and the study area is located within a developed residential community. The drainage to the north, partially within the study area, provides the primary opportunity for wildlife movement as there is cover for wildlife protection and there are few to no barriers for wildlife passage.

CHAPTER 3

Existing Conditions

Characteristics of the Study Area and Surrounding Area

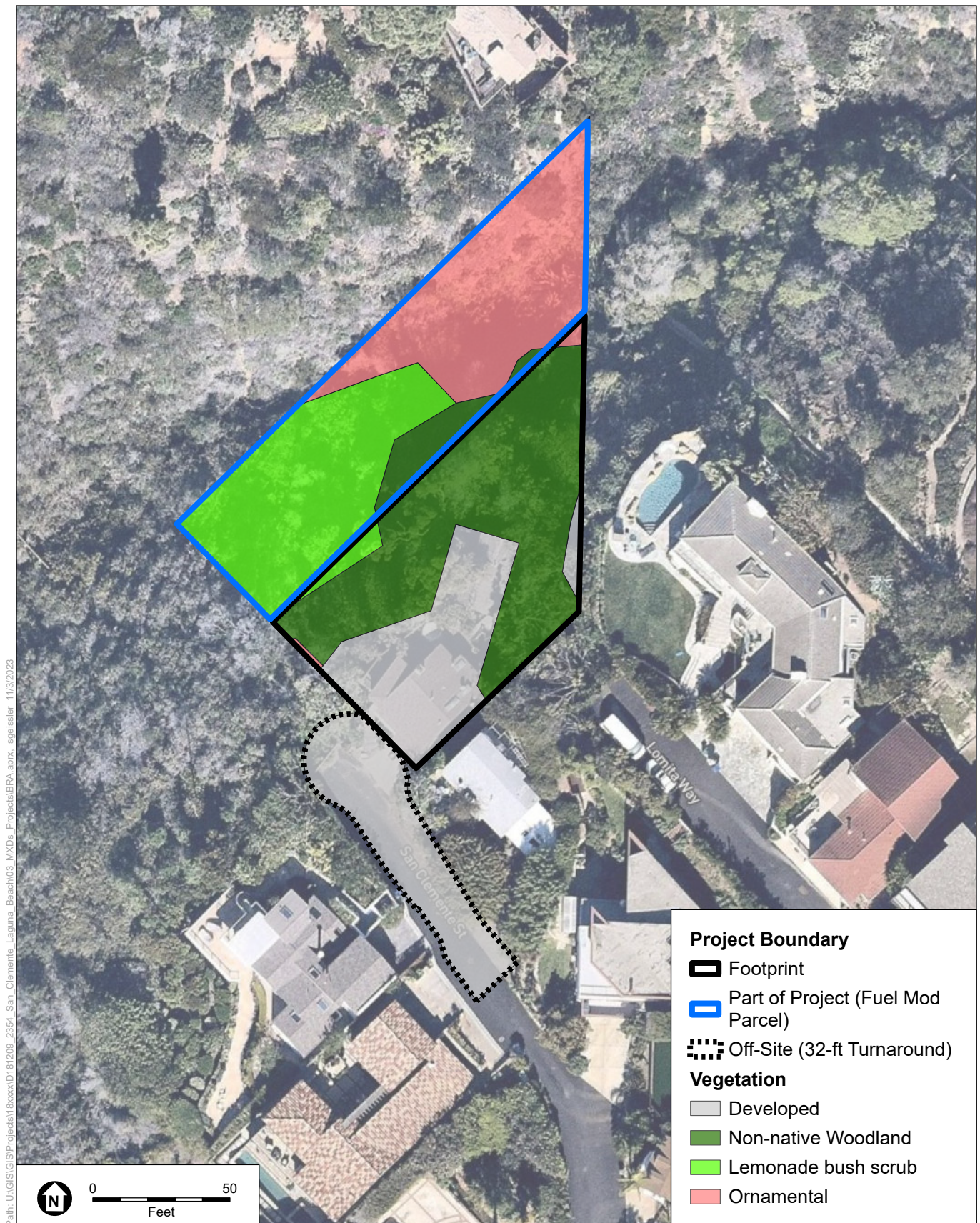
The study area is located at the northeast end of a cul-de-sac at 2354 San Clemente Street in the City of Laguna Beach, north of the intersection of Alta Vista Way and San Clemente Street. The study site consists of an existing residential structure, natural communities, and planted ornamental landscaping.

The study area is immediately bordered by residential development to the east, southeast and southwest, bordered by an undeveloped canyon to the northwest. Each of the surrounding residential structures, including the existing residence on the project site, have associated fuel modification requirements to provide defensible space. Parcel APN 656-122-04 supports an area that has been designated as “High Value Habitat” under the Laguna Beach General Plan Open Space and Conservation Element (City of Laguna Beach 2006b). Ornamental and invasive non-native species were also observed in this portion of the study area. Much of this designated “High Value Habitat” is developed with a single-family residence or is within the fuel modification areas for existing residential uses.

The topography of the study area is characterized by moderate to steep sloping hillsides with ornamental and chaparral vegetation. Elevations range from approximately 250 feet above mean sea level (MSL) in the northern portion of the study area to approximately 320 feet above MSL in the southern portion of the study area.

Natural Communities

The natural communities and land cover types located within the survey area were characterized and remapped during the June 2023 biological field assessment and are depicted in **Figures 3a – Vegetation Map and Figure 3b – Vegetation Map with Fuel Modification Zones**. Each natural community and land cover type is described in detail below. A complete list of plant species observed during the site assessment is provided in **Appendix A – Species Compendia**. Representative photographs are shown in **Appendix B – Site Photographs**. A summary of acreages for each natural community and land cover type within the study area are presented below in **Table 1**.

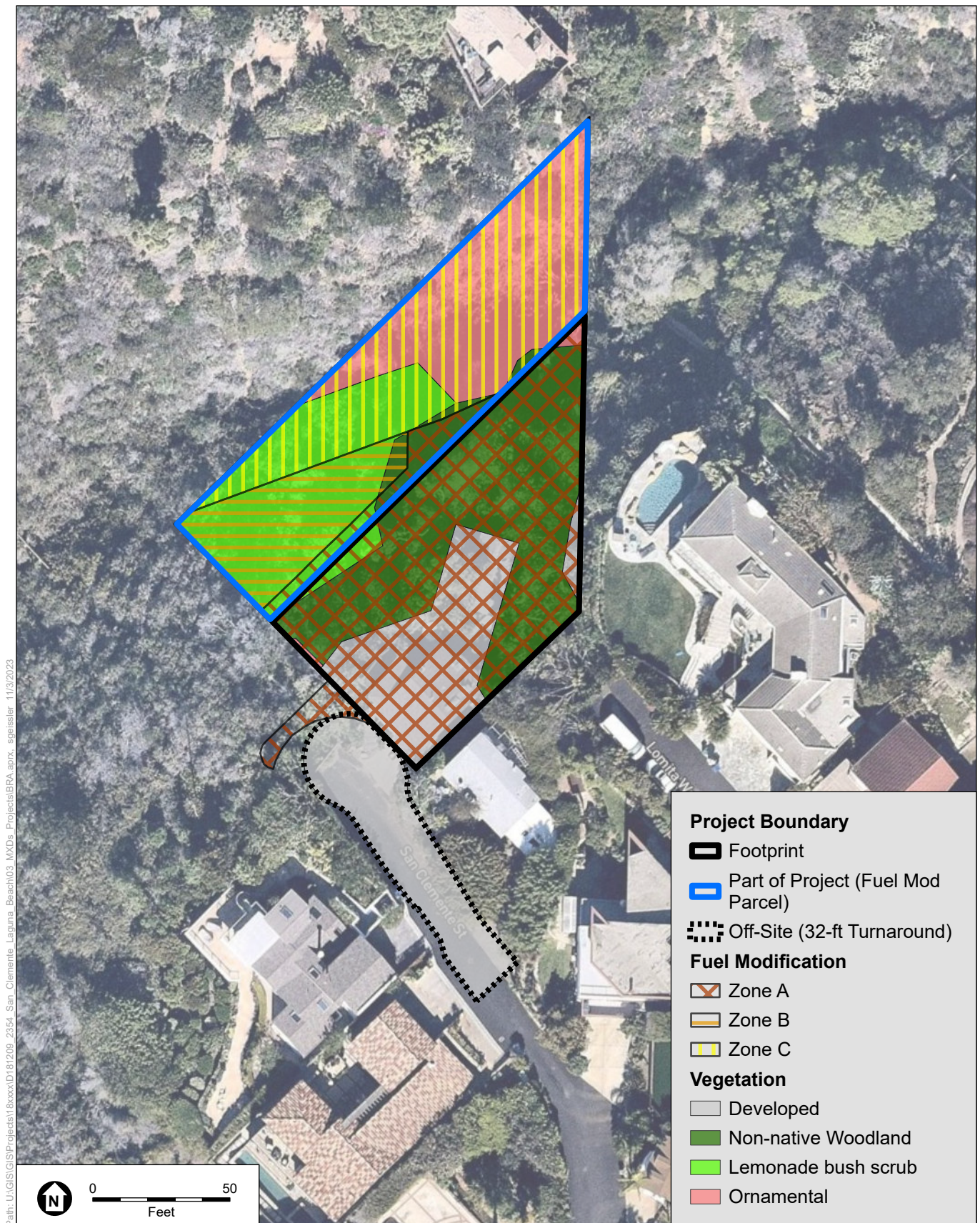


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SOURCE: Mapbox, 2021

2354 San Clemente Project

Figure 3a
Vegetation Map



SOURCE: Mapbox, 2021

2354 San Clemente Project

Figure 3b
Vegetation Map with Fuel Mod Zones

TABLE 1
NATURAL COMMUNITIES AND LAND COVER TYPES WITHIN THE BIOLOGICAL STUDY AREA

Natural Community/Land Cover Type	Project Footprint (acres)	Fuel Modification Parcel			Off-site (32- foot turnaround)	Total (acres) ²
		Fuel Mod Zone A	Fuel Mod Zone B	Fuel Mod Zone C		
Lemonade Berry Scrub (<i>Rhus integrifolia</i> shrubland alliance)	0.01	0.01	0.05	0.04	-	0.11
Non-native Woodland	0.13	0.01	0.00 ²	0.00	-	0.15
Ornamental	0.00	-	-	0.10	-	0.10
Developed	0.07	-	-	-	0.06	0.13
TOTAL	0.21	0.02	0.05	0.14	0.06	0.49

¹ Vegetation was characterized in the field in accordance with A Manual of California Vegetation, Online (CNPS, 2023)

² Biological study area totals are rounded from overall calculated acreage to the nearest 100th and may differ slightly from cumulative totals for those areas where natural communities and land cover types occur in the BSA. Acreages 0.004 or below are reflected as 0.00 in the table.

