

Santa Monica Mountains Local Coastal Program Biological Assessment

Bluewater Residence (RPPL2023003558)
Los Angeles County, California
APN 4457-002-053

Prepared for
NSE Bluewater, LLC
1212 5th Street, Suite 1-584
Santa Monica, CA 90401

April 2023; Revised by Daryl Koutnik June 2024



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Bluewater Residence (RPPL2023003558)

Los Angeles County, California

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Biological Assessment

Bluewater Residence

1. Introduction

This report documents the findings of a Biological Assessment conducted pursuant to Section 22.44.1800 *et seq* of the Santa Monica Mountains Local Coastal Program (LCP, 2014) and Local Implementation Program (LIP), administered by the County of Los Angeles (County). The Biological Assessment was conducted in anticipation for the processing of a coastal development permit application with Los Angeles County for the proposed construction of the Bluewater residential development located west of Malibu Canyon Road (APN 4457-002-053) within the coastal zone of the Santa Monica Mountains (project site). The parcel (study area) was assessed for sensitive biological resources during the site visit.

This report provides an overview of the biological resources observed during the field visit, as well as any that have the potential to occur within, or adjacent to, the study area. In addition, this report includes recommendations for avoiding or minimizing impacts to sensitive biological resources prior to the commencement of any ground-disturbing activities. In accordance with the LCP, a Santa Monica Mountains Biological Assessment Checklist is provided at the end of the report verifying that all necessary information has been included (**Appendix A – Santa Monica Mountains Biological Assessment Checklist**).

1.1 Statement of Qualifications

ESA has extensive experience analyzing biological resources in Los Angeles County; qualified ESA biologists conducted the biological assessment and prepared this report. Resumes for each ESA biologist involved in the preparation of this report are provided in **Appendix B – Resumes** and discussed briefly below:

Daryl Koutnik - Principal Biologist: Daryl has over 30 years of experience as a professional biologist. Daryl earned a B.S. in Mathematics and Biology from California State University, Northridge and an M.S. and Ph.D. in Botany from University of California, Davis. Daryl has extensive experience conducting biological assessments in Southern California, including within the Santa Monica Mountains. As the project's Principal Biologist, Daryl conducted the biological assessment, managed and participated in the drafting of the document, and is responsible for the contents of this report.

Douglas Gordon-Blackwood – Wildlife Biologist/Botanist: Douglas Gordon-Blackwood has over 13 years of professional experience conducting various habitat assessments, wildlife

surveys and focused botanical surveys in Southern California. Douglas earned a B.S. in Botany from California Polytechnic University, Pomona. Douglas conducted the biological assessment and prepared the subsequent biological assessment report.

1.2 Project and Survey Description

1.2.1 Project Understanding

The proposed project includes the processing of a coastal development permit application for a 6.26-acre parcel (APN 4457-002-053) for development of a single family residence and associated access driveway within the parcel and its eastern adjacent parcels (APNs 4457-002-055, 4457-002-054, and 4457-002-045). In addition, a water well and septic system are proposed off-site within parcel APN 4457-002-055 within the access driveway grading limits.

- Applicant: NSE Bluewater, LLC.
1212 5th Street, Suite 1-584
Santa Monica, CA 90401
- Project Name: Bluewater Residence
- Type of Report: Biological Assessment
- APN: 4457-002-053
- Development: Residential Development

1.2.2 Methods

1.2.2.1 Literature Review

Prior to conducting the field assessment, ESA conducted a query of available resource inventory databases to analyze the potential for sensitive resources to occur within the study area:

- California Department of Fish and Wildlife (CDFW). 2021a. California Natural Diversity Data Base (CNDDDB). Database was queried for special status species records in the Malibu Beach USGS 7.5-minute quadrangle and five surrounding quadrangles including Point Dume, Topanga, Thousand Oaks, Calabasas, and Canoga Park.
<https://apps.wildlife.ca.gov/rarefind/view/RareFind.aspx>: Accessed September 14, 2021.
- CDFW. 2021b. California Natural Community List. Sacramento, CA: CDFW, Natural Heritage Division, 2021.
<https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=153609&inline>: Accessed September 22, 2021.
- California Native Plant Society (CNPS). 2021. Inventory of Rare and Endangered Vascular Plants of California. Database was queried for special status species records in the Malibu Beach USGS 7.5-minute quadrangle and five surrounding quadrangles including Point Dume, Topanga, Thousand Oaks, Calabasas, and Canoga Park.
<https://rareplants.cnps.org/Search/Advanced>: Accessed September 16, 2021.

- Natural Resource Conservation Service (NRCS). 2021. Web Soil Survey. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>: Accessed September 14, 2021.
- U.S. Fish and Wildlife Service (USFWS). 2021. Critical Habitat Portal. <http://fws.maps.arcgis.com/home/webmap/viewer.html?webmap=9d8de5e265ad4fe09893cf75b8dbfb77>: Accessed September 14, 2021.

1.2.2.2 Biological Assessment

An initial biological assessment was conducted by ESA biologists Daryl Koutnik and Douglas Gordon-Blackwood on July 22, 2021, to prepare a general biological inventory. The survey consisted of walking transects throughout the study area to characterize and map vegetation, and to determine the potential for special-status plants and wildlife to occur within the study area. Those areas that were deemed inaccessible were scanned with binoculars. A focused rare plant survey was conducted on May 6, 2022.

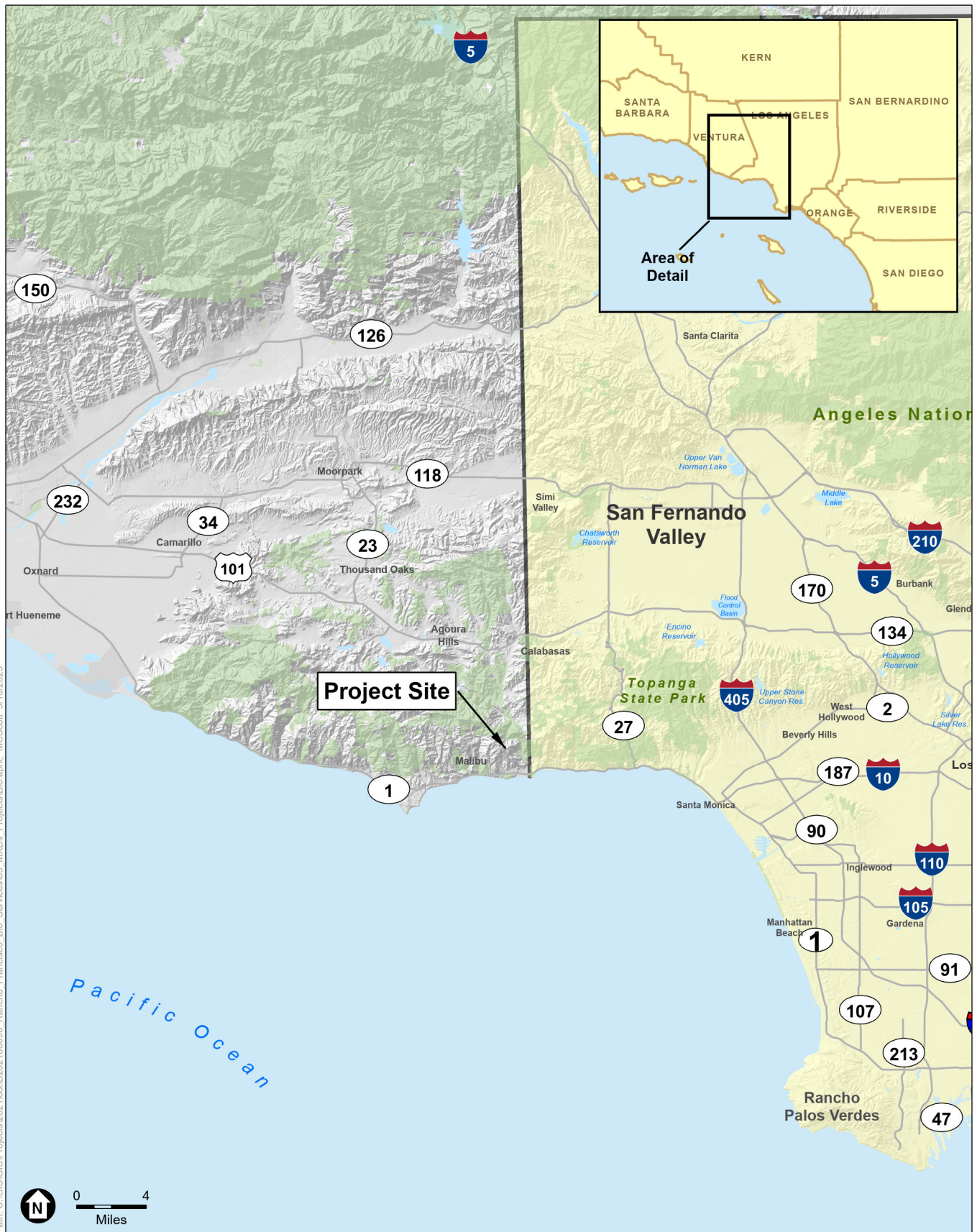
All incidental, visual observations of flora and fauna, including sign (i.e. presence of scat) as well as any audible detections, were noted during the assessment and are described further below in this report. All native and non-native natural communities and land uses were characterized and delineated on aerial photographs during the field survey, and then digitized on aerial maps using a Geographic Information System software (ArcGIS). Most descriptions of vegetation were characterized in the field in accordance with *Vegetation Classification of the Santa Monica Mountains National Recreation Area and Environs in Ventura and Los Angeles Counties, California, Version 1-Association Level and Specific Alliances* (CDFG et al, 2006); however, some communities were characterized based on dominant species or other visual characteristics if a suitable vegetation alliance was not previously identified or appropriate. A detailed description of each natural community and land use is provided in Section 2.4 of this report.

2. Characteristics of the Study Area

This section discusses the characteristics of the study area and location of the proposed project.

2.1 Location and Legal Description of the Study Area

The study area is located within Los Angeles County (**Figure 1 – Regional Location**), in the U.S. Geological Survey (USGS) Malibu Beach, California, 7.5-minute topographic quadrangle; within APN’s 4457-002-053, 4457-002-054, 4457-002-055, and 4457-002-045 (**Figure 2 - Project Location**); situated within the foothills of Santa Monica Mountain Range at an elevation of ranging roughly between 200 to 1,200 feet above mean sea level. The City of Malibu is located approximately 0.5 miles to the south, and the rural community of Monte Nido is located approximately 2 miles to the north. California State Route 1 (Pacific Coast Highway) and the Pacific Ocean are located 1 mile to the south.



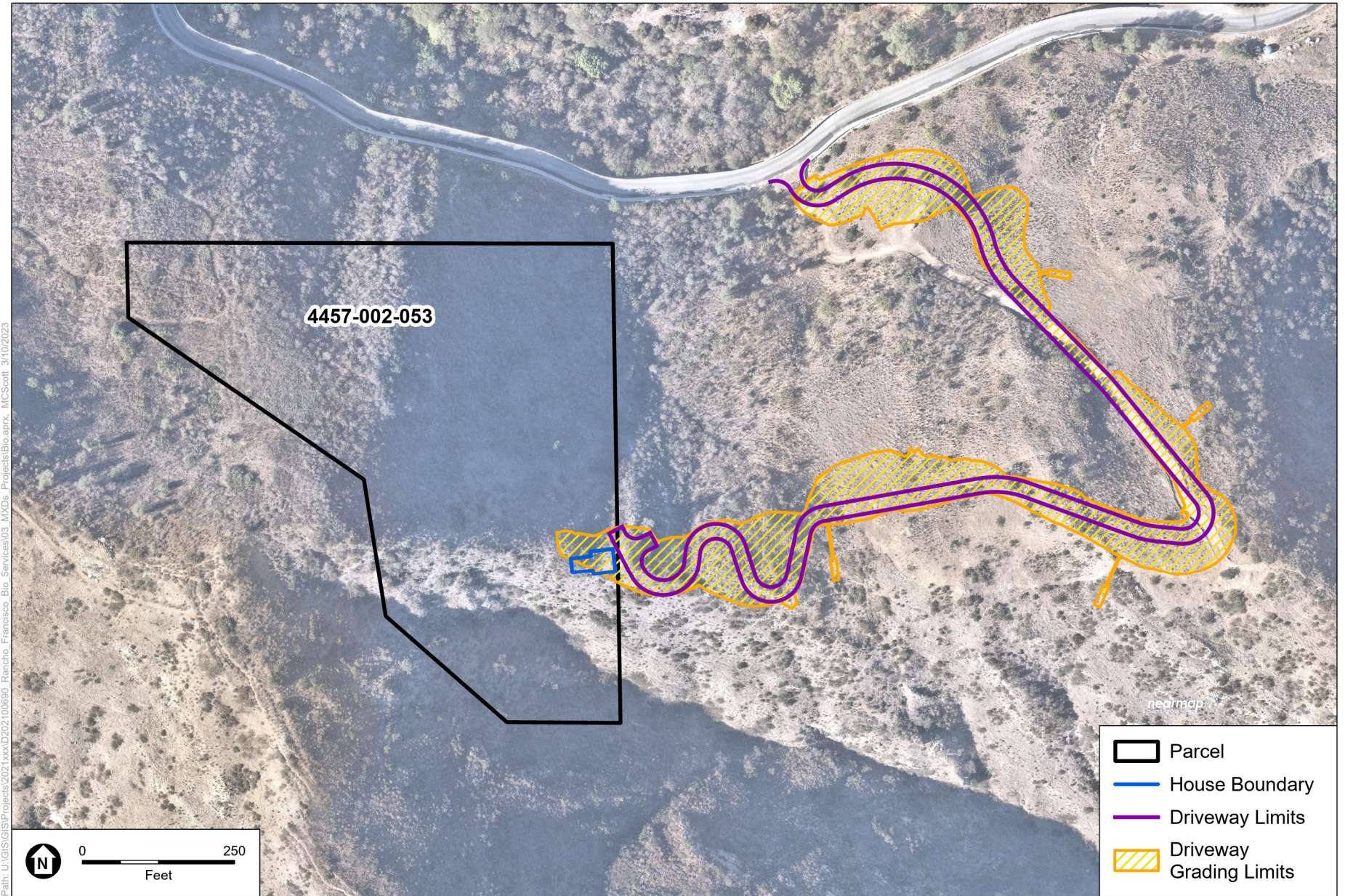
Path: U:\GIS\GIS\Projects\2021\00690_Rancho_Francisco_Bio_Services\03_MXD\Projects\Bio.aprx, MCS\Scott, 3/10/2023

SOURCE: ESRI, 2018; ESA, 2021

Bluewater Residence

Figure 1
Regional Location





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SOURCE: Nearmap, 2021; Los Angeles County, 2021; ESA, 2022.