SOURCE: ESA, 2023

Lemonade Berry Scrub

Lemonade berry scrub (*Rhus integrifolia* shrubland alliance), was mapped along the western portion of the study area, on north-facing slopes. Lemonade berry scrub has lemonade berry (*Rhus integrifolia*) as the dominant shrub, and may include toyon (*Heteromeles arbutifolia*) and laurel sumac (*Malosma laurina*) as subdominants. Lemonade berry scrub typically occurs in mesic north-facing slopes in coastal areas. Lemonade berry scrub accounts for 0.11 acre within the study area, including 0.10 acre within the fuel modification parcel and 0.01 acre within the project footprint. This natural community was previously mapped as toyon sumac scrub, 3.12 in OCHCS (Gray and Bramlet 1992).

Non-native Woodland

Non-native woodland was mapped within the southern portion of the study area, on the north-facing slope immediately adjacent to the existing house and within proposed fuel modification Zone A. Non-native woodland consists of various non-native tree species, including Brazilian pepper (*Schinus terebinthefolius*), ngaio (*Myoporum laetum*), Victorian box (*Pittosporum undulatum*), and blue gum (*Eucalyptus* spp.) as codominant species in the tree canopy. Understory species observed within this community included garden nasturtium (*Tropaeolum majus*), bank catclaw (*Acacia redolens*), and castor bean (*Ricinus communis*). This community comprises 0.15 acre within study area, including 0.02 acre within the fuel modification parcel.

Ornamental

Ornamental vegetation in the study area have a variety of non-native trees, shrubs, and ground cover planted as landscaping, being the dominant species within the community. The area has

been subject to regular and historic disturbance in the form of fuel modification. Within this community, remnant native species were also observed intermixed with ornamental landscaping plantings. Species observed within this community include native laurel sumac, lemonade berry, California sagebrush (*Artemisia californica*), coyote brush (*Baccharis pilularis*), California buckwheat (*Eriogonum fasciculatum*), spiny redberry (*Rhamnus crocea*), toyon, bushrue (*Cneoridium dumosum*), and ornamental or non-native Brazilian peppertree, hottentot fig (*Carpobrotus edulis*), sowthistle (*Sonchus asper* var. *asper*), Australian saltbush (*Atriplex semibaccata*), Haworth's aeonium (*Aeonium haworthii*), jade plant (*Crassula ovata*), spotted spurge (*Euphorbia maculata*), Bailey acacia (*Acacia baileyana*), ngaio, Victorian box, trailing lantana (*Lantana montevidensis*), century plant (*Agave americana*), giant yucca (*Yucca gigantea*), and pampas grass (*Cortaderia selloana*). Ornamental vegetation in the study area comprises 0.10 acre within the study area, including 0.10 acre within the fuel modification parcel and 0.002 acre within the project development footprint. This community was previously mapped as ornamental landscaping, 15.5 in OCHCS (Gray and Bramlet 1992).

Developed

Developed areas within the study area consist of the existing residential single-family home, the associated driveway and San Clemente Street. Developed areas comprise 0.13 acre within the study area.

General Plant Inventory

The plant communities discussed above are composed of a variety of plant species. Plant species observations and identifications were completed during the field visit to the study area. No special-status species were detected. Focused surveys for intermediate mariposa lily and big crownbeard were conducted during the peak bloom period in June 2023, and neither species was observed within the study area. All plant species observed within the study area are included in Appendix A, *Species Compendia*. Special-status plant species occurring or potentially occurring within the study area are discussed below under, Special-Status Plant Species.

General Wildlife Inventory

A general habitat assessment for wildlife was performed while visiting the study area. No special-status species were detected, and no focused surveys were conducted. The native and ornamental trees and shrubs may provide foraging and cover habitat for a number of wildlife species, including year-round and seasonal avian residents and migrating songbirds. Bird species observed within or over the study area include turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), Anna's hummingbird (*Calypte anna*), California scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), bushtit (*Psaltiriparus minimus*), wrentit (*Chamaea fasciata*), California towhee (*Melospiza crissalis*), spotted towhee (*Pipilo maculatus*), and lesser goldfinch (*Spinus psaltria*). All wildlife species observed within the study area are indicated in Appendix A, *Species Compendia*. Special-status wildlife species occurring or potentially occurring within the study area are discussed below under, Special-Status Wildlife Species.

Wildlife Movement

Overview

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because such conditions preclude the infusion of new individuals and genetic information into isolated populations (MacArthur and Wilson 1967, Soule 1987, Harris and Gallagher 1989, Bennett 1990).

Corridors effectively act as links between different populations of a species. A group of smaller populations (termed “demes”) linked together via a system of corridors is termed a “metapopulation.” The long-term health of each deme within the metapopulation is dependent upon its size and the frequency of interchange of individuals (immigration vs. emigration). The smaller the deme, the more important immigration becomes, because prolonged inbreeding with the same individuals can reduce genetic variability. Immigrant individuals that move into the deme from adjoining demes mate with individuals and supply that deme with new genes and gene combinations that increases overall genetic diversity. An increase in a population’s genetic variability is generally associated with an increase in a population’s health and long-term viability.

Corridors mitigate the effects of habitat fragmentation by: (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Noss 1983, Fahrig and Merriam 1985, Simberloff and Cox 1987, Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies, such as “travel route,” “wildlife corridor,” and “wildlife crossing” to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and facilitate the discussion on wildlife movement in this study, these terms are defined as follows:

Travel route: A landscape feature (such as a ridge line, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another; it contains adequate food, water, and/or cover while moving between habitat areas; and provides a relative direct link between target habitat areas.

Wildlife corridor: A piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as “habitat or landscape linkages”) can provide both transitory and resident habitat for a variety of species.

Wildlife crossing: A small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are man-made and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These are often “choke points” along a movement corridor.

Wildlife Movement within the Study Area

As previously described, wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, or individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). Although the nature of each of these types of movement are species specific, large open spaces will generally support a diverse wildlife community representing all types of movement. Each type of movement may also be represented at a variety of scales from non-migratory movement of amphibians, reptiles, and some birds on a “local” level, to many square mile home ranges of large mammals moving at a “regional” level.

The study area supports “High Value Habitat,” as designated under the City General Plan Open Space and Conservation Element (City of Laguna Beach 2006b) (**Figure 4, General Plan High Value Habitat and Significant Watercourse**), although this does not fully correspond to the biological resources of highest value observed on the project site. High Value Habitats are extensive areas dominated by indigenous plant communities with good species diversity, and are often linked to other extensive open space areas by traversable open space corridors. This movement does not occur within the Project Site. Their faunal carrying capacity is good to excellent, and many areas are utilized as bedding and foraging sites by mule deer, or possess large resident populations of birds or native small mammals. The High Value Habitat mapped on-site within the City’s General Plan is found in the extreme northeastern corner. Northwest of the study area is comprised of native chaparral and provides high quality native habitat; therefore, this area adjacent to the study area should be considered as High Value Habitat that may be utilized for wildlife movement, while the area onsite currently designated as High Value Habitat should not be so designated based on the observed biological resources present.

The native habitat within the study area is contiguous to open space areas consisting of undeveloped hillsides and canyons, primarily upslope from the study area. Although this open space area is surrounded by residential development, it is loosely connected to the open space area of Aliso and Wood Canyons Wilderness Park further to the east. There is no direct connection of open space from the study area to the Pacific Ocean. However, generally, the study area provides live-in habitat (e.g., for cover, foraging, nesting, etc.) for a variety of wildlife species. Although the study area is not a wildlife movement corridor (i.e., a piece of habitat, usually linear in nature, that

connects two or more habitat patches that would otherwise be fragmented or isolated from one another) since it does not connect Aliso and Wood Canyons Wilderness Park to another large open space area, it is a part of habitat that can be considered a habitat patch and likely supports movement within it on a local and regional level.

Jurisdictional Determination

No formal jurisdictional delineation was performed. However, a preliminary jurisdictional determination was conducted to identify any drainage features potentially subject to the jurisdiction of the USACE, RWQCB, and/or CDFW. One drainage occurs within approximately 0.01 acre of the northern portion of the study area (**Figure 4, General Plan High Value Habitat and Significant Watercourse**). This drainage is fringed by lemonade berry and other species associated with lemonade berry scrub, as well as some sparse sweet fennel, tree tobacco, and pampas grass that were also observed. No native riparian vegetation was observed within the drainage.

Sensitive Biological Resources

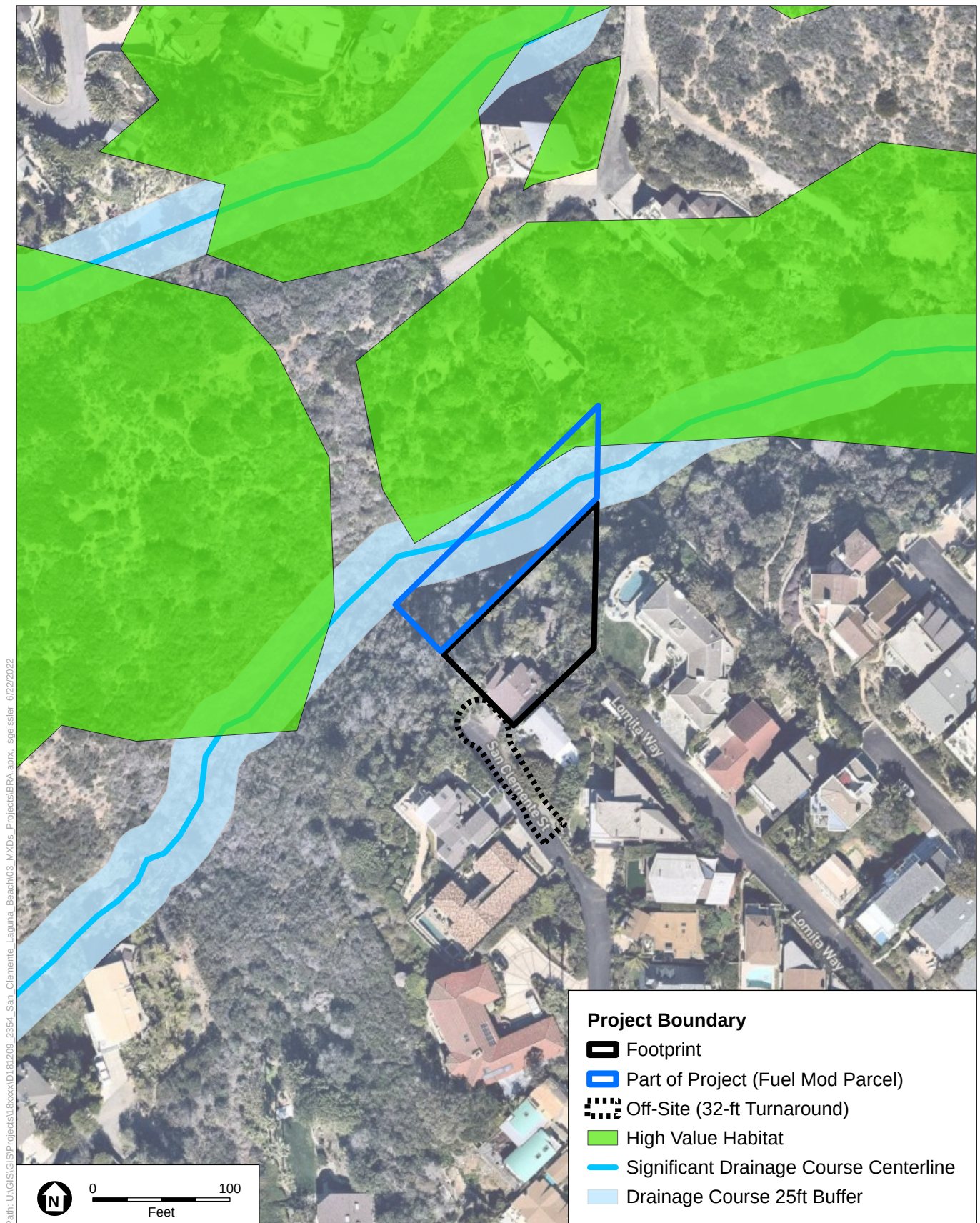
Sensitive biological resources are habitats or individual species that have special recognition by Federal, State, or local conservation agencies and organizations as endangered, threatened, or rare. The USFWS, the CDFW, and special groups like the CNPS maintain watch lists of such resources, under the provisions of the Federal and State Endangered Species Acts.

Special-status species that occur or could potentially occur within the study area are based on one or more of the following: (1) the direct observation of the species on the property during the biological survey, (2) a record reported in the CNDDDB, or (3) the study area is within the known distribution of a species and contains appropriate suitable habitat.

Sensitive Resource Classification

Federal Protection and Classifications

The FESA of 1973 defines an endangered species as “any species which is in danger of extinction throughout all or a significant portion of its range.” A threatened species is defined as “any species which 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, unless properly permitted, 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 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. Of legal note, the FESA does not protect or regulate Federal threatened or endangered listed plant species on private property unless a federal action, such as regulatory permit approval or federal funding, is involved.



SOURCE: Mapbox, 2021

2354 San Clemente Project

Figure 4
General Plan High Value Habitat
and Significant Watercourse

All references to Federally-protected species in this report include the most current published status or candidate category to which each species has been assigned by USFWS.

For purposes of this assessment the following acronyms are used for Federal 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
- FPD Federally proposed for delisting
- FC Federal candidate species (former C1 species)

State of California Protection and Classifications

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 FESA, CESA does not include listing provisions for invertebrate species.

Article 3, Sections 2080 through 2085, of the CESA addresses the taking of threatened or endangered 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.”

Additionally, some sensitive mammals and birds are protected by the State as Fully Protected Mammals or Fully Protected Birds, as described in the California Fish and Game Code, Sections 4700 and 3511, respectively.

California Species of Special Concern are species designated as vulnerable to extinction due to declining population levels, limited ranges, and/or continuing threats. Informally listed species are not protected per se, but warrant consideration in the preparation of biological assessments. For some species, the CNDDDB is only concerned with specific portions of the life history, such as roosts, rookeries, or nest sites. The CNDDDB records represent both specific and generalized information and mapping of observed species; thus, it is more often than not used as an indicator of the potential presence of special status species on a particular study area and is without regulatory authority.

For the purposes of this assessment, the following acronyms are used for State 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
- SSC California Species of Special Concern
- WL California Watch List

California Native Plant Society

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of sensitive species in California. 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 (CNPS 2022). The list serves as the candidate list for listing as Threatened and Endangered by CDFW. CNPS has developed six California Rare Plant Ranks (CRPR) categories of rarity:

- 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.

The CNPS recently added “threat ranks” which parallel the ranks used by the CNDDDB. These ranks are added as a decimal code after the CRPR List (e.g., List 1B.1). The threat codes are as follows:

- .1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat);
- .2 – Fairly threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat);
- .3 – Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known).

Sensitive species that occur or potentially could occur within the study area are based on one or more of the following: (1) the direct observation of the species on the property during one of the biological surveys; (2) a record reported in the CNDDDB; and (3) the study area is within known distribution of a species and contains appropriate habitat.

County of Orange Central/Coastal Subregion Natural Community Conservation Plan and Habitat Conservation Plan (NCCP/HCP)

The study area is located within the coastal subregion of the County of Orange Central/Coastal Subregion NCCP/HCP. The NCCP/HCP was reviewed and approved by the USFWS and CDFW in 1996 to address protection and management of coastal sage scrub habitat and coastal sage scrub-obligate species, as well as other covered habitats and species, and mitigate anticipated impacts on those habitats and species on a programmatic, subregional level rather than on a project-by-project, single-species basis. A habitat reserve in excess of 37,000 acres was established for the protection of coastal sage scrub, other upland habitats, the coastal California gnatcatcher (*Poliophtila californica californica*), and the other primarily coastal sage scrub-dependent species identified in the NCCP/HCP. Specifically, the NCCP/HCP, the USFWS, and the CDFW authorized take of 39 identified species of plants and wildlife (including covered and conditionally covered species). Further, the NCCP/HCP contains requirements for adaptive management, interim management, and funding management for the reserve as well as procedures and minimization measures related to the take of identified species and habitat. Thus, the NCCP/HCP provides for the protection and management of a broad range of plant and wildlife populations while providing certainty to the public and affected landowners with respect to the location of future development and open space in the subregion.

The NCCP/HCP provides for the protection of a number of plant and animal species, referred to as Target Species and Identified Species. There are also identified NCCP/HCP species that have conditional regulatory coverage under the NCCP/HCP, referred to as conditionally covered Identified Species. The conservation and management of these species is provided for under the

NCCP/HCP. The NCCP/HCP provides permits for the take of all covered and conditionally covered species so long as the conditions imposed are satisfied. For the purpose of this assessment the following acronyms are used relative to the NCCP/HCP:

- TN Target NCCP/HCP Species – Covered Species
- IN Identified NCCP/HCP Species – Covered Species
- IN/CC Identified NCCP/HCP Species – Conditionally Covered Species

Sensitive Natural Communities

The study area supports 0.10 acre of lemonade berry scrub, which is considered a sensitive natural community on CDFW’s Natural Community List (*Rhus integrifolia* scrub alliance [lemonade berry scrub alliance, 37.803.00] (CDFW 2023). Project implementation will result in impacts to lemonade berry scrub, where fuel modification will be required of the new single-family residence. The study area also supports High Value Habitat as defined under the Laguna Beach General Plan Open Space and Conservation Element (City of Laguna Beach 2006b). As previously mentioned above, High Value Habitats are designated for extensive areas dominated by indigenous plant communities with good species diversity, and are often linked to other extensive open space areas by traversable open space corridors. Although the lemonade berry scrub is conservatively labeled as High Value Habitat, this natural community does not have extensive links to other open space areas to form large contiguous habitat blocks.

Portions of the High Value Habitat identified within the City of Laguna Beach General Plan Open Space and conservation Element on-site includes the northeastern portion of the study area, where many ornamental and non-native invasive species occur, and the area is subject to regular brush removal as a result of fuel modification for existing residences in the area. These areas do not meet the definition of a High Value Habitat, and should not be considered as such (refer to **Figure 4, General Plan High Value Habitat and Significant Watercourse**).

Lemonade berry scrub mapped in the western portion of the study area should be considered a sensitive habitat, qualifies as ESHA and is therefore conservatively considered High Value Habitat, as defined in the City’s General Plan. Required fuel modification currently overlaps 0.10 acre of lemonade berry scrub. Although fuel modification is required within these areas, the City’s General Plan “Prohibit[s] intrusion of fuel modification programs into environmentally sensitive areas, including chaparral and coastal sage scrubs. In accordance with the City’s General Plan, fuel modification of 0.10 acre of lemonade berry scrub will be avoided and impacts to lemonade berry scrub should be minimized through selective thinning of undesirable nonnative shrubs, installation and use of irrigation rotors on galvanized poles within fuel modification Zone A, water cannons to assist with fire-fighting in Zone B, and other additional fire prevention and protection measures as recommended in the *Updated Request for Alternate Materials, Design, and Methods of Construction for 2354 San Clemente* (AMM; Stamm, 2019). Lemonade berry scrub within Zone C is completely within the 25 foot setback of the drainage and would be avoided completely.

Special-Status Plant Species

During the course of the field investigation, no special-status plant species were observed on-site. A discussion of those special-status plant species with the potential to occur within the study area is included in **Chapter 4, Biological Constraints**.

Special-Status Wildlife Species

A number of special-status wildlife species, including bats, were reported in the CNDDDB and are reported within the region. No special-status wildlife species were observed within the study area during the field investigation. A discussion of those special-status wildlife species with the potential to occur within the study area is included in **Chapter 4, Biological Constraints**.

The coastal California gnatcatcher, a federally threatened species, is recorded within the Laguna Beach USGS topographic quadrangle, but is unlikely to be found within the study area. The only potentially suitable habitat is of poor quality, fragmented, and isolated from any other suitable habitat. The coastal California gnatcatcher has a high affinity for coastal sage scrub dominated by California sagebrush, which does not occur in sufficient quantities in the study area. While components of coastal sage scrub habitat were identified within the onsite chaparral communities, few individual California sagebrush shrubs were observed. Although the species may benefit from other shrub species, the onsite habitat was of low quality with only a few of the favored species evident. Additionally, the habitats were on a moderate to steep slope, a condition the species tends to avoid.

The least Bell's vireo (*Vireo bellii pusillus*) is a federal endangered and State endangered bird species that inhabits riparian habitats. However, no suitable riparian habitat to support this species occurs within the study area; therefore, this species is not expected to occur on-site.