Bluewater Residence
Figure 2
 Project Vicinity

2.2 Soils and Topography

The study area consists mainly of steeply sloping topography, including both ridges and canyons, with north, south and east aspects. As shown in **Figure 3 - Soils**, two soil types occur within the study area, which includes Chumash-Boades-Malibu association, 30 to 75 percent slopes; Mipolomol-Topanga association, 30 to 75 percent slopes; and Rock outcrop-Sumiwawa-Hipuk complex, 30 to 75 percent slopes. (NRCS, 2021).

2.2.1 Chumash-Boades-Malibu Association, 30 to 75 Percent Slopes

This soil association occurs within the southern portion of the parcel and all of the home site development area and; it is composed of three major soil types, Chumash, Boades and Malibu, which are described in detail below:

2.2.1.1 Chumash

Chumash soils have formed from a parent material of colluvium and/or residuum derived from sandstone and shale and is characterized as excessively drained with a very poor water capacity of 0.9 inch. Bedrock is usually present within 4 to 22 inches of the surface and the typical soil profile is as follows: 0 to 7 inches, gravelly loam; 7 to 17 inches, soft, weathered bedrock.

2.2.1.2 Boades

Boades soils have formed from a parent material of colluvium and/or residuum derived from sandstone and shale and is characterized as well drained with a very poor water capacity of 1.6 inches. Bedrock is usually present within 10 to 20 inches of the surface and the typical soil profile is as follows: 0 to 14, loam; and 14 to 24 inches, soft, weathered bedrock.

2.2.1.3 Malibu

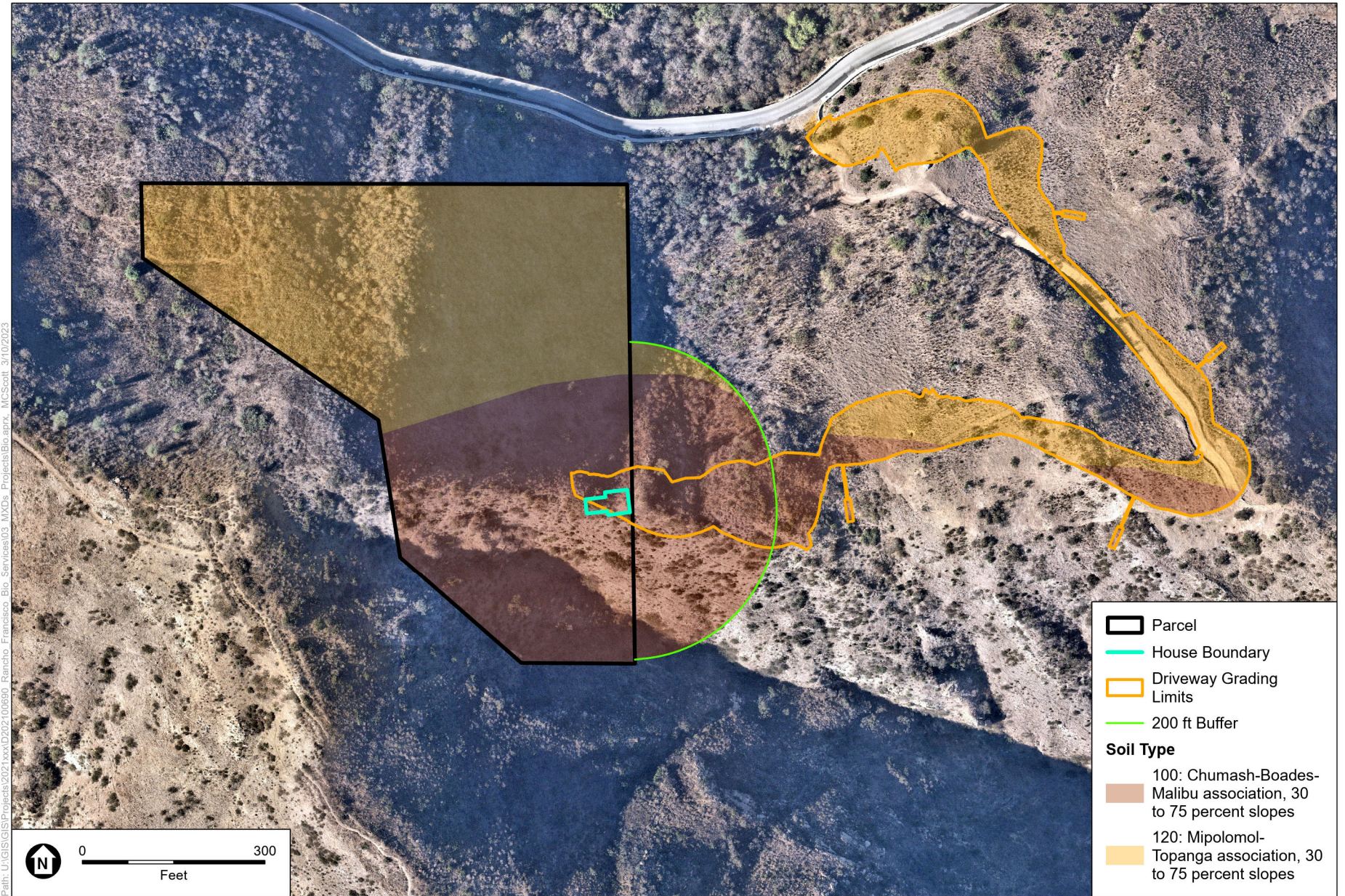
Malibu soils have formed from a parent material of colluvium and/or residuum derived from interbedded sandstone and shale and is characterized as moderately well drained with a poor water capacity of 3.4 inches. Bedrock is usually present within 20 to 40 inches of the surface and the typical soil profile is as follows: 0 to 19 inches, loam; 19 to 27 inches, clay; and 27 to 37 inches, weathered bedrock.

2.2.2 Mipolomol-Topanga association, 30 to 75 percent slopes

This soil association is the predominant soil type throughout the northern portion of the parcel and is the predominant soil type within the proposed driveway grading limits; it is composed of two major soil types, Mipolomol and Topanga, which are described in detail below.

2.2.2.1 Mipolomol

Mipolomol soils have formed from a parent material of colluvium derived from sandstone and shale or a residuum weathered from slate and is characterized as well drained with a very low water capacity of 1.5 inch. Bedrock is usually present within 12 to 22 inches of the surface and the typical soil profile is as follows: 0 to 12 inches, channery loam; 12 to 22 inches, bedrock.



SOURCE: Nearmap, 2021; ESA, 2022.

Bluewater Residence
Figure 3
 Soils

2.2.2.2 Topanga

Topanga soils have formed from a parent material of colluvium derived from sandstone and shale or a residuum weathered from slate, sandstone, or shale and is characterized as well drained with a moderately low water capacity of 2.5 inch. Bedrock is usually present within 18 to 28 inches of the surface and the typical soil profile is as follows: 0 to 15 inches, gravelly loam; 15 to 18 inches, gravelly clay loam; and 18 to 28 inches, bedrock.

2.3 Microclimate and Wildfire

Mean annual precipitation in the area is approximately 10.5 to 21.5 inches and mean annual air temperature is approximately 74 degrees F. According to the Statewide Historical Fire Perimeter Map (CDFFP, 2021), Portions of the study area burned in 2018 during the 96,949-acre Woolsey Fire.

2.4 Natural Communities and Land Uses

The natural communities and land uses located within the study area were characterized and mapped during the site visit and are depicted in **Figure 4 – Natural Communities and Land Uses**; each natural community and land use is described in detail below. A complete list of plant species observed during the site visit was generated and is provided in **Appendix C – Floral and Faunal Compendia**. Photographs were taken during the site visit depicting the communities and land use within the study area and are provided in **Appendix D – Photographic Log**. A summary of acreages within the study area are presented below in **Table 1 – Vegetation Acreages**.

**TABLE 1
VEGETATION ACREAGES**

Natural Communities	Grading Limits			Fuel Modification Zones				Total within Study Area ³
	Home Site	Driveway Grading Limits	Total Within Construction Limits ¹	Zone A (30 Feet)	Zone B (70 Feet)	Zone C (100 Feet)	Total Impact Area ²	
California Greenbark Ceanothus Woodland/Forest Association	0.00	0.02	0.02	0.00	0.00	0.00	0.02	1.46
Giant Wild Rye Herbaceous Association	0.00	1.16	1.16	0.00	0.00	0.00	1.16	1.16
Laurel Sumac-Ashy Buckwheat Shrubland Association	0.00	0.00	0.00	0.00	0.00	0.09	0.09	0.12
Greenbark Ceanothus Shrubland Alliance	0.00	0.36	0.36	0.04	0.38	1.14	1.92	3.68
Laurel Sumac Shrubland Association	0.02	0.61	0.63	0.18	0.55	1.27	2.63	2.83
Disturbed	0.00	0.32	0.32	0.00	0.00	0.00	0.32	0.32
Total	0.02	2.48	2.49	0.22	0.93	2.50	6.14	9.57

¹Total for home site grading limits, driveway grading limits and associated drainage structures. Due to minor overlap, totals do not represent summation of acreages.

²Not a summation of previous columns, since overlap occurs in Fuel Modifications zones and construction limits. Equals total acreage within project parcel and construction area (including driveway grading limits) and contains overlap with fuel modification.

³Present within parcel, but not impacted by construction limits or fuel modification.

2.4.1 California Walnut/Greenbark Ceanothus Woodland/Forest Association (1315)

California walnut/greenbark ceanothus woodland/forest association (*Juglans californica* / *Ceanothus spinosus* woodland/forest association) was surveyed within the northern portion of the parcel but is not located within grading limits for the home site. This community has California walnut (*Juglans californica*) as the dominant tree species with greenbark ceanothus dominant in the understory shrub layer. This community supports a simple herbaceous layer composed of a mixture of grass and forb species in low cover such as giant wild rye (*Elymus condensatus*), chilicothe (*Marah macrocarpa*), and California melic grass (*Melica imperfecta*). A small isolated patch of California walnut/greenbark ceanothus woodland/forest association is present within the driveway grading limits. This community has a state conservation status ranking of S3 and is considered an H1 habitat.

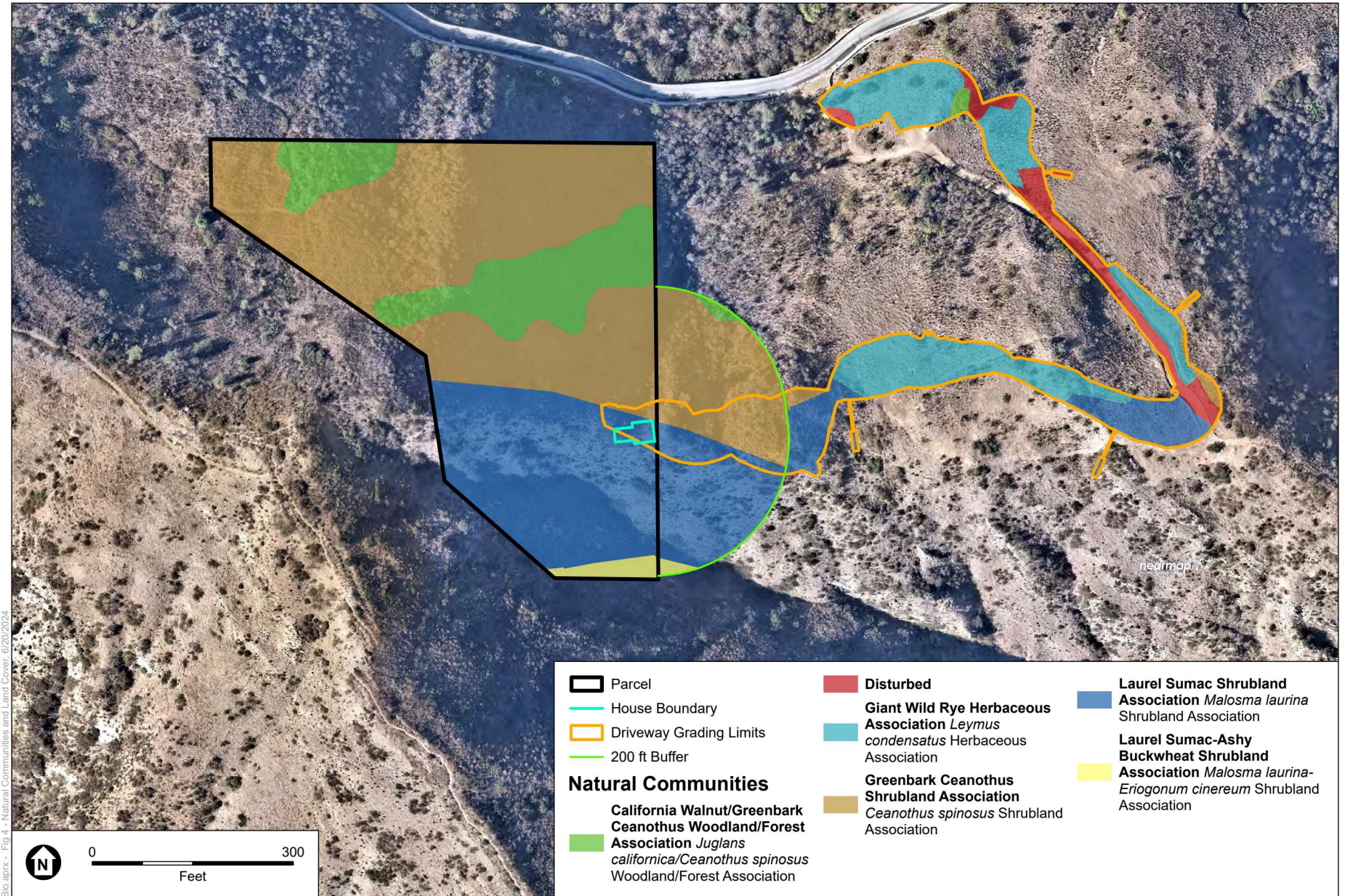
2.4.2 Giant Wild Rye Herbaceous Association (4041)

Giant wild rye herbaceous association (*Elymus condensatus* herbaceous association) was mapped within the grading limits of the proposed driveway. This community supports an herbaceous layer dominated by giant wild rye that may also support other native grasses, interspersed throughout with various shrub species such as coastal goldenbush (*Isocoma menziesii*), western poison oak, and saw toothed goldenbush (*Hazardia squarrosa*). Within the study area, this community appears to be tolerant of disturbance such as wildfire, surviving when shrub components are eliminated. This community has a state conservation status ranking of S3 and is considered an H1 habitat.