There is also potential for a number of other special-status wildlife species to occur within the study area, including coast horned lizard (*Phrynosoma blainvillii*), orange-throated whiptail (*Aspidoscelis hyperythra*), coast patch-nosed snake (*Salvadora hexalepis virgulata*), red-diamond rattlesnake (*Crotalus ruber*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), and San Diego desert woodrat (*Neotoma lepida intermedia*). In addition to the above special-status wildlife species, western mastiff bat (*Eumops perotis californicus*) and big free-tailed bat (*Nyctinomops macrotis*) were identified as having potential to forage within the undeveloped portions of the property, specifically within the canyon northwest of the property. These bat species are not federally or state listed by USFWS or CDFW, respectively, but are considered species of special concern by CDFW. Both species are known to roost in trees and are found in a variety of habitats including chaparral and rocky outcrops.

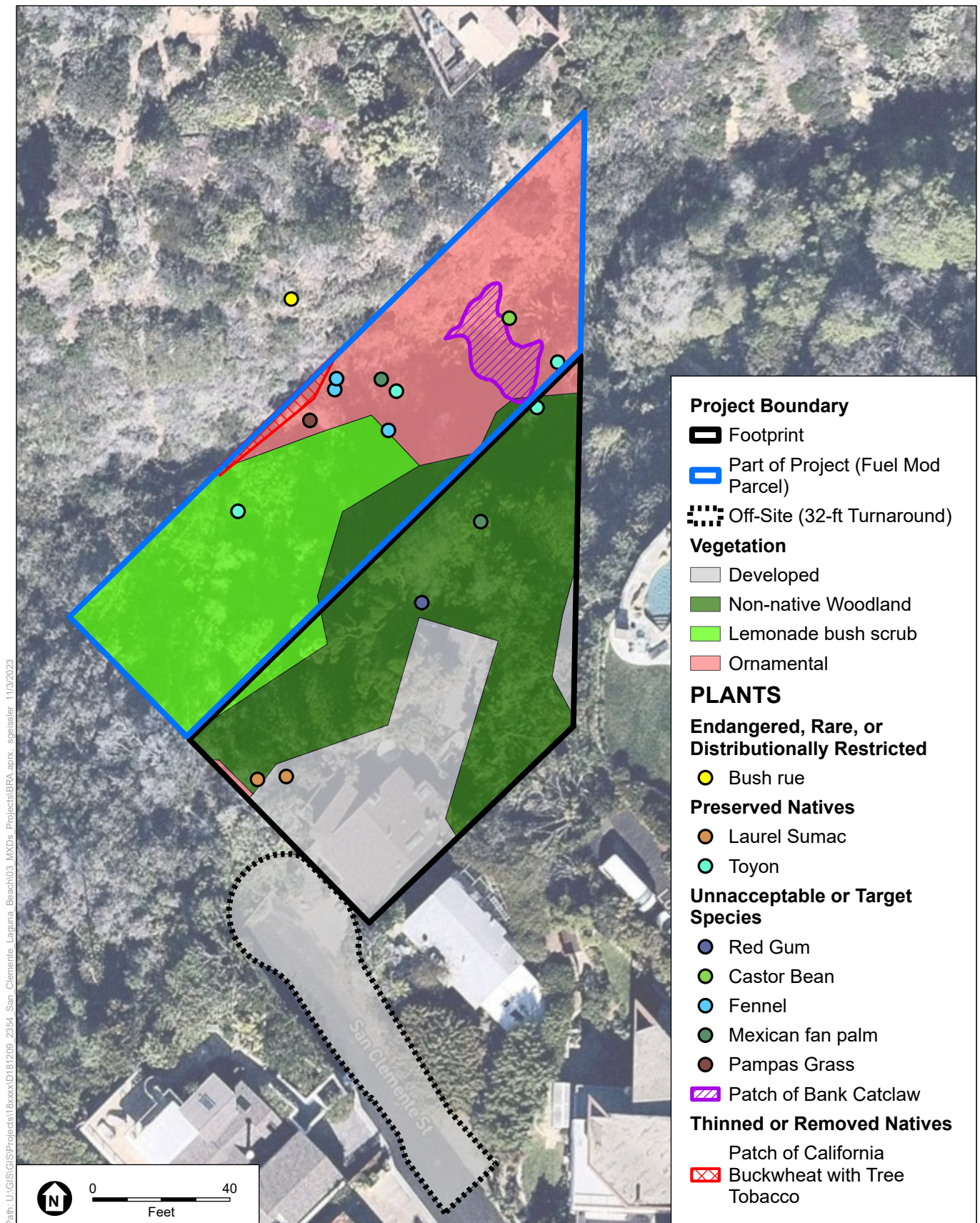
CHAPTER 4

Biological Constraints

The following discussion outlines the biological resources that may pose constraints to future development (e.g., the development of a single-family residence and any associated driveways, roads, infrastructure, fuel modification, and/or landscaping) within the study area.

Special-Status Plant Species

According to the CNDDDB and CNPS database search, more than 30 special-status plant species have been recorded in the region (**Appendix C – Special-Status Plant Species**). However, based on microhabitat characteristics, only 7 special-status plant species have moderate to high potential to occur within the study area. Plants with a moderate to high potential to occur within the project site include: Allen’s pentachaeta (*Pentachaeta aurea* ssp. *allenii*), big-leaved crownbeard, Coulter’s saltbush (*Atriplex coulteri*), intermediate monardella (*Monardella hypoleuca* ssp. *intermedia*), summer holly (*Comarostaphylis diversifolia* ssp. *diversifolia*), intermediate mariposa lily, and thread-leaved brodiaea (*Brodiaea filifolia*). Allen’s pentachaeta typically grows within coastal sage scrub habitat and away from direct coastal influence. The closest recorded location of this species to the study area is about five miles to the northeast. Suitable habitat is present for big-leaved crownbeard and the June 2023 field survey was conducted at a time of year when the species is flowering. Coulter’s saltbush occurs within both grassland and coastal sage scrub communities, neither of which occur within the study area. Intermediate monardella has not been recorded in the vicinity of Laguna Beach and all current records for this species are found within the Santa Ana Mountains further to the east. The woody shrub summer holly is recorded in similar habitat as that occurring within the study area; however, the closest location to the study area recorded for this species is about three miles to the southeast. Thread-leaved brodiaea is a species that occurs within grassland communities, which do not occur within the study area. During the course of the 2022 and 2023 field surveys, no special-status plant species were observed onsite. A small cluster of bush rue, which is listed in the City’s General Plan as ‘Endangered, Rare, or Distributionally Restricted’ plant, was observed in ornamental vegetation just beyond the eastern boundary of the fuel modification parcel. These plants were observed outside of any fuel modification zones and will not be impacted by fuel modification activities (See **Figure 5, Native and Invasive Plants**).



SOURCE: Mapbox, 2021

2354 San Clemente Project

Figure 5
Native and Invasive Plants

It is recommended that prior to any impacts to native lemonade berry scrub on-site, a focused special-status plant survey should be conducted during the appropriate blooming period for any special-status plant species³ that has a potential to occur within the study area. If any special-status plant species are found on-site, development on-site should avoid or minimize impacts to these special-status plant populations to the maximum extent possible, and focus development within areas mapped as developed or ornamental land uses, which already exhibit significant disturbance.

No Allen's pentachaeta, big-leaved crownbeard, Coulter's saltbush, intermediate monardella, summer holly, intermediate mariposa lily, bush rue or thread-leaved brodiaea were observed within the survey area during focused surveys conducted in 2022 or 2023. No special-status plant species are expected to occur within the residential development structural footprint, as the area is either the existing residence or landscaped areas.

Special-Status Wildlife Species

Nearly 60 special status wildlife species were identified by the database reviewed (e.g., CNDDDB; **(Appendix D – Special-Status Wildlife Species)**) as having potential to occur within the vicinity of the study area. Of these, seven special-status wildlife species have moderate to high potential to occur within the study area. Wildlife species with a moderate to high potential of occurring within the project site include: coast horned lizard, orange-throated whiptail, coast patch-nosed snake, red-diamond rattlesnake, northwestern San Diego pocket mouse, and San Diego desert woodrat. No special-status species were observed within the study area during the site surveys.

To minimize impacts to special-status wildlife species that may occur within the area, any development on-site should try to avoid or minimize impacts to the native lemonade berry scrub plant community, and concentrate development within areas mapped as developed or ornamental, which already exhibit disturbance. In addition, Best Management Practices should be incorporated to make sure that during construction, workers are educated about the potential for special-status wildlife species to occur on-site and, if any wildlife are encountered during construction activities, the wildlife should be allowed to leave the work area unharmed and should be flushed or herded in a safe direction away from the work area.

In addition, the study area has the potential to support both raptor and songbird nests due to the presence of trees, shrubs, and ground cover. Disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act (16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Game Code Section 3503. Vegetation removal activities (e.g., clearing for future development or thinning for fuel modification) should be scheduled outside the nesting season to avoid potential impacts to nesting birds. Nesting activity typically occurs from February 15 to August 31. This would insure that no active nests would be disturbed. If construction cannot be scheduled outside of the nesting season, all suitable habitat within 300 feet of project construction activities be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of vegetation removal activities. If any active nests are detected, a buffer of 300 feet (500 feet for raptors), or as determined appropriate by a qualified

³ Including those listed in the City's General Plan as Endangered, Rare, or Distributionally Restricted

biologist, will be delineated, flagged, and avoided until the biologist determines that the nesting cycle is complete.

Sensitive Natural Communities/High Value Habitat

The study area supports areas that have been designated as “High Value Habitat” under the Laguna Beach General Plan Open Space and Conservation Element (City of Laguna Beach 2006b). The High Value Habitat mapped on-site includes the extreme northeastern portion of the study area (refer to **Figure 4**, *General Plan High Value Habitat and Significant Watercourse*). The 0.10 acre of lemonade berry scrub is considered a sensitive natural community, which is also considered High Value Habitat. As discussed, no impacts to lemonade berry scrub will occur as a result of the project in accordance with the AMM.

Species identified as target species unacceptable for use in Fuel Modification Zone A (the zone closest to Combustible Habitable Structures) include wattle (*Acacia* species), toyon, and laurel sumac. Additional species observed within the Zone A Fuel Modification are listed as Target Species Unacceptable for use in all Fuel Modification Zones (A, B, or C) include *Eucalyptus* species, pampas grass, California sagebrush, Algerian ivy (*Hedera canariensis*), tree tobacco, castor bean, Brazilian pepper, and Mexican fan palm (*Washingtonia robusta*). Removal of non-native species within Zone A would provide an environmental benefit for the sensitive communities within Zone A (See Figure 5). Lemonade berry scrub in Zone C is located within the 25-foot setback buffer and would be avoided.

Jurisdictional Features

A preliminary jurisdictional determination was conducted to identify any drainage features potentially subject to the jurisdiction of the USACE, RWQCB, and/or CDFW. The onsite drainage occurs within approximately 0.01 acre of the northern portion of the study area.

Any development on-site, including fuel modification impacts, should avoid impacts to this jurisdictional feature, and concentrate development within areas that already exhibit disturbance. Fuel modification Zone C is intentionally designed to act as a 25-foot-wide setback from the significant watercourse. If avoidance is not feasible and it is determined that impacts to jurisdictional feature will occur from the proposed project, the appropriate permits will be obtained from the regulatory agencies (e.g., 404 permit from the USACE, 401 permit from the RWQCB, and Streambed Alteration Agreement from the CDFW) and mitigation will be required at a minimum 1:1 mitigation ratio, which may include one or more of the following:

- On- and/or off-site creation, restoration, and/or enhancement of USACE/RWQCB jurisdictional “waters of the U.S.” / “waters of the State” and CDFW jurisdictional streambed and associated riparian habitat;
- Purchase of mitigation credits at an agency-approved off-site mitigation bank or in-lieu fee program; and/or

- Off-site compensation through acquisition and protection of high-quality habitat elsewhere.

The proposed street improvement included in the project design will increase the size of the cul-de-sac adjacent to 2354 San Clemente Street. This increase would provide additional space for vehicle access and emergency vehicle turn around and also provide vehicular access for fire trucks and emergency personnel.

Wildlife Movement

The native habitat within the study area is contiguous to open space areas consisting of undeveloped hillsides and canyons. Although this open space area is surrounded by residential development, it is a loosely connected to the open space area of Aliso and Wood Canyons Wilderness Park to the east. There is no direct connection of open space from study area to the Pacific Ocean. However, the study area generally provides live-in habitat (e.g., for cover, foraging, nesting, etc.) for a variety of wildlife species within the natural communities on the hillside slope area. Although the study area is not a wildlife movement corridor (i.e., a piece of habitat, usually linear in nature, that connects two or more habitat patches that would otherwise be fragmented or isolated from one another) because it does not connect Aliso and Wood Canyons Wilderness Park to another large open space area, a portion of the study area can be considered a habitat patch and could support localized movement but not on a regional level.

Development on-site will avoid or minimize impacts to potential wildlife movement, and development should be concentrated within areas mapped as developed or ornamental/toyon-laurel sumac chaparral, which already exhibit disturbance. In addition, Best Management Practices should be incorporated to make sure that homeowners are educated about the natural resources within their area. Education should emphasize the importance of:

- Lighting in backyards being shielded and/or directed away from open space areas to ensure that ambient lighting within open space areas is not increased;
- Avoid perimeter fencing along property boundaries;
- Not dumping toxic chemicals down the storm drains;
- No planting of invasive species⁴ within their backyards, particularly those that are adjacent to open space areas or wildlife corridors;
- Discouraging outdoor pets, particularly cats, due to predation on native wildlife;
- Obeying signs and fencing along open space areas.

⁴ Invasive species are considered to be those plant species on the California Invasive Plant Council's (Cal-IPC) Invasive Plant Inventory (Cal-IPC 2013).

Conclusion

The proposed single-family residence, replacing the existing single-family residence, will not be located within a High Value Habitat Area but is located within a designated Open Space Preserve Area. Fuel modification will be conducted in accordance with the projects AMM, and will avoid impacts to High Value Habitat in the form of lemonade berry scrub. Construction will not occur within a significant watercourse or within a 25-foot drainage course buffer area. Impacts to biological resources can be avoided or minimized with the implementation of the above recommendations.

CHAPTER 5

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Appendix A

Species Compendia

APPENDIX A1

Floral Compendium

Family	Scientific Name	Common Name	Nativity	Special Status?
EUDICOTS				
AIZOACEAE		ICE-PLANT FAMILY		
	<i>Carpobrotus edulis</i>	freeway iceplant	Naturalized	No
ANACARDIACEAE		CASHEW FAMILY		
	<i>Malosma laurina</i>	laurel sumac	Native	No
	<i>Rhus integrifolia</i>	lemonade berry	Native	No
APIACEAE		CARROT FAMILY		
	<i>Foeniculum vulgare</i>	fennel	Naturalized	No
ARALIACEAE		GINSENG FAMILY		
	<i>Hedera helix</i>	English ivy	Naturalized	No
ASTERACEAE		SUNFLOWER FAMILY		
	<i>Artemisia californica</i>	California sagebrush	Native	No
	<i>Baccharis pilularis</i>	coyote brush	Native	No
	<i>Encelia californica</i>	bush sunflower	Native	No
	<i>Pseudognaphalium californicum</i>	ladies' tobacco	Native	No
	<i>Rafinesquia californica</i>	California chicory	Native	No
BORAGINACEAE		BORAGE FAMILY		
	<i>Echium candicans</i>	pride of Madeira	Naturalized	No
	<i>Eucrypta chrysanthemifolia</i>	spotted eucrypta	Native	No
CHENOPODIACEAE		GOOSEFOOT FAMILY		
	<i>Atriplex semibaccata</i>	Australian saltbush	Naturalized	No
CONVOLVULACEAE		MORNING-GLORY FAMILY		
	<i>Calystegia macrostegia</i>	island false bindweed	Native	No
	<i>Ipomoea purpurea</i>	common morning-glory	Waif	No
CRASSULACEAE		STONECROP FAMILY		
	<i>Aeonium arboreum</i> var. <i>arboreum</i>	tree aeonium	Cultivated Plant	No
	<i>Aeonium haworthii</i>	Haworth's aeonium	Cultivated Plant	No
	<i>Crassula ovata</i>	jade plant	Cultivated Plant	No
CUCURBITACEAE		GOURD FAMILY		

<i>Marah macrocarpa</i>	chilicothe	Native	No
EUPHORBIACEAE	SPURGE FAMILY		
<i>Euphorbia maculata</i>	spotted spurge	Naturalized	No
<i>Euphorbia peplus</i>	petty spurge	Naturalized	No
FABACEAE	LEGUME FAMILY		
<i>Acacia baileyana</i>	Cootamundra wattle	Naturalized	No
<i>Acacia longifolia</i>	Sydney golden wattle	Naturalized	No
<i>Acacia redolens</i>	vanilla-scented wattle	Naturalized	No
GERANIACEAE	GERANIUM FAMILY		
<i>Erodium cicutarium</i>	redstem filaree	Naturalized	No
LAMIACEAE	MINT FAMILY		
<i>Salvia mellifera</i>	black sage	Native	No
MALVACEAE	MALLOW FAMILY		
<i>Malacothamnus fasciculatus</i>	chaparral mallow	Native	No
MYRTACEAE	MYRTLE FAMILY		
<i>Eucalyptus globulus</i>	blue gum	Naturalized	No
PITTOSPORACEAE	PITTOSPORUM FAMILY		
<i>Pittosporum tobira</i>	Japanese pittosporum	Naturalized	No
<i>Pittosporum undulatum</i>	Victorian box	Naturalized	No
PLANTAGINACEAE	PLANTAIN FAMILY		
<i>Nuttallanthus texanus</i>	blue toadflax	Native	No
POLYGONACEAE	BUCKWHEAT FAMILY		
<i>Eriogonum fasciculatum</i>	California buckwheat	Native	No
RHAMNACEAE	BUCKTHORN FAMILY		
<i>Rhamnus crocea</i>	spiny redberry	Native	No
ROSACEAE	ROSE FAMILY		
<i>Heteromeles arbutifolia</i>	toyon	Native	No
RUBIACEAE	MADDER FAMILY		
<i>Galium aparine</i>	goose grass	Native	No
<i>Galium nuttallii</i> subsp. <i>nuttallii</i>	climbing bedstraw	Native	No
RUTACEAE	RUE FAMILY		
<i>Cneoridium dumosum</i>	bushrue	Native	No
SCROPHULARIACEAE	FIGWORT FAMILY		
<i>Myoporum laetum</i>	myoporum, Ngaio tree	Naturalized	No
SOLANACEAE	NIGHTSHADE FAMILY		
<i>Cestrum nocturnum</i>	night-blooming jasmine	Naturalized	No
<i>Nicotiana glauca</i>	tree tobacco	Naturalized	No
<i>Solanum douglasii</i>	Douglas' nightshade	Native	No

TROPAEOLACEAE		NASTURTIUM FAMILY	
	<i>Tropaeolum majus</i>	garden nasturtium	Naturalized No
VERBENACEAE		VERBENA FAMILY	
	<i>Lantana montevidensis</i>	trailing lantana	Waif No
MONOCOTS			
AGAVACEAE		AGAVE FAMILY	
	<i>Agave americana</i>	century plant	Cultivated Plant No
	<i>Yucca gloriosa</i>	Joshua tree	Naturalized No
POACEAE		GRASS FAMILY	
	<i>Cortaderia selloana</i>	pampas grass	Naturalized No
	<i>Elymus condensatus</i>	giant wild-rye	Native No
	<i>Melica imperfecta</i>	little California melica	Native No

Key to Species Listing Status Codes

FE	Federally Endangered	SE	State Listed as Endangered
FT	Federally Threatened	ST	State Listed as Threatened
FC	Federal Candidate	SCE	State Candidate for Endangered
FPE	Federally Proposed as Endangered	SCT	State Candidate for Threatened
FPT	Federally Proposed as Threatened	SFP	State Fully Protected
FPD	Federally Proposed for Delisting		

California Native Plant Society (CNPS)

Rank 1A: Presumed extirpated in California and either Rare or Extinct elsewhere. Rank 1B: Rare, threatened, or endangered throughout their range. Rank 2A: Presumed extirpated in California, but more common elsewhere. Rank 2B: Rare, threatened, or endangered in California, but more common in other states. Rank 3: Plant species for which additional information is needed before rarity can be determined. Rank 4: Species of limited distribution in California (i.e., naturally rare in the wild), but whose existence does not appear to be susceptible to threat. Source: ESA 2023.	<u>New Threat Code extensions and their meanings:</u> 1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat) 2 Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat) 3 Not very threatened in California (<20% of occurrences threatened or no current threats known)
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APPENDIX A2

Faunal Compendium

Scientific Name	Common Name	Special-Status?
VERTEBRATES		
BIRDS		
ACCIPITRIDAE	HAWKS, KITES, EAGLES, AND ALLIES	
<i>Buteo jamaicensis</i>	Red-tailed Hawk	No
AEGITHALIDAE	LONG-TAILED TITS AND BUSHTITS	
<i>Psaltriparus minimus</i>	Bushtit	No
CATHARTIDAE	NEW WORLD VULTURES	
<i>Cathartes aura</i>	Turkey Vulture	No
COLUMBIDAE	PIGEONS AND DOVES	
<i>Zenaida macroura</i>	mourning dove	No
CORVIDAE	CROWS AND JAYS	
<i>Aphelocoma californica</i>	California Scrub-Jay	No
<i>Corvus corax</i>	common raven	No
FRINGILLIDAE	FINCHES	
<i>Haemorhous mexicanus</i>	house finch	No
<i>Spinus psaltria</i>	Lesser Goldfinch	No
MIMIDAE	MOCKINGBIRDS AND THRASHERS	
<i>Toxostoma redivivum</i>	California thrasher	No
PASSERELLIDAE	NEW WORLD SPARROWS	
<i>Melospiza crissalis</i>	California towhee	No
STURNIDAE	STARLINGS	
<i>Sturnus vulgaris</i>	European starling	No
SYLVIDAE	SYLVID WARBLERS	
<i>Chamaea fasciata</i>	wrentit	No
TROCHILIDAE	HUMMINGBIRDS	
<i>Calypte anna</i>	Anna's hummingbird	No
MAMMALS		
CRICETIDAE	RATS, MICE, AND VOLES	
<i>Neotoma fuscipes</i>	dusky-footed woodrat	No
REPTILES		
PHRYNOSOMATIDAE	SPINY LIZARDS	
<i>Uta stansburiana</i>	common side-blotched lizard	No

Appendix B

Site Photographs



PHOTOGRAPH 1: Project location 2354 San Clemente Street.