Within the adjacent parcel to the east (APN 4457 002 055), through which the proposed access driveway passes, a small patch of foothill needlegrass (*Stipa* [*Nasella*] *lepida*) herbaceous alliance (4090) is present adjacent to but north (and outside) of the proposed driveway grading limits. The patch consists of scattered plants within openings of the giant wild rye herbaceous association. Foothill needlegrass herbaceous alliance has a state conservation status ranking of S3 and is considered an H1 habitat. The small patch measures 0.03 acre in area but is not depicted in **Figure 4 – Natural Communities and Land Uses** because it is not within the study area.

2.4.3 Laurel Sumac-Ashy Buckwheat Shrubland Association Shrubland (2141)

Laurel sumac-ashy buckwheat shrubland association (*Malosma laurina*-*Eriogonum cinereum* shrubland association) occurs within the southern portions of the parcel but is not located within any grading limits. This community is dominated by laurel sumac (*Malosma laurina*) and a subdominance of ashy buckwheat (*Eriogonum cinereum*) in the shrub layer. This community has a state conservation status ranking of S4 and is considered an H2 habitat.



SOURCE: Nearmap, 2021; ESA, 2024.

Bluewater Residence
Figure 4
 Natural Communities and Land Cover

2.4.4 Greenbark Ceanothus Shrubland Association (2092)

Greenbark ceanothus shrubland (*Ceanothus spinosus* Shrubland Association) was mapped within the northern portions of the parcel and along the eastern portion of the Driveway grading limits. This community supports a shrub layer dominated by greenbark ceanothus interspersed throughout with various shrub species such as chamise (*Adenostoma fasciculatum*) and laurel sumac. A developed herbaceous layer is not present within this community. This community has a state conservation status ranking of S4 and is considered an H2 habitat.

2.4.5 Laurel Sumac Shrubland Association (7142)

Laurel sumac shrubland (*Malosma laurina* shrubland association) occurs within the southern portion of the parcel and makes up the majority of the area within the home site grading limits and fuel modifications. This community is dominated by laurel sumac in the shrub layer. This community is rather dense and does not support a well-developed herbaceous layer. This community has a state conservation status ranking of S4 and is considered an H2 habitat.

2.4.6 Disturbed

Disturbed land use was mapped along the driveway grading limits associated with an old road and pullouts. This community supports mainly weedy, non-native vegetative growth with a few native species mixed in. Species include coastal goldenbush, deerweed (*Acmispon glaber*), red brome (*Bromus rubens*) and wild oats (*Avena* spp.). Disturbed lands have no state conservation status ranking and are considered H3 habitat.

2.5 Sensitive Natural Communities and Habitats

2.5.1 California Department of Fish and Wildlife

Sensitive natural communities and habitats are defined by the CDFW as those natural communities that have a reduced range and/or are imperiled as a result of residential and commercial development, agriculture, energy production and mining, or an influx of invasive and other problematic species. Vegetation communities are evaluated using NatureServe's Heritage Methodology (NatureServe, 2021) which is based on the knowledge of range and distribution of a specific vegetation type and the proportion of occurrences that are of good ecological integrity. Evaluation is done at both Global (natural range within and outside of California [G]) and Subnational (State level for California [S]), each ranked from 1 ("critically imperiled" or very rare and threatened) to 5 (demonstrably secure). Natural communities and habitats with state ranks of S1-S3 are considered Sensitive Natural Communities and may require review when evaluating environmental impacts (CDFW, 2021b).

California Walnut/Greenbark Ceanothus Woodland/Forest Association and Giant Wild Rye Herbaceous Association mapped within the study area each have Global and State evaluations of G3S3 and are designated as CDFW sensitive communities. As mentioned above, Foothill Needlegrass Herbaceous Alliance is also a CDFW sensitive community with Global and State conservation ranking of G3S3. This natural community is not within the study area, although immediately adjacent to the offsite driveway grading limits.

2.5.2 Santa Monica Mountains Local Coastal Program

As described in Section 22.44.1800 *et seq.* of the LCP, various habitat categories are described as sensitive and require protection in the face of new development within the Coastal Zone. Certain habitats are designated as Sensitive Environmental Resource Areas (SERA), described as H1, H2 and H2 “High Scrutiny” habitat types; these take priority during the development process under the guidelines of the LCP. Habitats that would otherwise fall into the aforementioned designations if they had not been altered through approved developments or modifications (i.e. fuel modification) are categorized as H3 habitat (not SERA). As part of the LCP process, the County has generated a preliminary map depicting SERA based on available vegetation and habitat data within the plan area; this preliminary map has been overlain on the study area and depicted in **Figure 5a – Sensitive Environmental Resource Areas (County-Designated)**. Based on the results of the biological assessment, the preliminary mapping within the study area is either confirmed as accurate or modified to reflect variations observed in the field. Habitat categories as defined in the LCP are described below and discussed whether or not they were observed within the study area.

2.5.2.1 H1 Habitat and H1 Habitat Elements

H1 habitats include habitats of the highest biological significance including alluvial scrub, coastal bluff scrub, dunes, wetland, and native grassland and scrub (high concentration of native grasses or forbs), riparian, native oak, sycamore, walnut and bay woodlands, and rock outcrop habitat types.

Based on species composition, as defined in the LCP, the California walnut/greenbark ceanothus woodland/forest association and giant wild rye herbaceous association mapped within the study area would be characterized as H1 habitat. As depicted in Appendix D – Photographic Log, these areas support a prominence of California walnut and other sensitive plant species. These communities have Global and State evaluation of G3S3 and are designated as CDFW sensitive communities.

2.5.2.2 H1 Habitat (100-foot Buffer)

Habitat mapped as H1 is generally afforded a 100-foot buffer to avoid indirect impact to the resource. An additional 100-foot “Quiet Zone” (measured from the outer edge of the 100-foot H1 habitat buffer) is required as well, where feasible, to avoid impact to wildlife that may utilize the habitat.

H1 habitat (100-foot buffer) surrounds the California walnut/greenbark ceanothus woodland/forest association and giant wild rye herbaceous association mapped natural communities within the study area.

2.5.2.3 H2 Habitat

H2 habitat includes “Habitats of high biological significance, rarity, and sensitivity that are important for the ecological vitality and diversity of the Santa Monica Mediterranean Ecosystem” (LCP, 2014). H2 habitat generally includes contiguous portions of native vegetation communities

that facilitate wildlife dispersal and migration, as well as supporting the persistence and growth of native plant populations.

The greenbark ceanothus shrubland association, laurel sumac-ashy buckwheat shrubland association, and laurel sumac shrubland association within the study area are categorized as H2 habitat.

2.5.2.5 H3 Habitat

H3 habitat is that would otherwise be designated as SERA; however, due to lawful historic or past disturbance, has been fragmented or heavily altered, reducing its capability to support native plant and wildlife populations. Only the Disturbed area is mapped H3 habitat in the study area

Figure 5b – Sensitive Environmental Resource Areas (Field-Surveyed), below reflects the “surveyed” SERA mapped within the study area during the Biological Assessment. **Table 2 – Field-Surveyed SERA**, below indicates the total acreage of each habitat category within each parcel.

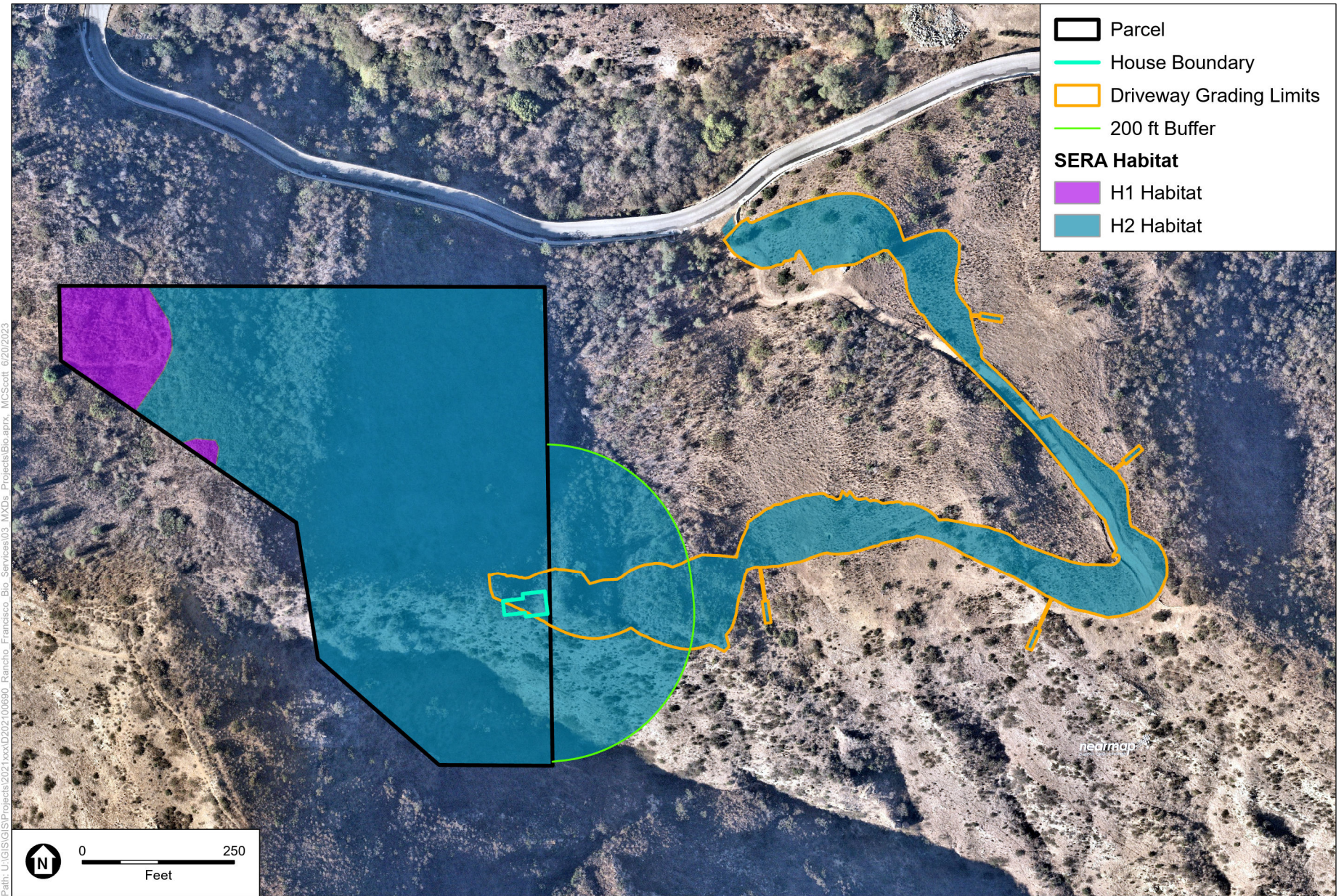
**TABLE 2
FIELD SURVEYED SERA**

Habitat Categories	Total within Study Area (acres) ¹	Construction Impacts			Fuel Modification Zones		
		Home Site	Driveway Grading Limits	Construction Limits	Zone A (30 feet)	Zone B (70 Feet)	Zone C (100 Feet)
<u>SERA</u>							
H1	2.62	0.00	1.18	1.18	0.00	0.00	0.00
H2	6.63	0.02	0.98	1.00	0.22	0.93	2.41
<u>Non-SERA</u>							
H3	0.32	0.00	0.32	0.32	0.00	0.00	0.00

¹Total area not a summation of previous columns, are includes total SERA within parcel boundary and construction limits. H1 Habitat 100-Foot Buffer and H1 “Quiet Zone” overlap with areas mapped as either H2 or H3 Habitat.