PHOTOGRAPH 2: Project location 2354 San Clemente Street, west view.



PHOTOGRAPH 3: Representative plants comprising the lemonade berry scrub vegetation alliance found within project footprint. Representative plants include: lemonade berry (*Rhus integrifolia*), toyon (*Heteromeles arbutifolia*), laurel sumac (*Malosma laurina*), and sugar bush (*Rhus ovata*).

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SOURCE: ESA, 2023

2354 San Clemente Project

Appendix B Site Photographs



PHOTOGRAPH 4: Representative non-native plants found within the lemonade berry scrub. Victorian box (*Pittosporum undulatum*)



PHOTOGRAPH 5: Representative non-native plants found within the lemonade berry scrub. Soap aloe (*Aloe saponaria*)



PHOTOGRAPH 6: Representative non-native plants found within the lemonade berry scrub. Eucalyptus (*Eucalyptus globulus*)



PHOTOGRAPH 7: Representative non-native plants found within the lemonade berry scrub. Prostrate acacia (*Acacia redolens*)

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SOURCE: ESA, 2023

2354 San Clemente Project



PHOTOGRAPH 5: Woodrat nest found approximately 15ft from the property. Nest likely constructed by dusky-footed woodrat (*Neotoma fuscipes*).



PHOTOGRAPH 6: Habitat adjacent to project footprint, west view.



PHOTOGRAPH 7: Habitat adjacent to project footprint, north view.

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SOURCE: ESA, 2023

2354 San Clemente Project

Appendix C

Special Status Plant Species

Appendix C

Special-Status Plant Species

VASCULAR PLANTS								
Scientific Name	Common Name	Flowering Period	Federal	State	CRPR	Preferred Habitat	Distribution	Occurrence On-site
GYMNOSPERMS								
Cupressaceae	Cypress Family							
<i>Hesperocyparis forbesii</i>	Tecate cypress	N/A	None	None	1B.1	Clay, gabbroic or metavolcanic soils associated with closed-cone coniferous forest and chaparral. Between 80-1500 meters.	Riverside, Orange, San Diego Cos.	NE
ANGIOSPERMS (DICOTYLEDONS)								
Apiaceae	Carrot Family							
<i>Eryngium aristulatum</i> var. <i>parishii</i>	San Diego button-celery	Apr.-Jun.	FE	SE	1B.1	Valley grassland, coastal sage scrub, freshwater wetlands, wetland-riparian; vernal pools. 20 - 620 meters	San Diego and Riverside Cos.	NE
Asteraceae	Sunflower Family							
<i>Centromadia parryi</i> ssp. <i>australis</i>	southern tarplant	May-Nov.	None	None	1B.1	Margins of marshes and swamps, valley and foothill grassland (vernally mesic), vernal pools between 0 and 425 meters.	Los Angeles, Orange, San Diego, Ventura, Santa Barbara Cos.	NE
<i>Chaenactis glabriuscula</i> var. <i>orcuttiana</i>	Orcutt's pincushion	Jan.-Aug.	None	None	1B.1	Coastal bluff scrub (sandy), coastal dunes; elevation 3-100 meters.	Los Angeles, Orange, San Diego, Ventura Cos.; Baja CA.	NE
<i>Helianthus nuttallii</i> ssp. <i>parishii</i>	Los Angeles sunflower	Aug.-Oct.	None	None	1A	Freshwater marsh, salt marsh. 10 - 1675 meters	Los Angeles, Orange, San Bernardino Cos.	NE

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix C (Continued)

Special-Status Plant Species

VASCULAR PLANTS								
Scientific Name	Common Name	Flowering Period	Federal	State	CRPR	Preferred Habitat	Distribution	Occurrence On-site
<i>Isocoma menziesii</i> var. <i>decumbens</i>	decumbent goldenbush	Apr.-Nov.	None	None	1B.2	Chaparral, sandy coastal scrub,(often in disturbed areas); elevation 10-135 meters	Los Angeles, Orange, San Diego Cos.	NE
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	Feb.-Jun.	None	None	1B.1	Marshes and swamps (coastal salt), playas, vernal pools; elevation 1-1220 meters.	All of southern California coast; Riverside, San Bernardino Cos.; Baja CA.	NE
<i>Pentachaeta aurea</i> ssp. <i>allenii</i>	Allen's pentachaeta	Mar.-Jun.	None	None	1B.1	Coastal scrub (openings), valley and foothill grassland; elevation 75-520 meters	Orange County	NE

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix C (Continued)

Special-Status Plant Species

VASCULAR PLANTS								
Scientific Name	Common Name	Flowering Period	Federal	State	CRPR	Preferred Habitat	Distribution	Occurrence On-site
<i>Pseudognaphalium leucocephalum</i>	white rabbit-tobacco	Jul.-Dec.	None	None	2B.2	Chaparral, cismontane woodland, coastal scrub, riparian woodland; often within drainages; sandy, gravelly; 0 - 2100 meters	Los Angeles, Riverside, Orange, San Diego, Ventura Cos.	NE

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix C (Continued)

Special-Status Plant Species

VASCULAR PLANTS								
Scientific Name	Common Name	Flowering Period	Federal	State	CRPR	Preferred Habitat	Distribution	Occurrence On-site
<i>Senecio aphanactis</i>	chaparral ragwort	Jan.-Apr.	None	None	2B.2	Chaparral, cismontane woodland, coastal scrub; sometimes alkaline soil. 15 - 800 meters.	Los Angeles, Riverside, Orange, San Diego, Santa Barbara, Ventura Cos.	NE
<i>Symphotrichum defoliatum</i>	San Bernandino aster	Jul.-Nov.	None	None	1B.2	Near ditches, springs, and streams; cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grassland (vernally mesic). Between 2 and 2040 meters.	Los Angeles, Kern, Imperial, Riverside, San Bernardino, Orange, San Diego Cos.	NE

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix C (Continued)

Special-Status Plant Species

VASCULAR PLANTS								
Scientific Name	Common Name	Flowering Period	Federal	State	CRPR	Preferred Habitat	Distribution	Occurrence On-site
<i>Verbesina dissita</i>	big-leaved crownbeard	Apr.-Jul.	FT	ST	1B.1	Chaparral (maritime), coastal scrub; elevation 45-205 meters.	Orange Co. and Baja CA.	NE
Boraginaceae	Borage Family							
<i>Nama stenocarpum</i>	mud nama	Jan.-Jul.	None	None	2B.2	Marshes and swamps (lake margins, riverbanks); elevation 5-500 meters.	Imperial, Los Angeles, Orange, Riverside, San Clemente Isl., San Diego Cos.; AZ and Baja CA.	NE
Chenopodiaceae	Goosefoot Family							
<i>Aphanisma blitoides</i>	aphanisma	Mar.-Jun.	None	None	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub in sandy areas; elevation 1-305 meters.	All of Southern California coast, Channel Islands.	NE
<i>Atriplex coulteri</i>	Coulter's saltbush	Mar.-Oct.	None	None	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grasslands in clay and alkaline areas; elevation 3-460 meters.	All of Southern California coast, Channel Islands, Baja CA.	NE
<i>Atriplex pacifica</i>	South Coast saltscale	Mar.-Oct.	None	None	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, playas; elevation 0-100 meters	Anacapa Island, Los Angeles, Orange, Riverside, San Clemente Island, Santa Catalina Island, Santa Cruz Island, San Diego, San Nicholas Island, Santa Rosa Island, Ventura Cos.; Arizona, Baja CA Sonora (Mexico).	NE

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix C (Continued)

Special-Status Plant Species

VASCULAR PLANTS								
Scientific Name	Common Name	Flowering Period	Federal	State	CRPR	Preferred Habitat	Distribution	Occurrence On-site
<i>Atriplex parishii</i>	Parish's brittle scale	Jun.-Oct.	None	None	1B.1	Chenopod scrub, playas, vernal pools; elevation 25-1900 meters.	Los Angeles, Orange, Riverside, Santa Bernardino, San Diego Cos.; Baja CA.	NE
<i>Atriplex serenana</i> var. <i>davidsonii</i>	Davidson's salt scale	Apr.-Oct.	None	None	1B.2	Coastal bluff scrub, coastal scrub in alkaline areas; elevation 10-200 meters.	All of southern California coast, Channel Islands.	NE
<i>Suaeda californica</i>	California seablite	Jul.-Oct.	None	None	1B.1	Marshes and swamps (coastal salt). 0-15 meters.	Los Angeles, Orange, San Diego Cos.	NE
<i>Suaeda esteroa</i>	estuary seablite	May-Oct.	None	None	1B.2	Marshes and swamps (coastal salt); elevation 0-5 meters.	Los Angeles, Orange, Santa Barbara, San Diego, Ventura Cos.; Baja, CA.	NE
Crassulaceae	Stonecrop Family							
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	Apr.-Jun.	None	None	1B.1	Coastal bluff scrub, coastal scrub, valley and foothill grassland/often clay. 5 - 450 meters.	Los Angeles, Orange, Santa Barbara, Ventura Cos.	NE
<i>Dudleya multicaulis</i>	many-stemmed dudleya	Apr.-Jul.	None	None	1B.2	Coastal scrub, chaparral, valley and foothill grassland; heavy clay soils or rock outcrops; 15-790 meters.	Los Angeles, Orange, Riverside, San Bernardino, San Diego Cos.	NE
<i>Dudleya stolonifera</i>	Laguna Beach dudleya	May-Jul.	FT	ST	1B.1	Chaparral, coastal scrub, cismontane woodland, and valley and foothill grasslands in rocky areas; elevation 10-260 meters.	Orange County	NE