2.6 Wildlife

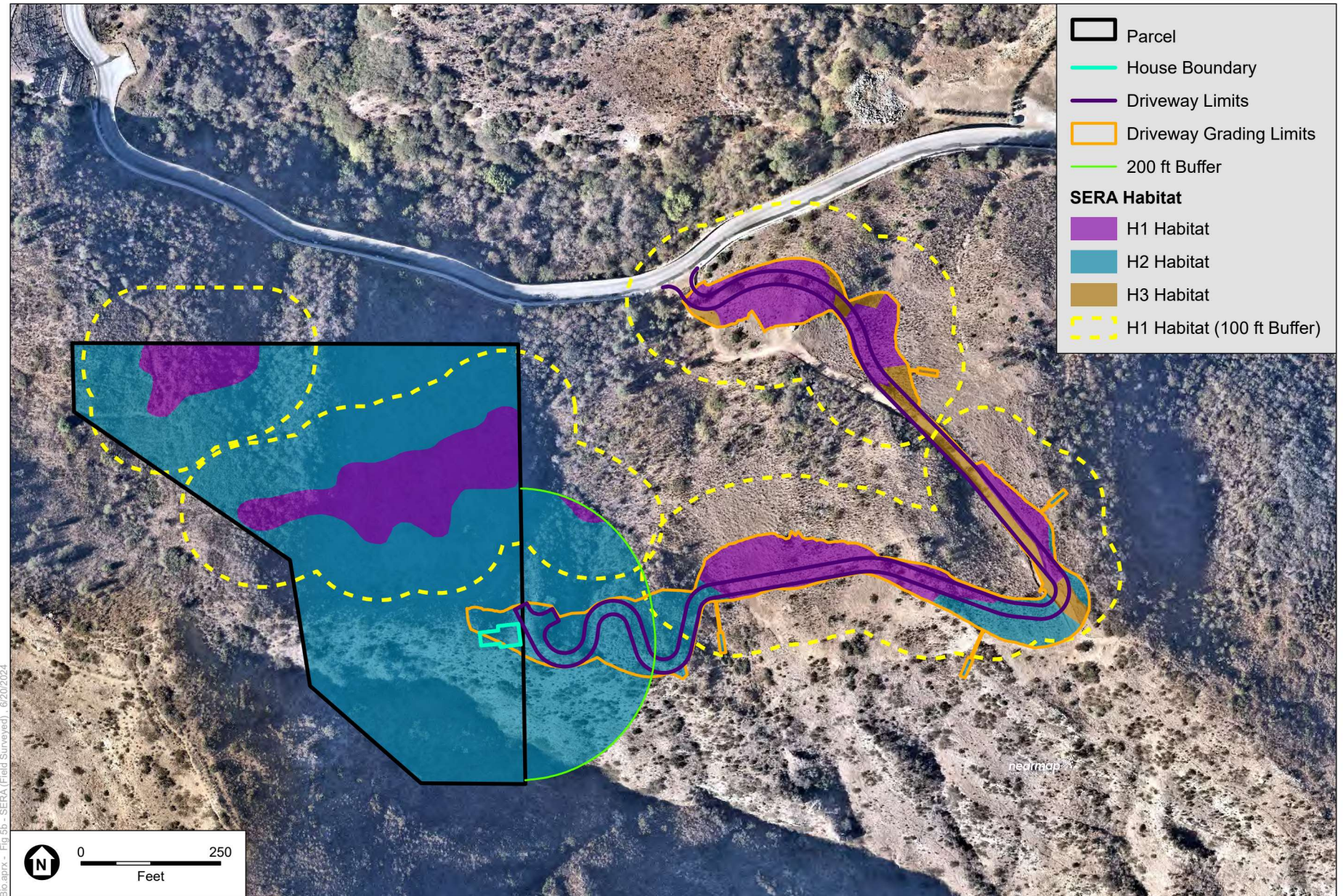
The generally contiguous natural topography, friable soils and unimpaired connection with adjacent native habitats to the west and north suggest that many species of wildlife are likely to utilize the study area both for foraging and breeding. Furthermore, an ephemeral drainage north of the project site runs parallel to the northern boundary of the study area provides drainage connection between the site, Malibu Creek to the east, Pacific Ocean to the south and the greater Santa Monica Mountains to the north. These features support, at a minimum, moderate levels of migration and likely increase wildlife utilization within the study area as a whole.



SOURCE: Nearmap, 2021; Los Angeles County, 2021; ESA, 2022.

Bluewater Residence

Figure 5a
 Sensitive Environmental Resource Areas (SERA)
 County-Designated



Bo.aprx - Fig. 5b - SERA (Field Surveyed) - 6/20/2024

SOURCE: Nearmap, 2021; ESA, 2024.



Bluewater Residence
Figure 5b
 Sensitive Environmental Resource Areas (SERA)
 Field Surveyed

2.6.1 Common Wildlife

Avian species observed during the field assessment include California towhee (*Melospiza crissalis*), house finch (*Haemorhous mexicanus*), wren (Chamaea fasciata), California scrub jay (*Aphelocoma californica*), turkey vulture (*Cathartes aura*), western gull (*Larus occidentalis*), Bewick's wren (*Thryomanes bewickii*), and mourning dove (*Zenaidura macroura*). Reptile species observed during the field assessment include western fence lizard (*Sceloporus occidentalis*) and common side-blotched lizard (*Uta stansburiana*). Mammal species observed during the field assessment include California mule deer (*Odocoileus hemionus californicus*), grey fox (*Urocyon cinereoargenteus*), and California ground squirrel (*Otospermophilus beecheyi*). Butterfly species observed during the field assessment include cabbage white butterfly (*Pieris rapae*). A list of wildlife species observed within the study area is included in Appendix C – Floral and Faunal Compendia.

2.6.2 Special-Status Wildlife

Special-status wildlife is defined as those animals that, because of their recognized rarity or vulnerability to various forms of habitat loss or population decline, are considered by federal, state, or other agencies to be under threat from human-associated developments. Some of these species receive specific protection that is defined by this federal or state endangered species legislation and others have been designated as special-status on the basis of adopted local policies (i.e. city and county) or the educated opinion of respected resource interest groups (i.e. Western Bat Working Group). Special-status wildlife is defined as follows:

- Wildlife listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the federal Endangered Species Act or the California Endangered Species Act;
- Wildlife that meet the criteria of rare or endangered under *California Environmental Quality Act (CEQA) Guidelines* Section 15380;
- Wildlife designated by CDFW as species of special concern, included on the Watch List or are considered Special Animals;
- Wildlife "fully protected" in California (Fish and Game Code Sections 3511, 4700, and 5050);
- Birds designated as "sensitive" by the Los Angeles Audubon Society or are included in the Bird Watchlist;
- Bird species protected by the Migratory Bird Treaty Act (MBTA); and
- Bat species considered priority by the Western Bat Working Group (WBWG).

Wildlife species generated in the query, that are not expected to occur within the study area based on an absence of suitable habitat, known geographic distributions and/or range restrictions were omitted and are not discussed further in this report.

The Audubon's Los Angeles County's Sensitive Bird Species List [LAA] (Allen, LW, et al. 2009) was reviewed as well to determine the potential for "sensitive" or "watch list" bird species to occur within the study area. Those species with potential to occur or were observed during the site visit are analyzed further in this report.

The special-status wildlife listed in **Table 3 – Potentially Occurring Special-Status Species in the Study Area** below were determined to have varying levels of potential to occur based on the following criteria:

Low Potential: The study area supports limited habitat for a particular species. For example, the appropriate vegetation assemblage may be present while the substrate preferred by the species may be absent.

Moderate Potential: The study area provides marginal habitat for a particular species. For example; the habitat may be heavily disturbed and/or may not support all stages of a species' life cycle.

High Potential: The study area provides suitable habitat conditions for a particular species and/or known populations occur in the immediate area.

Present: The species was observed within the study area during the site visit.

A total of 43 special-status wildlife species were reported in the vicinity based on a CNDDDB database search within the 6-quadrangle search area (i.e., Malibu Beach and surrounding topographic quadrangles). A total of 19 wildlife species have a low to high potential to occur within the study area, including Santa Monica shieldback katydid (*Aglaothorax longipennis*), Santa Monica grasshopper (*Trimerotropis occidentiloides*), monarch butterfly – overwintering population (*Danaus plexippus* pop. 1), Crotch's bumble bee (*Bombus crotchii*), coast horned lizard (*Aspidoscelis tigris stejnegeri*), southern California legless lizard (*Anniella stebbinsi* /*Anniella pulchra*), San Bernardino ringneck snake (*Diadophis punctatus modestus*), turkey vulture, Cooper's hawk (*Accipiter cooperi*), golden eagle (*Aquila chrysaetos*), Allen's hummingbird (*Selasphorus sasin*), oak titmouse (*Baeolophus inornatus*), wrenit (*Chamaea fasciata*), southern California rufous-crowned sparrow (*Aimophila ruficeps caescens*), California towhee (*Melospiza crissalis*), common yellowthroat (*Geothlypis trichas*), pallid bat (*Antrozous pallidus*), western mastiff bat (*Eumops perotis californicus*), San Diego desert woodrat (*Neotoma lepida intermedia*), and mountain lion (*Puma concolor*).

Two LAA species, the turkey vulture (*Cathartes aura*) and California towhee, were observed within the study area during the site visit. Species that were either observed during the site visit or have a moderate to high potential to occur within the study area are discussed in detail below in Section 5.0 of this report.

Additionally, mountain lion has been previously observed within the study area. The Southern California/Central Coast evolutionarily significant unit (ESU) of mountain lion became a Candidate species as threatened or endangered under the California Endangered Species Act (CESA), as defined in Section 2068 of the Fish and Game Code, when the California Fish and Game

Commission (Commission) accepted the petition to list the species under the CESA at the Commission’s April 15-16, 2020, meeting. Notification of this finding was published on May 1, 2020. The CDFW was to provide a written report within one year of this publication indicating whether or not the listing under the CESA is warranted. However, at the April 14, 2021, Commission meeting, CDFW requested a six-month extension to provide the Commission with their written report, until November 3, 2021. No formal decision has yet been made by the Fish and Game Commission, as of February 2023.

Prior to the 2020 Candidate status for mountain lion, the species was designated by CDFW as a Specially Protected Mammal that affords some protection for the species. The Specially Protected Mammal status makes it unlawful to take, injure, possess, transport, import, or sell mountain lion except with a depredation permit. The mountain lion is considered a special-status species because of the Candidate status. The petition to list the mountain lion Southern California/Central Coast ESU was submitted by the Center for Biological Diversity and the Mountain Lion Foundation (2019). Within the petition, Chapter 6 describes factors affecting the ability of the species to survive and reproduce. These factors include low genetic diversity and inbreeding depression, vehicle strikes, depredation and illegal kills, intraspecific strife, abandonment, poisoning with rodenticides, wildfires, and climate change. Interruption of wildlife connectivity is considered to be a primary factor reducing mountain lion populations. Enhancement of habitat connectivity will help overcome many of the obstacles limiting the long-term prospects of the species in Southern California.

**TABLE 3
POTENTIALLY OCCURRING SPECIAL-STATUS WILDLIFE SPECIES WITHIN THE STUDY AREA**

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
Invertebrates			
Order Orthoptera (Grasshoppers, Locusts, Crickets) Insecta			
Santa Monica shieldback katydid <i>Aglaothorax longipennis</i>	Federal: None State: None Local: G1G2, S1S2	Occur nocturnally in chaparral and canyon stream bottom vegetation, in the Santa Monica Mountains of Southern California. Inhabit introduced iceplant and native chaparral plants.	Low Potential. This species has a low potential to occur due to marginally suitable habitat present on site.
Santa Monica grasshopper <i>Trimerotropis occidentiloides</i>	Federal: None State: None Local: G1G2, S1S2	Known only from the Santa Monica Mountains. Found on bare hillsides and along dirt trails in chaparral.	Low Potential. This species has a low potential to occur due to marginally suitable habitat present on site.

**TABLE 3
POTENTIALLY OCCURRING SPECIAL-STATUS WILDLIFE SPECIES WITHIN THE STUDY AREA**

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
Order Lepidoptera (butterflies & moths) Insecta			
monarch butterfly – California overwintering population <i>Danaus plexippus</i> pop. 1	Federal: None State: None Local:	Wintering sites in California are associated with wind-protected groves of large trees (primarily eucalyptus or pine [<i>Pinus</i> spp.]) with nectar and water sources nearby that are generally near the coast.	Low Potential. This species has a low potential to occur because suitable wind-protected habitat is marginally present on site.
Order Hymenoptera (ants, bees, & wasps) Insecta			
Crotch bumble bee <i>Bombus crotchii</i>	Federal: None State: SCE Local: None	Open grassland and scrub habitats that support potential nectar sources such as plants within the <i>Fabaceae</i> , <i>Apocynaceae</i> , <i>Asteraceae</i> , <i>Lamiaceae</i> , and <i>Boraginaceae</i> families.	Moderate Potential. This species has a moderate potential to occur due to suitable habitat present on site.
AMPHIBIANS			
REPTILES			
Spiny Lizards Phrynosomatidae			
coast horned lizard <i>Phrynosoma blainvillii</i>	Federal: None State: SSC Local:	Prefers sandy riparian and sage scrub habitats but also occurs in valley-foothill hardwood, conifer, pine-cypress, juniper and annual grassland habitats below 6,000 feet, open country, especially sandy areas, washes, flood plains, and windblown deposits. Requires open areas for sunning, bushes and loose soil for cover and abundant supply of harvester ants.	Moderate Potential. This species has a moderate potential to occur due to suitable habitat present on site.
Whiptails & relatives Teiidae			
coastal western whiptail <i>Aspidoscelis tigris stejnegeri</i>	Federal: None State: SSC Local:	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	Moderate Potential. This species has a moderate potential to occur due to suitable habitat present on site.

**TABLE 3
POTENTIALLY OCCURRING SPECIAL-STATUS WILDLIFE SPECIES WITHIN THE STUDY AREA**

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
Legless Lizards Anniellidae			
southern California legless lizard [=silvery legless lizard] <i>Anniella stebbinsi</i> [= <i>Anniella pulchra</i>]	Federal: None State: SSC Local:	Occurs in moist warm loose soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of beach/coastal dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Often can be found under surface objects such as rocks, boards, driftwood, and logs. Can also be found by gently raking leaf litter under bushes and trees. Sometimes found in suburban gardens in Southern California.	Moderate Potential. This species has a moderate potential to occur due to suitable habitat present on site.
Egg-Laying Snakes Colubridae			
San Bernardino ringneck snake <i>Diadophis punctatus modestus</i>	Federal: None State: None Local:	Most common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats. Often in somewhat moist microhabitats near intermittent streams. Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous vegetation.	Moderate to High Potential. This species has a moderate to high potential to occur due to suitable mesic habitat providing moist conditions present on site.
BIRDS			
Hawks, Kites, Harriers, & Eagles Accipitridae			
Cooper's hawk <i>Accipiter cooperii</i>	Federal: None State: WL Local:	Inhabits cismontane woodland, riparian forest, riparian woodland, upper montane coniferous forest, or other forest habitats near water. Nests and forages near open water or in riparian vegetation.	Low Potential. This species has a low potential to occur due to marginally suitable habitat present on site.