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix C (Continued)

Special-Status Plant Species

VASCULAR PLANTS								
Scientific Name	Common Name	Flowering Period	Federal	State	CRPR	Preferred Habitat	Distribution	Occurrence On-site
Ericaceae	Heath Family							
<i>Comarostaphylis diversifolia</i> ssp. <i>diversifolia</i>	summer holly	Apr.-Jun.	None	None	1B.2	Chaparral, cismontane woodland; 30-7900 meters	Orange, Riverside, San Diego; Baja CA.	NE
Euphorbiaceae	Spurge Family							
<i>Euphorbia misera</i>	cliff spurge	Dec.-Aug.	None	None	2B.2	Coastal bluff scrub, coastal scrub, Mojavean desert scrub in rocky areas; elevation 10-500 meters.	Los Angeles, Orange, Riverside, Santa Barbara, San Clemente Island, Santa Catalina, San Diego Cos.; Baja CA, Guadalupe Island (Mexico).	NE
<i>Tetracoccus dioicus</i>	Parry's tetracoccus	Apr.-May	None	None	1B.2	Chaparral, coastal scrub. 165 - 1000 meters	Orange and San Diego Cos.	NE
Fagaceae	Oak Family							
<i>Quercus dumosa</i>	Nuttall's scrub oak	Feb.-Apr.	None	None	1B.1	Closed-cone coniferous forest, chaparral, coastal scrub in sandy clay loam or sandstone; elevation 15-400 meters.	Orange, Santa Barbara, San Diego Cos.; Baja CA.	NE
Lamiaceae	Mint Family							
<i>Monardella hypoleuca</i> ssp. <i>Intermedia</i>	intermediate monardella	Apr.-Sep.	None	None	1B.3	Chaparral, cismontane woodland, lower montane, coniferous forest (sometimes). 400-1250 meters	Riverside, Orange, San Diego Cos.	NE
Malvaceae	Mallow Family							
<i>Ayenia compacta</i>	California ayenia	Mar.-Apr.	None	None	2B.3	Creosote bush scrub, washes. 150 - 1095 meters	Riverside, San Bernardino, San Diego Cos.	NE

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix C (Continued)

Special-Status Plant Species

VASCULAR PLANTS								
Scientific Name	Common Name	Flowering Period	Federal	State	CRPR	Preferred Habitat	Distribution	Occurrence On-site
<i>Sidalcea neomexicana</i>	Salt Spring checkerbloom	Mar.-Jun.	None	None	2B.2	Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas; alkaline and mesic soils. 15 - 1530 meters	Kern, Orange, Riverside, Ventura, San Bernardino, San Diego, possibly Los Angeles Cos.	NE
Nyctaginaceae	Four O'clock Family							
<i>Abronia villosa</i> var. <i>aurita</i>	chaparral sand-verbena	Jan.-Sep.	None	None	1B.1	Chaparral, coastal scrub, and desert dunes/sandy areas between 0 and 1,600 meters.	Los Angeles, Riverside, San Diego, San Bernardino, possibly Orange Cos.	NE
Orobanchaceae	Broomrape Family							
<i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	salt marsh bird's beak	May-Oct.	FE	SE	1B.2	Coastal dunes, marshes, and swamps. 0-30 meters.	Los Angeles, Orange, San Diego, San Bernardino, Ventura Cos.	NE
Polemoniaceae	Phlox Family							
<i>Navarretia prostrata</i>	prostrate navarretia	Apr.-Jun.	None	None	1B.1	Meadows and seeps, valley and foothill grasslands, alkaline, vernal pools; elevation 0-700 meters.	San Joaquin Valley, Central and South Coast, Coast and Peninsular Ranges	NE
Polygalaceae	Milkwort Family							
<i>Polygala cornuta</i> var. <i>fishiae</i>	Fish's milkwort	May-Aug.	None	None	4.3	Chaparral, oak woodland, riparian woodland; elevation 90-1270 meters.	Monterey County south in cismontane CA to Baja CA.	NE
Polygonaceae	Buckwheat Family							

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix C (Continued)

Special-Status Plant Species

VASCULAR PLANTS								
Scientific Name	Common Name	Flowering Period	Federal	State	CRPR	Preferred Habitat	Distribution	Occurrence On-site
<i>Dodecahema leptoceras</i>	slender-horned spineflower	Apr.-Jun.	FE	SE	1B.1	Scrub and chaparral in sandy soils and alluvial fans. 200-760 meters.	Los Angeles, Riverside, San Bernardino Cos.	NE
<i>Nemacaulis denudata</i> var. <i>denudata</i>	coast woolly-heads	Apr.-Sep.	None	None	1B.2	Coastal dunes. 0 - 100 meters	Los Angeles, Orange, San Diego Cos.	NE
Rosaceae	Rose Family							
<i>Horkelia cuneata</i> ssp. <i>puberula</i>	mesa horkelia	Feb.-Jul.	None	None	1B.1	Chaparral, cismontane woodland, coastal scrub in sandy or gravelly areas; elevation 70-810 meters.	All of southern California coast.	NE
ANGIOSPERMS (MONOCOTYLEDONS)								
Alismataceae	Water-Plantain Family							
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	May-Oct.	None	None	1B.2	Marshes and swamps. 0 - 650 meters	Orange, San Bernardino, Ventura Cos.	NE
Asparagaceae	Asparagus Family							
<i>Brodiaea filifolia</i>	thread-leaved brodiaea	May-Jun.	FT	SE	1B.1	Chaparral (openings), cismontane woodland, coastal scrub, playas, valley and foothill grasslands, vernal pools often in clay areas; elevation 25-860 meters.	Los Angeles, Orange, Riverside, San Bernardino, San Diego, and San Luis Obispo Cos.	NE

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix C (Continued)

Special-Status Plant Species

VASCULAR PLANTS								
Scientific Name	Common Name	Flowering Period	Federal	State	CRPR	Preferred Habitat	Distribution	Occurrence On-site
Liliaceae	Lily Family							
<i>Calochortus weedii</i> var. <i>intermedius</i>	intermediate mariposa lily	May-Jul.	None	None	1B.2	Chaparral, coastal scrub, valley and foothill grasslands; elevation 105- 855 meters.	Los Angeles, Orange, and Riverside Cos.	NE
Ruscaceae	Butcher's Broom Family							
<i>Nolina cismontana</i>	chaparral nolina	May-Jul.	None	None	1B.2	Chaparral, coastal scrub in sandstone or gabbro; elevation 140-1275 meters.	Los Angeles, Orange, San Diego, Ventura Cos.	NE
Key to Species Listing Status Codes FE <i>Federally Listed as Endangered</i> FC <i>Federal Candidate Species</i> SCT <i>State Candidate for Threatened</i> FT <i>Federally Listed as Threatened</i> FSC <i>Federal Special Concern Species</i> SP <i>State Protected</i> FPE <i>Federally Proposed as Endangered</i> SE <i>State Listed as Endangered</i> SFP <i>State Fully Protected</i> FPT <i>Federally Proposed as Threatened</i> ST <i>State Listed as Threatened</i> SR <i>State Rare</i> FPD <i>Federally Proposed for Delisting</i> SCE <i>State Candidate for Endangered</i> SSC <i>California Species of Special Concern</i> Key to California Rare Plant Rank Codes Rank 1A: <i>Presumed extirpated in California and either Rare or Extinct elsewhere.</i> Rank 1B: <i>Rare, threatened, or endangered in California and elsewhere.</i> Rank 2A: <i>Presumed extirpated in California, but common in other states.</i> Rank 2B: <i>Rare, threatened, or endangered in California, but more common elsewhere.</i> Rank 3: <i>Plant species for which additional information is needed.</i> Rank 4: <i>Plant species of limited distribution.</i> Key to Threat Codes List .1: <i>Seriously threatened in California.</i> List .2: <i>Fairly threatened in California.</i> List .3: <i>Not very threatened in California.</i>								

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix D

Special Status Wildlife Species

Appendix D

Special-Status Wildlife Species

Scientific Name	Common Name	Federal	State	Preferred Habitat	Distribution	Occurrence On-site
INVERTEBRATES						
CRUSTACEANS						
Branchinectidae	Fairy Shrimp Family					
<i>Branchinecta sandiegonensis</i>	San Diego fairy shrimp	FE	None	Vernal pools in areas of shallow depressions that have a clay hardpan soil layer that inhibits percolation.	Found throughout California	NE
<i>Streptocephalus woottoni</i>	Riverside fairy shrimp	FE	None	Vernal pools/swales; apparently prefers deeper pools through the warm weather of late April and May.	Ventura, Orange, and San Diego Counties in California.	NE
VERTEBRATES						
FISHES						
Cyprinidae	Minnow Family					
<i>Gila orcutti</i>	arroyo chub	None	SSC	Slow water sections of streams with mud or sand substrates; spawns in pools.	Native to the streams and rivers of the Los Angeles.	NE
<i>Rhinichthys osculus</i> ssp. 3	Santa Ana speckled dace	None	SSC	Permanent flowing streams with summer water temperatures of 17-20 C. Typically, these streams are maintained by outflows of cool springs. The dace inhabits shallow cobble and gravel riffles.	The headwaters of the Los Angeles, Santa Ana and San Gabriel rivers.	NE
Gobiidae	Goby Family					

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix D (Continued)

Special-Status Wildlife Species

Scientific Name	Common Name	Federal	State	Preferred Habitat	Distribution	Occurrence On-site
<i>Eucyclogobius newberryi</i>	tidewater goby	FE	SSC	Brackish water habitats along the coast; found in shallow lagoons and lower stream reaches with fairly still but not stagnant water and high oxygen levels.	Coastal ranges from Agua Hedionda Lagoon, San Diego Co. to the mouth of the Smith River.	NE
AMPHIBIANS						
Bufonidae	True Toad Family					
<i>Anaxyrus californicus</i>	arroyo toad	FE	SSC	Washes and streams with sandy banks, willows, cottonwoods, or sycamores; riparian habitats of semiarid areas, small cobbly streambeds. Requires clear, standing water for reproduction.	Southern part of the Coast Range from northern San Luis Obispo Co. south to Baja CA.	NE
Scaphiopodidae	Spadefoot Toad Family					
<i>Spea hammondi</i>	western spadefoot	None	SSC	Prefers burrow sites within relatively open areas in lowland grasslands, chaparral, and pine-oak woodlands, areas of sandy or gravelly soil in alluvial fans, washes, and floodplains. Requires temporary pools for reproduction.	Great Valley, bordering foothills, and coastal ranges from south of Monterey Bay to nw. Baja, CA.	NE