TABLE 3
POTENTIALLY OCCURRING SPECIAL-STATUS WILDLIFE SPECIES WITHIN THE STUDY AREA

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
golden eagle <i>Aquila chrysaetos</i>	Federal: BGEPA, BCC State: FP, WL Local:	Known to live in open and semi-open country featuring native vegetation across most of the Northern Hemisphere. They avoid developed areas and uninterrupted stretches of forest. They are found primarily in mountains up to 12,000 feet, Canyonlands, rim rock terrain, and riverside cliffs and bluffs. Nest on cliffs and steep escarpments in grassland, chaparral, shrubland, forest, and other vegetated areas. Forages for mammalian prey in grasslands, coastal sage scrub, chaparral, oak savannahs, open coniferous forest, and over open areas	Low Potential. This species has a low potential to occur due to marginally suitable habitat present on site.
Hummingbirds Trochilidae			
Allen's hummingbird <i>Selasphorus sasin</i>	Federal: BCC State: None Local:	Common in coastal forest, woodland, scrub, and chaparral from sea level to 1000 feet along the west coast.	High Potential. This species has a high potential to occur due to presence of suitable habitat.
Tits, Chickadees, Titmice Paridae			
Oak titmouse <i>Baeolophus inornatus</i>	Federal: BCC State: None Local: LACSBS Watch List	Year round resident of the Pacific slope. Live mostly in warm, open, dry oak-pine woodlands. Will use scrub oaks or other brush as long as woodlands are nearby.	High Potential. This species has a high potential to occur due to presence of suitable habitat.
Parrotbill Paradoxornithidae			
wrentit <i>Chamaea fasciata</i>	Federal: BCC State: None Local:	Known to occur in chaparral, oak woodlands, and scrub throughout California.	High Potential. This species has a high potential to occur due to presence of suitable habitat.
Sparrows Passerellidae			
southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	Federal: None State: WL Local: LACSBS Watch List	Known to frequent relatively steep, often rocky hillsides with grass and forb species. Resident in southern California coastal sage scrub and mixed chaparral habitats.	High Potential. This species has a high potential to occur due to presence of suitable habitat.

**TABLE 3
POTENTIALLY OCCURRING SPECIAL-STATUS WILDLIFE SPECIES WITHIN THE STUDY AREA**

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
California towhee <i>Melospiza crissalis</i>	Federal: None State: None Local: LACSBS Watch List	California brush, chaparral, open woodlands, and along streams adjacent to desert slopes. Found throughout the state.	Observed. This species was observed within the study area during site survey. One bird was detected audibly within the BSA.
Wood-Warblers Parulidae			
common yellowthroat <i>Geothlypis trichas</i>	Federal: BCC State: None Local:	Found in riparian forest, scrub, and woodland. Riparian plant associations in close proximity to water throughout Southern California.	Low Potential. This species has a low potential to occur due to marginally suitable habitat present on site.
MAMMALS			
Evening Bats Vespertilionidae			
pallid bat <i>Antrozous pallidus</i>	Federal: None State: SSC Local:	Occurs in a wide variety of habitats including chaparral, coastal scrub, desert wash, grassland, scrub, Mojavean desert scrub, riparian woodland, Sonoran Desert scrub, valley and foothill grasslands. Most common in open, dry habitats with rocky areas for roosting. For roosting, prefers rocky outcrops, cliffs and crevices with access to open habitats for foraging. Roosts must protect species from high temperatures. Very sensitive to disturbance of roosting sites.	Moderate Potential. This species has a moderate potential to occur due to suitable rocky roosting and foraging habitat present on site.
Free-Tailed Bats Molossidae			
western mastiff bat <i>Eumops perotis californicus</i>	Federal: None State: SSC Local:	Known to occur in habitat consisting of extensive open areas within dry desert washes, flood plains, chaparral, cismontane oak woodland, coastal scrub, open ponderosa pine forest, and grasslands. Roosts primarily in crevices in rock outcrops and buildings.	Moderate Potential. This species has a moderate potential to occur due to suitable rocky roosting and foraging habitat present on site.

**TABLE 3
POTENTIALLY OCCURRING SPECIAL-STATUS WILDLIFE SPECIES WITHIN THE STUDY AREA**

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
<i>Mice, Rats, & Voles</i> <i>Muridae</i>			
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	Federal: None State: SSC Local:	Found in a variety of coastal scrub, desert scrub, chaparral, cactus, and rocky habitats. Nests primarily against rock outcroppings, boulders, cacti, or areas of dense undergrowth.	Low Potential. This species has a low potential to occur due to marginally suitable habitat present on site.
<i>Cats & relatives</i> <i>Felidae</i>			
mountain lion <i>Puma concolor</i>	Federal: None State: SCE Local:	Prefers large, unfragmented habitats such as mountains, forests, and deserts.	Observed. This species has been observed within the study area during previous surveys of the site.

2.7 Plants

Vegetation within the study area consists of chaparral vegetation in varying states of disturbance, interspersed with herbaceous vegetation and developed land use. Disturbance and development within the study area includes paved driveway, road pullouts, unpaved dirt roads, and old goat pens and grazing grounds. All plants observed throughout the study area during the assessment were recorded and a comprehensive list is provided in Appendix C – Floral and Faunal Compendia; those that were unidentified in the field were keyed to the species level using the 2012 Jepson Manual (Baldwin et al, 2012).

2.7.1 Special-Status Plants

Special-status plants are defined as those plants that, because of their recognized rarity or vulnerability to various causes of habitat loss or population decline, are recognized by federal, state, or other agencies as under threat from human-associated developments. Some of these species receive specific protection that is defined by federal or state endangered species legislation. Others have been designated as special-status on the basis of adopted policies and expertise of state resource agencies or organizations with acknowledged expertise, or policies adopted by local governmental agencies such as counties, cities, and special districts to meet local conservation objectives. Special-status plants are defined as follows:

- Plants listed or proposed for listing as threatened or endangered, or are candidates for possible future listing as threatened or endangered, under the federal Endangered Species Act or the California Endangered Species Act;
- Plants that meet the definitions of rare or endangered under *State CEQA Guidelines* Section 15380;

- Plants considered by the CNPS and CDFW to be rare, threatened, or endangered (California Rare Plant Rank [CRPR] 1A, 1B, 2A and 2B plants) in California;
- Plants listed by the CNPS and CDFW as plants in which more information is needed to determine their status and plants of limited distribution (CRPR 3 and 4 plants); and
- Plants listed as rare under the California Native Plant Protection Act (Fish and Game Code 1900 et seq.)

A review of the CNDDDB (CDFW, 2021) and the CNPS Inventory of Rare and Endangered Plants (CNPS, 2021) revealed numerous special-status plant species recorded within the 6-USGS quadrangle search. The potential for special-status plant species to occur is based on on-site vegetation and habitat quality, topography, elevation, soils, surrounding land uses, habitat preferences and geographic ranges. A complete list of the species generated in the CNDDDB query are provided in **Appendix E2 – Special-Status Plant Species**. Based on the presence of suitable habitat, known geographic distributions and/or range restrictions, it was determined that many of the plant species do not have the potential to occur within the study area and are therefore omitted from further discussion in this report. Special-status plants provided below in **Table 4 - Special-Status Plant Species** were determined either to be absent or present from the study area based on the following criteria:

Absent: The species was considered identifiable based on vegetative characteristics and/or survey timing and was not observed during the biological assessment.

Low Potential: The study area supports limited habitat for a particular species. For example, the appropriate vegetation assemblage may be present while the substrate preferred by the species may be absent.

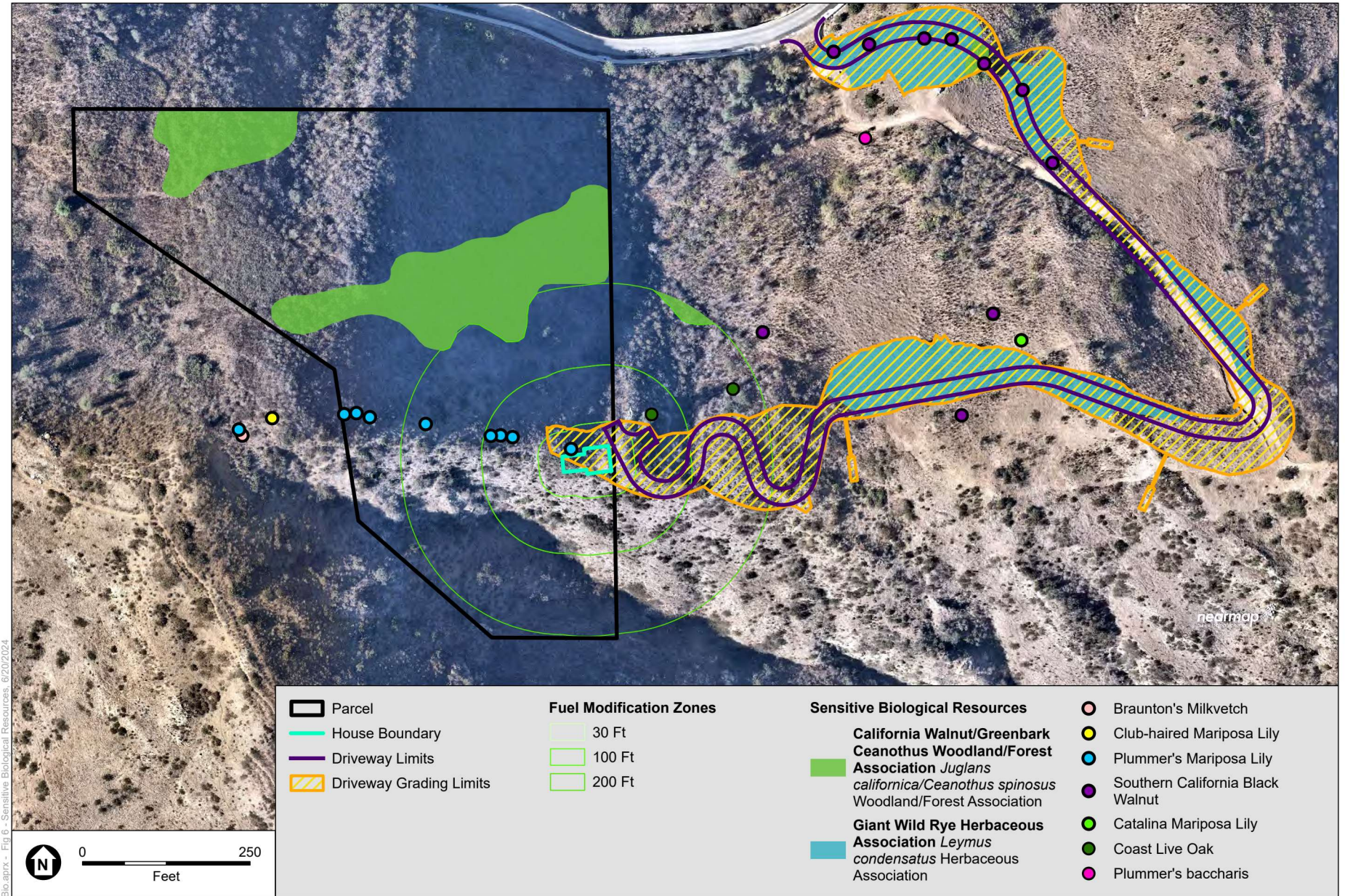
Moderate Potential: The study area provides marginal habitat for a particular species. For example; the habitat may be heavily disturbed and/or may not support all stages of a species life cycle.

High Potential: The study area provides suitable habitat conditions for a particular species and/or known populations occur in the immediate area.

Observed: The species was observed within the study area during the site visit.

Suitable habitat is present for 12 special status plant species within the study area, including Braunton’s milkvetch (*Astragalus brauntonii*), Malibu baccharis (*Baccharis malibuensis*), Plummer’s baccharis (*Baccharis plummerae* ssp. *plummerae*), Brewer’s calandrinia (*Calandrinia breweri*), Catalina mariposa lily (*Calochortus catalinae*), club-haired mariposa lily (*Calochortus clavatus* var. *clavatus*), Plummer’s mariposa lily (*C. plummerae*), western dichondra (*Dichondra occidentalis*), Blochman’s dudleya (*Dudleya blochmaniae* ssp. *blochmaniae*), marcescent dudleya (*Dudleya cymosa* ssp. *marcescens*), Santa Monica dudleya (*Dudleya cymosa* ssp. *ovatifolia*), and southern California black walnut.

Based on the results of the most recent site visit as well as previously conducted focused rare plant surveys conducted within the site, it was determined that 47 of the species are considered absent from the study area due to negative survey results. Four species, southern California black walnut, Catalina mariposa lily, club-haired mariposa lily, and Plummer's mariposa lily were observed throughout the study area. Additionally, two species; Plummer's baccharis and Braunton's milkvetch were observed immediately adjacent to the study area and have a high likelihood to be present within the study area, although not observed in the 2022 study area during the focused rare plant survey. **Figure 6 – Sensitive Biological Resources** depicts the location of the rare plant species within the study area.



SOURCE: Nearmap, 2021; ESA, 2024.

Bluewater Residence
Figure 6
 Sensitive Biological Resources

**TABLE 4
POTENTIALLY OCCURRING SPECIAL-STATUS PLANT SPECIES WITHIN THE STUDY AREA**

Common Name Scientific Name	Sensitivity Status¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution²	Presence/Potential to Occur Within Biological Study Area
ANGIOSPERMS (DICOTYLEDONS)				
Asteraceae (Sunflower Family)				
Malibu baccharis <i>Baccharis malibuensis</i>	Federal: None State: None Local: 1B.1	Aug.	Chaparral, cismontane woodland, coastal scrub, riparian woodland. Elevation range extends from 150-305 meters. Found in Los Angeles and Orange.	Low Potential. This species has a low potential to occur within the study area due to marginally suitable habitat on site.
Plummer's baccharis <i>Baccharis plummerae</i> ssp. <i>plummerae</i>	Federal: None State: None Local: 4.3	May-Oct.	Rocky areas in broadleaved upland forest, Chaparral, Cismontane woodland, Coastal scrub Elevation range extends from 5-425 meters. Found in Los Angeles, Santa Barbara, and Ventura Counties.	Observed. This species was observed immediately outside the study area and is presumed to potentially occur within the study area. Several plants were observed along Francisco Ranch Road and one plant on the southside of the existing access road, a short distance south of Francisco Ranch Road.
Convolvulaceae (Morning-glory Family)				
Western dichondra <i>Dichondra occidentalis</i>	Federal: None State: None Local: 4.2	Jan.-Jul.	perennial rhizomatous herb. Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland Elevation range extends from 50-500 meters. Found in Orange, Los Angeles, San Diego, Ventura counties.	Low Potential. This species has a low potential to occur within the study area due to marginally suitable habitat on site.
Crassulaceae (Stonecrop Family)				
Blochman's dudleya <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Federal: None State: None Local: 1B.1	Apr.-Jun.	Coastal bluff scrub, coastal scrub, valley and foothill grassland/often clay. Elevation range extends from 5-450 meters. Found in Los Angeles, Orange, Santa Barbara, Ventura counties.	Low Potential. This species has a low potential to occur within the study area due to marginally suitable habitat on site.
marcescent dudleya <i>Dudleya cymosa</i> ssp. <i>marcescens</i>	Federal: FT State: SR Local: 1B.2	Apr.-Jul.	Rocky, volcanic substrates in chaparral communities. Elevation range extends from 150 and 520 meters.	Low Potential. This species has a low potential to occur within the study area due to marginally suitable habitat present on site.

**TABLE 4
POTENTIALLY OCCURRING SPECIAL-STATUS PLANT SPECIES WITHIN THE STUDY AREA**

Common Name Scientific Name	Sensitivity Status¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution²	Presence/Potential to Occur Within Biological Study Area
			Found in Los Angeles, Ventura counties.	
Santa Monica dudleya <i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	Federal: FT State: None Local: 1B.1	Mar.-Jun.	Chaparral, coastal scrub. Grows on north-facing slopes within canyons and sedimentary substrates. Elevation range extends from 210-500 meters. Found in Los Angeles, Orange counties.	Moderate Potential. This species has a moderate potential to occur within the study area and collections of the plant have been made within 1 mile of the site.
Fabaceae (Legume Family)				
Braunton's milkvetch <i>Astragalus brauntonii</i>	Federal: FE State: None Local: 1B.1	Jan.-Aug.	Chaparral, coastal scrub, valley and foothill grassland; recent burns or disturbed areas, usually sandstone with carbonate layers. Elevation range extends from 4-640 meters. Found in Los Angeles, Orange, Riverside, Ventura counties.	Observed. This species was observed growing 200 feet upslope of the study area within an adjacent parcel (APN 4457-004-075) and outside of proposed project impacts.
Juglandaceae (Walnut Family)				
Southern California black walnut <i>Juglans californica</i>	Federal: None State: None Local: 4.2	Mar.-Aug.	Chaparral, cismontane woodland, coastal scrub, riparian woodland; alluvial. Elevation range extends from 50-900 meters. Found in Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, Ventura counties.	Observed. This species was observed within the study area. Many walnut trees were observed throughout the property, the majority of which with trunk diameters of less than six inches in diameter.
Portulacaceae (Purslane Family)				
Brewer's calandrinia <i>Calandrinia breweri</i>	Federal: None State: None Local: 4.2	Mar.-Jun	Sandy or loamy, disturbed sites and burns; chaparral, coastal scrub. Elevation range extends from 10-1,220 meters. Found in Los Angeles, Orange, Riverside, San	Low Potential. This species has a low potential to occur within the study area due to marginally suitable habitat present on site.

**TABLE 4
POTENTIALLY OCCURRING SPECIAL-STATUS PLANT SPECIES WITHIN THE STUDY AREA**

Common Name Scientific Name	Sensitivity Status¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution²	Presence/Potential to Occur Within Biological Study Area
			Bernardino, San Diego, Ventura counties.	
ANGIOSPERMS (MONOCOTYLEDONS)				
Liliaceae (Lily Family)				
Catalina mariposa lily <i>Calochortus catalinae</i>	Federal: None State: None Local: 4.2	Feb-Jun.	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. Typically found in heavy soils within openings. Elevation range extends from 15-700 meters. Found in Los Angeles, Orange, Santa Barbara, San Bernardino, Ventura counties.	Observed. This species was observed within the study area. Plants were observed on previous surveys of the property.
club-haired mariposa lily <i>Calochortus clavatus</i> var. <i>clavatus</i>	Federal: None State: None Local: 4.3	May-Jun.	Chaparral, cismontane woodland, valley and foothill grassland, and coastal scrub; typically found growing in serpentine clay, rocky soils. Elevation range extends from 75-1,300 meters.	Observed. This species was observed within the study area. Plants were observed in flower along the ridgeline leading to the proposed project.
Plummer's mariposa lily <i>Calochortus plummerae</i>	Federal: None State: None Local: 4.2	May-Jul.	Chaparral (openings), cismontane woodland, coastal scrub, valley and foothill grassland, granitic/rocky. Elevation range extends from 100- 1,700 meters. Found in Los Angeles, Orange, Riverside, San Bernardino, Ventura counties.	Observed. This species was observed within the study area. Plants were observed on previous surveys of the property.
Federal/State/Other Status: FE – federally endangered, FT – federally threatened; FSC – Federal Species of Concern; SE – State endangered, SSC – State Species of Special Concern, WL – State watch List; CE – State Endangered Candidate S1- 6 element occurrences (Eos) or less than 1,000 individuals or less than 2,000 acres; S2- 6-20 Eos or 1,000-3,000 individuals or 2,000-10,000 acres; S3 – 21-100 Eos or 3,000-10,000 individuals or 10,000-50,000 acres; SNR – Conservation status not yet assessed; California Native Plant Society (CNPS) 1B – Plants rare, threatened or endangered in California and elsewhere, 2 – Plants rare, threatened or endangered in California, but more common elsewhere, and 4 – Plants of limited distribution; 0.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat), 0.2 Fairly threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat) and 0.3 Not very threatened in California (<20% of occurrences threatened / low degree and immediacy of threat or no current threats known)				

2.8 Protected Trees

Pursuant to Section 22.44.1870 of the LCP (LCP, 2014), all new developments shall be sited and designed to preserve oak, walnut, sycamore, California bay, toyon, elderberry or other individual native trees to the maximum extent feasible. Native trees include those that have at least one trunk measuring a total of 6 inches or more in diameter, or a combination of any two trunks measuring a total of eight inches or more in diameter at breast height. Many trees of protected size were observed within the study area, including walnuts, oaks, California bay, and several other native trees with a trunk diameter of 6 inches or greater. A protected tree survey that includes an inventory of all oaks and walnuts within 200 feet of the project development area may be required prior to project initiation. Only the Fuel Modification Zone C thinning area contains a few walnuts within 200 feet of the development area.

2.9 Critical Habitat

Under the Federal Endangered Species Act (FESA), to the extent feasible, the USFWS and National Marine Fisheries Service (NMFS) are required to designate critical habitat for endangered and threatened species. Critical habitat is defined as areas of land, water, and air space containing the physical and biological features essential for the survival and recovery of endangered and threatened species. Designated critical habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Designated critical habitats require special management and protection of existing resources, including water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types. Critical habitat delineates all suitable habitat, occupied or not, essential to the survival and recovery of the species.

No critical habitat is located within the study area. The closest known critical habitat is for the tidewater goby (*Eucyclogobius newberryi*), located approximately 0.15 miles southeast of the study area (USFWS, 2021) separated by Malibu Canyon Road.

2.10 Jurisdictional Resources

A formal jurisdictional determination was not performed within the study area; however, presence/absence of drainage features was examined during the site assessment. An ephemeral drainage was identified using aerial imagery and observed in the field just to the north of the study area. The drainage supports riparian vegetation and likely supports bed and bank features and ultimately lead downstream to the Pacific Ocean as tributary to Malibu Creek. As a result, they are likely to be considered jurisdictional with the United States Army Corps of Engineers (USACE), Regional Water Quality Control Board (RWQCB) and/or CDFW. A single seep was also observed supporting mesic vegetation such as California bay. Both features occur north of the existing driveway and outside the study area and will not be impacted as a result of the project activities.

3. Characteristics of the Surrounding Area

This section discusses the characteristics of existing habitat and land use surrounding the study area based on review of aerial imagery and overall knowledge of the region.

3.1 Existing Land Uses and Open Space

As described in Section 2.1 of this report, the study area is located in the County of Los Angeles, within the U.S. Geological Survey (USGS) Malibu Beach, California, 7.5-minute topographic quadrangle. The study area is situated within the Transverse Ranges, and more specifically, the coastal Santa Monica Mountains. Currently, land use surrounding the study area consists of native chaparral and scrub communities fragmented by rural residential development, public and private roadways and various utilities. The density of development (i.e. commercial and residential) within this region tends to increase to the south, toward the Pacific Ocean, and decrease to the north, toward more rural portions of the mountain range. Public and private roads provide a connection between the Conejo and San Fernando Valleys in the north, to the Pacific Coast Highway and Pacific Ocean to the south.

3.2 Natural Communities and Habitats

Native vegetation similar to that observed within the study area also dominates much of the surrounding landscape; however, various other upland shrubland, herbaceous and woodland/forest communities; including riparian assemblages, occur as well.

Surrounding woodland/forest associations generally support an overstory that is either dominated or mixed with various native tree species such as southern black walnut, western sycamore (*Platanus racemosa*) and coast live oak. Due to limited access to sunlight, these communities generally support a sparse understory consisting of sporadically placed shrubs and shade-loving herbaceous species such as California wood fern (*Dryopteris arguta*), deerweed (*Acmispon glaber*) or creeping snowberry (*Symphoricarpos mollis*).

Surrounding shrub communities predominantly consist of fire-adapted species with sclerophyllous or drought-retardant and waxy foliage and are expected to be dominated by at least one of the following chaparral species: red shank (*Adenostoma sparsifolium*), manzanita (*Arctostaphylos* spp.), big pod ceanothus (*Ceanothus megacarpus*), greenbark ceanothus, chamise, toyon (*Heteromeles arbutifolia*), laurel sumac, scrub oak (*Quercus berberidifolia*); other chaparral dominant species may be present as well.

Many annual and perennial herbaceous species occur throughout all of the previously mentioned vegetation communities, to varying degrees, as well as forming their own communities. Herbaceous species are the first to succeed in unvegetated areas as many are quick to sprout, flower and seed; therefore, become very dense and dominate areas of historic disturbance. Density and diversity of herbaceous communities throughout the Santa Monica Mountains are generally dependent on the degree to which natural and/or human disturbances, such as wildfires, private and public development, off-road vehicular traffic, etc., have impacted the region. Species

expected to occur throughout herbaceous communities within the region include wild oats, caterpillar phacelia (*Phacelia cicutaria* ssp. *hispidia*), ripgut brome (*Bromus diandrus*), etc.; and to a lesser degree, native grasses, such as needlegrass (*Stipa* spp.).

Wildlife species expected to utilize the upland vegetation communities discussed above are consistent with those that are expected to occur within the study area (Appendix C – Floral and Faunal Compendia), and include avian species such as the Anna’s hummingbird (*Calypte anna*), American crow (*Corvus brachyrhynchos*), mourning dove and American bushtit (*Psaltriparus minimus*); reptile species such as the Southern Pacific rattlesnake (*Crotalus oreganus* ssp. *helleri*), San Diego gopher snake (*Pituophis catenifer* ssp. *annectens*) and common side-blotched lizard (*Uta stansburiana*); and mammal species such as the mountain lion, California ground squirrel, raccoon (*Procyon lotor*) and desert cottontail (*Sylvilagus audubonii*).

Perennial drainages with established riparian vegetation and persistent water sources are likely to provide habitat for various riparian avian and aquatic wildlife species. Avian species generally restricted to these areas include the Wilson’s warbler (*Cardellina pusilla*), common yellowthroat (*Geothlypis trichas*), yellow-breasted chat (*Icteria virens*) and yellow warbler (*Setophaga petechia*); and aquatic amphibian and reptiles expected to occur within such habitats include (but not limited to) Baja California treefrog (*Pseudacris hypochondriaca*) and the two-striped garter snake (*Thamnophis hammondi*). Fish species that are known to occur in perennial waters of the Santa Monica Mountains, principally within Malibu Creek, include the arroyo chub (*Gila orcuttii*), Pacific lamprey (*Lampetra tridentata*), and the federally endangered steelhead trout (*Onchorynchus mykiss*) [SCRLC, 2016].

3.3 Wildlife Movement and Habitat Linkages

The Santa Monica Mountains, and Western Transverse Ranges as a whole, have historically provided a vital connection between the coast and Sierra Nevada Ranges of northern and central California, and the San Gabriel and San Bernardino Mountain Ranges in the southern portion of the state. In the face of ongoing commercial, industrial and residential development pressures occurring throughout the state of California, the foothills and mountainous topography of these ranges provide necessary patches of undeveloped habitat for many species of flora and fauna that is becoming increasingly absent throughout the valleys and inland basins. In addition to providing contiguous upland habitat for various terrestrial wildlife species, the canyons and waterways traversing through the Santa Monica Mountains and surrounding ranges provide invaluable habitat to various aquatic species as well.

The apex predators including coyote (*Canis latrans*) and mountain lion, and meso-predators including Virginia opossum (*Didelphis virginiana*), raccoon, striped skunk, gray fox, as well as, various large mammals such as California mule deer (*Odocoileus hemionus californicus*), are known to utilize the vast open space of the Santa Monica Mountains for movement. While these species undoubtedly utilize upland habitats for overland travel, the canyons and streams within these mountain landscapes are also known to support long-term migration, and they provide an invaluable resource for food, water, and shelter.