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix D (Continued)

Special-Status Wildlife Species

Scientific Name	Common Name	Federal	State	Preferred Habitat	Distribution	Occurrence On-site
REPTILES						
Emydidae	Box and Water Turtle Family					
<i>Emys marmorata pallida</i>	southwestern pond turtle	None	SSC	Ponds, lakes, marshes, rivers, streams, and irrigation ditches that typically have a rocky or muddy bottom and grown to watercress, cattails, water lilies, or other aquatic vegetation; found in woodland, grassland, and open forest.	Northern CA south to NW Baja, CA.	NE
Phrynosomatidae	Zebra-tailed, Earless, Fringe-toed, Spiny, Tree, Side-blotched, and Horned Lizard Family					
<i>Phrynosoma blainvillii</i>	coast horned lizard	None	SSC	Valley-foothill hardwood, conifer, and riparian habitats, pine-cypress, juniper and annual grassland habitats below 6,000 feet, open country, especially sandy areas, washes, flood plains, and windblown deposits.	Coastal ranges from south Ventura, Los Angeles, San Bernardino counties, Orange, western Riverside and western San Diego counties.	P
Teiidae	Whiptail Family					
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	None	SSC	Gently sloping hillsides, ridges, and valleys supporting open coastal sage scrub, open chaparral, or sparse grasslands.	Extreme S Los Angeles Co., SW San Bernardino Co., Orange, Riverside, and San Diego Counties, west of the crest of the Peninsular Ranges, and Baja CA.	P

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix D (Continued)

Special-Status Wildlife Species

Scientific Name	Common Name	Federal	State	Preferred Habitat	Distribution	Occurrence On-site
Colubridae	Colubrid Snake Family					
<i>Salvadora hexalepis virgultea</i>	coast patch-nosed snake	None	SSC	Coastal chaparral, desert scrub, washes, sandy flats, and rock areas. Barren creosote bush desert flats. Sagebrush semi-deserts; sea level to 7,000 feet.	Point Conception south through Baja CA.	P
<i>Thamnophis hammondi</i>	two-striped garter snake	None	SSC	Found in or near permanent or intermittent freshwater, often along streams with rocky beds bordered by willows or other streamside growth; frequents oak woodland, brushlands, and sparse coniferous forests.	Coastal ranges from Monterey Co. to NW Baja CA.	NE
Viperidae	Viper Family					
<i>Crotalus ruber</i>	red-diamond rattlesnake	None	SSC	Chaparral, woodland, and arid desert habitats in rocky areas with dense vegetation.	San Bernardino county to tip of Baja CA.	P
BIRDS						
Charadiidae	Plover Family					
<i>Charadrius alexandrinus nivosus</i>	western snowy plover	FT	SSC	Barren to sparsely vegetated sand beaches, dry salt flats in lagoons , dredge spoils deposited on beach or dune habitat , levees and flats at salt-evaporation ponds, and river bars.	Coastal ranges from Monterey Co. to NW Baja CA.	NE
Laridae	Gull Family					
<i>Sternula antillarum browni</i>	California least tern	FE	SE/SFP	Open, sandy or gravelly shores near shallow-water feeding areas in estuaries.	San Francisco Bay area, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, and San Diego Cos.	NE

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Appendix D (Continued)

Special-Status Wildlife Species

Scientific Name	Common Name	Federal	State	Preferred Habitat	Distribution	Occurrence On-site
Accipitridae	Hawk, Kite, Harrier, and Eagle Family					
<i>Elanus leucurus</i>	white-tailed kite	None	SFP	Grasslands with scattered trees, near marshes, along highways.	Year-long resident in coastal and valley lowlands; rarely found away from agricultural areas. Central valley of CA and along the entire length of the coast.	NE
Strigidae	Owl Family					
<i>Athene cunicularia</i>	burrowing owl	None	SSC	Prefers berms, ditches, and grasslands adjacent to rivers, agricultural, and scrub areas.	Local resident throughout CA excluding the central valley. Some seasonal movement away from nesting areas. Year-round resident of the lowlands of southern CA	NE
Hirundinidae	Swallow Family					
<i>Riparia riparia</i>	bank swallow	None	ST	Riparian scrub, riparian woodland; requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting holes. Colonial nester; nests primarily in riparian and other lowland habitats west of the desert.	A spring and fall migrant in the interior, less common on coast; an uncommon and very local summer resident. Casual in southern California in winter. Occurs along banks of the Sacramento and Feather rivers in the northern Central Valley, and along the central coast from Monterey to San Mateo counties, and northeastern California.	NE

OB = Observed; P = Potential; NE = Species not expected due to the lack of suitable habitat or not observed during surveys.

Appendix D (Continued)

Special-Status Wildlife Species

Scientific Name	Common Name	Federal	State	Preferred Habitat	Distribution	Occurrence On-site
Sylviidae	Old World Warbler, Gnatcatcher Family					
<i>Poliophtila californica californica</i>	coastal California gnatcatcher	FT	SSC	Coastal sage scrub vegetation below 2,500 feet elevation in Riverside County and generally below 1,000 feet elevation along the costal slope; generally avoids steep slopes and dense vegetation.	Southern Ventura county, southward through Los Angeles, Orange, Riverside, San Bernardino counties, and south through the coastal foothills of San Diego county.	NE
Troglodytidae	Wren Family					
<i>Campylorhynchus brunneicapillus sandiegensis</i>	coastal cactus wren	None	SSC	Coastal sage scrub, vegetation with thickets of prickly pear or cholla cactus.	Ventura Co. south to San Diego Co.	NE
Embirizidae	Sparrow, Bunting, and Warbler Family					
<i>Ammodramus savannarum</i>	grasshopper sparrow	None	SSC	Dense, dry or well-drained grassland, especially native grassland with a mix of grasses and forbs for foraging and nesting.	An uncommon and local, summer resident and breeder in foothills and lowlands west of the Cascade-Sierra Nevada crest from Mendocino and Trinity cos. south to San Diego Co.	NE
<i>Passerculus sandwichensis beldingi</i>	Belding's savannah sparrow	None	SE	Dense, moist grasslands, wet meadows, and salicornia wetlands, with or without scattered shrubs or clumps of tall herbs.	Coastal Santa Barbara to San Diego Cos	NE

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Appendix D (Continued)

Special-Status Wildlife Species

Scientific Name	Common Name	Federal	State	Preferred Habitat	Distribution	Occurrence On-site
Parulidae	Wood-Warblers					
<i>Icteria virens</i>	yellow-breasted chat	None	SSC	Riparian woodlands with a thick understory.	Uncommon summer resident and migrant in coastal CA and in foothills of the Sierra Nevada.	NE
Rallidae	Rail Family					
<i>Laterallus jamaicensis</i>	California black rail	None	ST	Prefers saline, brackish, and fresh emergent wetlands, and some coastal wetlands.	Coastal wetlands from Santa Barbara to San Diego County.	NE
<i>Rallus longirostris levipes</i>	light-footed clapper rail	FE	SE/SFP	Dense vegetation within coastal salt and brackish marshes, especially among cordgrass and pickleweed.	San Francisco Bay area, Monterey, San Luis Obispo, Santa Barbara, Ventura, San Bernardino, Orange, Riverside, Imperial, and San Diego Cos.	NE
Vireonidae	Vireo Family					
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE	SE	Perennial and intermittent streams with low, dense riparian scrub and riparian woodland habitats below 2,000 feet elevation; nests primarily in willows and forages in the riparian and occasionally in adjoining upland habitats. Associated with willow, cottonwood, and mule fat.	Southern California	NE

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Appendix D (Continued)

Special-Status Wildlife Species

Scientific Name	Common Name	Federal	State	Preferred Habitat	Distribution	Occurrence On-site
MAMMALS						
Molossidae	Free-tailed Bat Family					
<i>Eumops perotis californicus</i>	western mastiff bat	None	SSC	Primarily arid lowlands, especially deserts. Open, semiarid to arid habitats including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban.	Uncommon resident of lower elevations in se San Joaquin Valley and Coastal Ranges from Monterey Co. southward through S CA from the coast eastward to the Colorado desert.	P (foraging)
<i>Nyctinomops macrotis</i>	big free-tailed bat	None	SSC	Pinyon-juniper regions of the arid parts of CA.	San Mateo Co. to southern CA.	P (foraging)
Phyllostomidae	New World Leaf-Nosed Bat Family					
<i>Choeronycteris mexicana</i>	Mexican long-tongued bat	None	SSC	Nests in dry, rocky habitats/caves, crevices in rocks, arid habitats including deserts, montane riparian, desert scrub, desert succulent shrub, and pinyon-juniper habitats.	California only from San Diego Co. and only as a summer resident	NE
Soricidae	Shrew Family					
<i>Sorex ornatus salicornicus</i>	southern California saltmarsh shrew	None	SSC	Dense coastal marshes	Tidal marshes of Los Angeles Basin	NE
Heteromyidae	Pocket Mouse and Kangaroo Rat Family					
<i>Chaetodipus fallax fallax</i>	San Diego pocket mouse	None	SSC	Chaparral; coastal scrub; valley and foothill grassland.	Found throughout California	P
<i>Perognathus longimembris pacificus</i>	Pacific pocket mouse	FE	SSC	Coastal scrub; prefers soils of fine alluvial sands near the ocean.	S CA; widely distributed in arid regions from S Oregon to W Utah and Arizona.	NE

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Appendix D (Continued)

Special-Status Wildlife Species

Scientific Name	Common Name	Federal	State	Preferred Habitat	Distribution	Occurrence On-site
Cricetidae	Mouse, Rat, and Vole Family					
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	None	SSC	Chaparral, coastal sage scrub, and pinyon-juniper woodland.	S California	P
Mustelidae	Weasel Family					
<i>Taxidea taxus</i>	American badger	None	SSC	Open shrub, forest, and herbaceous habitats, with friable soils.	Common in most of the state except for the northern North Coast area.	NE
Key to Species Listing Status Codes FE <i>Federally Listed as Endangered</i> SE <i>State Listed as Endangered</i> SSC <i>California Species of Special Concern</i> FT <i>Federally Listed as Threatened</i> ST <i>State Listed as Threatened</i> WL <i>California Watch List</i> FPE <i>Federally Proposed as Endangered</i> SCE <i>State Candidate for Endangered</i> FPT <i>Federally Proposed as Threatened</i> SCT <i>State Candidate for Threatened</i> FPD <i>Federally Proposed for Delisting</i> SFP <i>State Fully Protected</i> FC <i>Federal Candidate Species</i> SR <i>State Rare</i>						

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