The unnamed drainage north of the study area does provide a connection with the Santa Monica Mountains to the north and the Pacific Ocean to the south. However, this drainage is outside of the study area, and the project design will avoid this area. Furthermore, the proposed permanent impacts to intact, native vegetation (H2 habitat) are expected to be small and localized, avoiding any severe, long term effects on wildlife migration, large and small.

4. Regulatory Setting

4.1 Federal and State Endangered Species Acts

FESA provides guidance for conserving federally listed species and the ecosystems upon which they depend. Section 9 of the FESA and its implementing regulations prohibit the “take” of any federally-listed endangered or threatened plant or animal species, unless otherwise authorized by federal regulations. “Take” includes the destruction of a listed species’ habitat. Section 9 also prohibits a number of specified activities with respect to endangered and threatened plants.

The California Endangered Species Act (CESA) mandates that state agencies not approve a project that would jeopardize the continued existence of species if reasonable and prudent alternatives are available that would avoid a jeopardy finding. CESA also prohibits the take of any fish, wildlife, or plant species listed as endangered or threatened, or designated as candidates for listing, under CESA. Similar to the FESA, CESA contains a procedure for the CDFW to issue an incidental take permit authorizing the take of listed and candidate species incidental to an otherwise lawful activity, subject to specified conditions.

4.2 Migratory Bird Treaty Act

The federal MBTA prohibits the take of native birds “by any means or manner to pursue, hunt, take, capture (or) kill” any migratory birds except as permitted by regulations issued by the USFWS. The term “take” is defined by USFWS regulation to mean to “pursue, hunt, shoot, wound, kill, trap, capture or collect” any migratory bird or any part, nest, or egg of any migratory bird covered by the conventions, or to attempt those activities.

4.3 Clean Water Act

In accordance with Section 404 of the Clean Water Act (CWA), the USACE regulates discharge of dredged or fill material into Waters of the U.S. and their lateral limits are defined in 33 CFR 328.3(a) and includes navigable waters of the U.S., interstate waters, all other waters where the use or degradation or destruction of the waters could affect interstate or foreign commerce, tributaries to any of these waters, and wetlands that meet any of these criteria or that are adjacent to any of these waters or their tributaries. Waters of the U.S. are often categorized as “jurisdictional wetlands” (i.e., wetlands over which the USACE exercises jurisdiction under Section 404) and “other waters of the United States” when habitat values and characteristics are being described. “Fill” is defined as any material that replaces any portion of a water of the U.S. with dry land or that changes the bottom elevation of any portion of a water of the U.S. Any activity resulting in the placement of dredged or fill material within waters of the United States

requires a permit from USACE. In accordance with Section 401 of the CWA, projects that apply for a Section 404 permit for discharge of dredged or fill material must obtain water quality certification from the appropriate RWQCB indicating that the proposed project would uphold State of California water quality standards.

4.4 Native Plant Protection Act

The Native Plant Protection Act includes measures to preserve, protect, and enhance rare and endangered native plants. The list of native plants afforded protection pursuant to the Native Plant Protection Act includes those listed as rare and endangered under the CESA. The Native Plant Protection Act provides limitations on take as follows: “No person will import into this state, or take, possess, or sell within this state” any rare or endangered native plant, except in compliance with provisions of the act. Individual landowners are required to notify the CDFW at least 10 days in advance of changing land uses to allow the CDFW to salvage any rare or endangered native plant material.

4.5 Section 15380 of the California Environmental Quality Act Guidelines

Although threatened and endangered species are protected by specific federal and state statutes, *State CEQA Guidelines* Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in CEQA primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either USFWS or CDFW. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities. Although natural communities do not at present have legal protection of any kind, CEQA calls for an assessment of whether any such resources would be affected and requires findings of significance if there would be substantial losses. Natural communities listed in the CNDDDB as sensitive are considered by CDFW to be significant resources and fall under the *State CEQA Guidelines* for addressing impacts. Local planning documents such as general plans often identify these resources as well.

4.6 Sections 3503 and 3513 of the California Fish and Game Code

Section 3503 of the California Fish and Game Code prohibits the killing of birds or the destruction of bird nests. Birds of prey are protected under Section 3503.5 of the California Fish and Game Code, which provides that it is “unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant

thereto.” Section 3513 of the California Fish and Game Code prohibits any take or possession of birds that are designated by the MBTA as migratory nongame birds except as allowed by federal rules and regulations promulgated pursuant to the MBTA. Migratory birds include all native birds in the United States, except those non-migratory game species, such as quail and turkey, which are managed by individual states.

4.7 Section 1602 of the California Fish and Game Code

Section 1602 of the California Fish and Game Code requires a Streambed Alteration Agreement for any activity that may alter the bed and/or bank of a lake, stream, river, or channel. Typical activities that require a Streambed Alteration Agreement include, but are not limited to, excavation or fill placed within a channel, vegetation clearing, installation of culverts and bridge supports, and bank reinforcement. As part of the notification process, the CDFW requires documentation of any trees to be removed as part of the project. Trees that have a trunk diameter at breast height of greater than 2 inches are subject to regulation by the CDFW via the Streambed Alteration Agreement.

4.8 Santa Monica Mountains Local Coastal Program

In 1976, the California legislature enacted the California Coastal Act intended to manage the development of resources throughout coastal regions of the state. Individuals LCP’s have been developed for various jurisdictions under the guidance of the California Coastal Commission, to regulate development within the coastal zone. The LCP specifically refers to and regulates all development within the Santa Monica Mountains west of the City of Los Angeles, east of Ventura County and south of the coastal zone boundary, excluding the City of Malibu. The LCP provides protection for various natural resources as part of the development process including but not limited to native vegetation communities, native trees of a specified size and species, various sensitive plant and wildlife species identified by the CNPS and/or CDFW, riparian corridors, etc.

5. Conclusions

As with any new development to be sited within an area with natural biological resources, the proposed Bluewater residence will have impacts to both common and potentially sensitive biological resources. The impacts to natural communities and LCP SERA are summarized in Tables 1, 2, and 5. The project would impact 1.18 acres of H1 Habitat, associated with the proposed driveway grading. The H1 Habitat impacts include 1.16 acres of giant wild rye herbaceous association and 0.02 acre of California walnut/greenbark ceanothus woodland/forest association. The project would also impact 3.41 acres of H2 Habitat, 1.0 acre associated with the proposed home site (0.02 acre) and driveway grading (0.97 acre). The proposed project could also impact up to seven (7) southern California walnut trees, trunk diameter less than six (6) inches in diameter, and one location of Plummer’s mariposa lily with up to 15 individual plants will be impacted by the proposed project.

5.1 Sensitive Natural Communities and Sensitive Environmental Resource Areas

As described in Section 2.4.4, California walnut/greenbark ceanothus woodland/forest association and giant wild rye herbaceous association are designated by the CDFW as sensitive natural communities and would qualify as an H1 habitat. The greenbark ceanothus shrubland association, laurel sumac-ashy buckwheat shrubland association, and laurel sumac shrubland association qualify as H2 habitat, while the disturbed land use qualifies as H3 habitat categories as defined in the LCP occur within the study area as well and are discussed in detail below. Below is a summary of the proposed impacts as a result of construction activities.

TABLE 5
IMPACTS TO COUNTY-RECOMMENDED SERAS AND OTHER AREAS

Habitat Categories (as verified in this report)	Total within Parcel Boundary	Total within Construction Footprint (Acres)	Total within Approved Preliminary Fuel Modification Zone (Acres encompass Zones A, B, & C)
SERAs			
H1 Habitat	2.62	1.18	0.00
H2 Habitat	6.63	1.00	2.41
Other Areas			
H3 Habitat	0.32	0.32	0.00

* The sum of H1, H2, and H3 Habitat total 9.57 acres. H1 Habitat 100-Foot Buffer and H1 "Quiet Zone" overlap with areas mapped as either H2 or H3 Habitat.

5.1.1 H1 Habitat

Construction within the development footprint is expected to remove 1.18 acre of H1 Habitat as giant wild rye herbaceous alliance, all associated with the access driveway from the existing paved road. Although 0.06 acre of California walnut/greenbark ceanothus woodland/forest association is located at the outer edge of the Zone C fuel modification area, north and downslope of the proposed residence, the approved fuel modification excludes these areas from being impacted.

5.1.2 H2 Habitat

Construction within the development footprint is expected to remove 1.00 acre of H2 habitat as laurel sumac shrubland association and greenbark ceanothus shrubland association; up to 2.41 acres of H2 Habitat may be impacted as a result of fuel modification.

5.1.3 H3 Habitat (Non-SERA)

Construction within the development footprint, all associated with the proposed access driveway, is expected to remove 0.33 acre of H3 habitat; No H3 habitat will be impacted as a result of fuel modification.

5.2 Special Status Plants and Wildlife

5.2.1 Nesting Birds and Raptors

Migratory and resident passerine/raptor species such as the California towhee, greater roadrunner, loggerhead shrike, oak titmouse and southern California rufous-crowned sparrow may utilize all habitats within the study area for foraging and breeding purposes.

5.2.2 Special-Status Plants

Four special-status plant species, the southern California black walnut, Catalina mariposa lily, Plummer's mariposa lily, and club-haired mariposa lily were observed within the study area. Multiple plants of these species were observed during the site visit, some of which will likely be impacted by future proposed construction activities. One southern California black walnut with a trunk diameter of less than six inches was observed adjacent to the proposed access driveway but will not be impacted. However, up to seven (7) southern California walnut trees with trunk diameters of less than six inches occur within the proposed access driveway grading limits and may be removed. In addition, Plummer's baccharis and Braunton's milkvetch were observed immediately adjacent to the study area and are presumed to have potential to occur within the study area, although not observed during appropriately timed focused rare plant survey. The proposed project is not anticipated to impact either Plummer's baccharis or Braunton's milkvetch. Previous surveys of the study area have also noted Catalina mariposa lilies, club-haired mariposa lilies, and Plummer's mariposa lilies within the study area. At least one Plummer's mariposa lily location occurs within the proposed development footprint and would be removed.

5.2.3 Special-Status Wildlife

Threatened or Endangered Species: None of the threatened and endangered wildlife species discussed within Appendix E are expected to occur within the Project Site due to the lack of suitable habitat. However, the CESA Candidate species mountain lion has been previously observed within the study area. The mountain lion is a widespread, but uncommon, species, whose range in California extends from shrublands and forests in the Coast Ranges, from sea level to 3,050 meters (10,000 feet). The Southern California/Central Coast ESU of this species does not inhabit the Mojave or Colorado deserts, although other evolutionarily significant units may occur. Mountain lion is well-documented within the Santa Monica Mountains, based on tracking studies conducted by the National Park Service ("NPS"; Riley et al 2014). Mountain lion's primary prey is California mule deer, and mountain lion seasonal movements often follow deer migration. California Mule deer comprise up to 80% of a mountain lion's diet but other prey species may include coyotes, raccoons, rabbits, livestock or pets in urban areas. Mountain lions often make their dens for rearing young in natural cavities such as caves and sometimes in thickets. Mountain lions prefer vegetated ridgetops and stream courses as travel corridors and hunting routes. Mountain lions select habitats with dense understory vegetation, such as riparian woodlands and chaparral, and adequate stalking cover to allow for successful hunting.

Low genetic diversity and inbreeding depression is a consequence of habitat fragmentation and isolation resulting from limited connectivity (Ernest et al 2014). Riley et al (2014) has

documented that mountain lion genetic diversity in the Santa Monica Mountains is very low relative to populations north of the 101 freeway and elsewhere in California and the western US. Freeways in the Santa Monica Mountain areas are almost complete barriers to mountain lion movement contributing to the low genetic diversity and inbreeding. Gene flow is critical for Santa Monica Mountains mountain lions, as was demonstrated by the migration of a single male in 2009, that successfully mated and substantially contributed to enhanced genetic diversity (Riley et al 2014). However, the study area is situated within an existing rural residential community and the proposed Project would not substantially interfere with mountain lion movement within the Santa Monica Mountains.

Depredation and illegal kills of mountain lions are a leading cause of mortality after vehicle collisions. Depredation permits are issued by the California Department of Fish and Wildlife when it can be documented that mountain lion has killed or injured livestock or pets. More male mountain lions than females are killed from issued depredation permits. Development within the study area will not introduce livestock to the area and new domestic pet introduction within the proposed 15 new homes would be proportionate with the number of pets already occurring within the nearby city of Malibu, thus representing a potential incremental increase.

Intraspecific strife is the killing of an individual animal by another animal of the same species. There is documentation that intraspecific strife is a major cause of mortality of mountain lion in the Santa Monica Mountains (Riley et al 2014), where it has been documented that males have killed their offspring or other close relatives. Male subadults were frequently killed by territorial adult males in the isolated Santa Monica Mountains, which appears to be a function of the dispersal difficulty associated with human-caused barriers (Benson et al 2019). Intraspecific killing within the Santa Monica Mountains may be a consequence for subadult animals preventing from dispersing because of the lack of landscape connectivity. The Project would not substantially exacerbate the potential for intraspecific strife within mountain lions because the Project would not significantly impact juvenile dispersal and movement opportunities. The small reduction in marginal habitat by the project, in comparison to the total available habitat within the core area of the Santa Monica Mountains, would allow continuation of dispersal and movement opportunities for mountain lion.

The Santa Monica Mountains mountain lion population has experienced kitten abandonment by females. There is little scientific data to document the reasons why a female may abandon her cubs but this is a reported potential cause of mountain lion death in the Santa Monica Mountains. Pre-construction survey for the potential of mountain lion dens to occur on the Project Site would minimize disruption of rearing. The presence of a monitoring biologist would be required to report to CDFW any observation of an active mountain lion den as well.

The second most frequent form of human-caused mortality of mountain lions after vehicle collisions has been shown to be rodenticide poisoning (Benson et al 2019). Anticoagulant rodenticides in Los Angeles causes mortality of various predatory wildlife species, such as bobcats and coyotes. The use of rodenticides should be discouraged, especially within a suburban-wildland interface, and restrictions on the use of rodenticides could help reduce mountain lion mortality in

the southern California region. The California Ecosystems Protection Act, AB 1788, became law on January 1, 2021. This law prohibits the use of most second-generation anticoagulant rodenticides in order to help protect California wildlife. The Project should be conditioned to prohibit the use of rodenticides.

The proposed project does not propose perimeter fencing that would prevent or impede potential movement of mountain lion or other wildlife species. Drainages, trails nor ridgelines would be blocked by project development to hinder wildlife movement. The project study area does not provide nor would the project interfere with suitable denning areas for mountain lion, which is available north of the study area. As stated above, the project should be conditioned to prohibit the use of rodenticides. These features

Locally Sensitive Species: Two LAA species, turkey vulture and California towhee, were observed within the study area during the site visit. In addition, based on the presence of suitable habitat, there is a moderate to high potential for 8 other special-status wildlife species to occur within and immediately adjacent to the development footprint, including crotch bumblebee, coast horned lizard, coastal western whiptail, San Bernardino ringneck snake, southern California legless lizard, southern California rufous-crowned sparrow, pallid bat, and western mastiff bat. In addition, Los Angeles Audubon sensitive species oak titmouse, Allen’s hummingbird, and wrentit, may occur within the study area and nest within 500 feet of the study area.

5.3 Critical Habitat

Critical habitat is not present within the study area.

5.4 Cumulative Impacts

The project is proposed immediately to the north of Pepperdine University, and in an area with some limited historic disturbance. Construction of the residence and associated driveway is not expected to significantly reduce the value of the surrounding habitat and ultimately cause substantial cumulative impacts.

5.5 Jurisdictional Resources

A formal jurisdictional determination was not performed within the study area; however, an unnamed ephemeral drainage was identified using aerial imagery and observed in the field to the north of the study area. The drainage does support riparian vegetation and support bed and bank features and ultimately leads downstream to the Pacific Ocean. This drainage is likely considered jurisdictional with the USACE, RWQCB and/or CDFW. This drainage remains north of the existing access road and is located outside of the study area. No jurisdictional resources were observed within the study area.

5.6 Wildlife Movement and Habitat Linkages

The study area is not located within a “pinch point” or movement corridor between one or more contiguous open space areas. However, local wildlife movement is expected. Therefore, the

proposed project would not have an effect on large scale wildlife movement through the Santa Monica Mountains.

6. Recommendations

6.1 Sensitive Habitats

The Resource Conservation Program was developed to address and compensate for unavoidable impacts to H1 and H2 habitats. Pursuant to Section 22.44.1950 *et seq* of the LCP, the project will comply with In-Lieu Fee requirements for permitted impacts to these habitat types and will pay the appropriate fee applicable at the time of project implementation.

6.1.1 H1 Habitat

Calculation of fees for payment of In-Lieu Fees and verification of the proposed 1.18-acres of H1 Habitat impacts to the giant wild rye herbaceous alliance and California walnut/greenbark ceanothus woodland/forest association (0.02 acre) as a result of the driveway construction are required after approval of final project design. Alternatively, giant wild rye can be planted in the temporary disturbance areas associated with slope stabilization for the driveway and for re-establishment in the cleared areas and irrigated fuel modification zones. The 0.06 acre of potential impact to California walnut/greenbark ceanothus woodland/forest association resulting from fuel modification has been excluded in the approved conceptual fuel modification plan. Southern California black walnut should be included in any plant palettes proposed for project landscaping.

6.1.2 H2 Habitat

Calculation of payment of In-Lieu Fees and verification of the proposed 1.00-acre of impacts to H2 habitat within the development footprint and up to 2.41 acres of impact as a result of fuel modification, approximately 1.15-acre of which would be irrigated, will be determined after approval of final project design.

6.1.4 SERA and Non-SERA Habitats

It is recommended that following completion of the project activities, efforts should be made to remove invasive non-native plant species (e.g., Geraldton carnation weed, tree tobacco or fountain grass) from within and immediately surrounding temporary project impact areas, including slopes and recontoured areas associated with the proposed driveway. A weed management plan, or similar document should be prepared outlining the proposed weed control strategies, including timeframe and success criteria. This document should be approved by the County.

6.2 Nesting Birds

Project activities could negatively impact nesting birds that are protected in accordance with the MBTA and Fish and Game Code. Therefore, the following measures shall be implemented to avoid nesting birds:

- If work activities occur within the bird nesting season (generally defined as January 15 through September 15), a qualified biologist should conduct a nesting bird study within 30 days of the anticipated start date, and no less than 3 days prior to ground disturbance, to identify any active nests within 500 feet of the development footprint. If an active nest is found, the nest shall be avoided, and a suitable buffer zone shall be delineated in the field where no impacts shall occur until the chicks have fledged the nest as determined by a qualified biologist. Construction buffers shall be 300 feet for passerines or up to 500 feet for raptors; however, avoidance buffers may be reduced at the discretion of the biologist, depending on the location of the nest and species tolerance to human presence and construction-related noises and vibrations.

6.3 Special-Status Plants

- Prior to any ground disturbing activities, a focused rare plant survey during the suitable bloom period for Santa Monica dudleya, southern California black walnut, Braunton's milkvetch, Plummer's baccharis, Catalina mariposa lily, club-haired mariposa lily, Plummer's mariposa lily and other rare plant species should be conducted to document the existence and quantity of any rare plants within the study area. Based on previous surveys, a single Plummer's mariposa lily location with up to 15 individual plants is within the home site and driveway grading limits. If clearing and grubbing occurs prior to the suitable bloom period for special status plants, a full time biological monitor shall be present on site for any ground disturbing or clearing and grubbing activities, and any special status plant species shall be flagged for avoidance.
- The locations of any rare plants within or adjacent to the proposed impact areas should be avoided and project design modified, if feasible. Individual plants should be flagged by a biologist and avoided to the greatest extent feasible. To ensure avoidance during construction, a qualified biologist should be present onsite during any ground disturbing activities within 10 feet of a special-status plant species.
- If special status plants are found within the impact area, the special-status plant species shall be mitigated through on-site translocation and/or seed collection and on-site seeding onto a suitable location such as the preserved portions of the property in areas that currently exhibit lesser plant density if possible. The translocations shall result in a minimum 50% survivorship that will be verified by the monitoring biologist. If survivorship is less than 50%, the applicant shall consult with CDFW to conduct additional on-site plantings sufficient to replace the impacted individuals. A special-status plant species mitigation plan (mitigation plan) shall be prepared for review and approval by the County biologist prior to the issuance of a grading permit. Mitigation at a ratio of 5:1 for each individual impacted shall occur on-site outside the approved fuel modification area where the impact species is known to occur (see Figure 6). The mitigation plan shall document the precise location for mitigation planting, the performance standards for measuring success, including 50% translocation survivorship, and adaptive measures to implement if performance standards are not met.

- If avoidance of special-status plant species is not feasible, additional appropriate mitigation should be implemented. Mitigation may include on-site or off-site restoration, translocation, and/or seed collection, and should be approved by the County.

6.4 Special-Status Wildlife

The following measures shall be implemented to avoid impacts to special-status wildlife during project construction activities.

- To avoid impacts to southern California rufous-crowned sparrow, wrentit, turkey vulture, oak titmouse or Allen’s hummingbird, a qualified biologist should perform pre-construction surveys prior to proposed construction activities during the nesting season. The surveys shall be focused within the proposed development footprint, as well as a surrounding 500-foot buffer. If no active nests are identified, no further action is required. However, if an active nest is found, the nest shall be avoided and avoidance measures shall be implemented similar to those described above for nesting birds, including installation of suitable buffer zones, waiting until fledging to avoid interference with nesting success.
- A qualified biologist shall conduct a preconstruction clearance survey throughout the study area including a 500-foot buffer for monarch butterfly – California overwintering population, coast horned lizard, coastal western whiptail, San Bernardino ringneck snake, southern California legless lizard, mountain lion natal dens and other special-status wildlife species. If any of the previously listed species are observed within or near the project work areas during preconstruction clearance surveys, a qualified biologist should relocate the individuals to suitable habitat outside of the project site to ensure that construction-related impacts are avoided. Relocation areas and survey methods should be approved by the USFWS and/or CDFW prior to implementation.
 - If an active mountain lion natal den is located, the project activities will cease and CDFW will be notified within 24 hours. The location will be documented using GPS coordinates and ground-disturbing activities avoided within a minimum of 500 feet during the offspring-rearing season (February 15 through July 1) or a suitable natal den setback established under consultation with CDFW. All areas near mountain lion dens will not be disturbed until all cubs have left the area.
- To avoid impacts to Crotch’s bumble bee, a qualified biologist shall conduct foraging surveys prior to proposed construction activities during the colony active period (April to August), consistent with the Survey Considerations for California Endangered Species Act (CESA) Candidate Bumble Bee Species prepared by the CDFW June 6, 2023.¹ The surveys shall be focused in suitable habitat (with flowering shrubs) within the proposed development footprint, as well as a surrounding 100-foot buffer. If no active Crotch’s bumble bee nests are identified, no further action is required. If an active Crotch’s bumble bee nest is found, a protective buffer will be established for nest avoidance and CDFW will be consulted

¹ <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline>

- Prior to the commencement of construction activities, construction personnel shall check under stationary equipment to ensure no wildlife species are present. Construction holes shall be covered during periods of inactivity or overnight and shall be provided with animal escape ramps in the event an animal falls in. Any pipe or other stockpiled construction material shall be inspected for wildlife prior to installation in the ground or other construction use. Any open or accessible water containers/buffaloes shall be covered to prevent animal entrapment or drowning.
- The use of poison baits, containing second generation anticoagulant rodenticides (i.e., brodifacoum, bromadiolone, difenacoum or difethialone) for the control of rodents shall be prohibited.
- All trash shall be collected daily during construction and taken offsite for proper disposal. All trash containers during residential occupation shall be covered to prevent access from wildlife.
- The Rural Outdoor Lighting District standards promote dark skies principles that benefit wildlife within a suburban interface. Outdoor lighting should be fully shielded and cast away from open space areas.
- Accessory structures and non-native plant species will be prohibited within the non-developed areas outside of the existing graded building pads. Fuel modification, especially within the onsite drainages, will be the minimum required by the County Forester to provide defensible space for the residential structures. Any wildlife impermeable fencing will be confined to the existing building pads and will be the minimum required for safety reasons (e.g., fencing around swimming pools).

6.5 Jurisdictional Resources

The following measures shall be implemented to minimize indirect impacts to offsite jurisdictional resources during project construction activities.

- Erosion control measures (i.e., silt fencing, straw wattles, etc.) should be implemented upslope within the work area to prevent sediment from entering any potentially jurisdictional features.
- Drip pans should be placed underneath all mechanical machinery that will be staged within work areas during the construction period.

6.6 Construction Monitoring

The following measures shall be implemented to minimize direct impacts to wildlife species during project construction activities.

- Prior to the issuance of a grading permit, a qualified biologist shall be retained by the Applicant as the lead biological monitor subject to the approval of the County. The biological monitor shall ensure that impacts to sensitive biological resources are minimized or avoided, and shall conduct (or supervise) pre-construction field surveys for species that may be

avoided, affected, or eliminated as a result of excavation or any other site preparation activities. The lead biological monitor shall ensure that all surveys are conducted by qualified personnel (e.g. avian biologists for bird surveys, herpetologists for reptile surveys, etc.) and that they possess all necessary permits and memoranda of understanding with the appropriate agencies for the handling of potentially-occurring special-status species. The lead biological monitor shall also ensure that daily monitoring reports (e.g., survey results, protective actions, results of protective actions, adaptive measures, etc.) during periods of ground-disturbing activities are prepared, and shall make these monitoring reports available to the County, at their request. During trenching, excavation, and other ground-disturbing activities, the biological monitor shall be present to inspect and enforce all mitigation requirements and to relocate any species that may come into harm's way to an appropriate offsite location of similar habitat. The biological monitor shall be authorized to stop specific construction activities if violations of mitigation measures or any local, state, or federal laws are suspected. The biological monitor shall file a report of the monitoring activities with the County upon completion of monitoring activities. If ongoing biological monitoring of construction activities reveals the presence of any special-status reptiles within an active work area, then work shall be temporarily halted until the animals can be collected and relocated to areas outside of the designated work zones. Work areas shall be surveyed for special-status species during construction activities. Any special-status species occurring within the work area shall be collected and relocated to areas outside of the designated work zones.

6.7 Protected Trees

In accordance with Los Angeles County ordinance 22.44.1920.K, the following measures shall be implemented to minimize impacts to protected native trees prior to, and during project construction activities.

- Prior to construction, a qualified arborist² shall conduct a protected tree inventory of all native oak, walnut, sycamore, bay, or other native trees within the development footprint, that have at least one trunk measuring six inches or more in diameter, or a combination of any two trunks measuring a total of eight inches or more in diameter, measured at four and one-half feet above natural grade, to the maximum extent feasible. A unique tree number shall be assigned to each tree included in the inventory and shall be installed on the north side of each tree using an aluminum tag or other suitable method. The qualified arborist shall provide a protected tree report for all native trees within the development footprint that includes title page, plot of all trees (trunk location, canopy, and tree protected zone [“TPZ”]³) to scale with scale bar and north arrow and may include native oak trees. The tree plot shall depict the existing and intended development with an overlay of trunk locations and tree protection zones, as well as any oak woodlands (as described in the Los Angeles Oak Woodlands

²A person with at least four years of experience in the business of transplanting, moving, caring for and maintaining trees and who is (a) a certified arborist with the International Society of Arboriculture and who holds a valid California license as an agricultural pest control advisor or (b) a landscape architect or (c) a registered consulting arborist with the American Society of Consulting Arborists.

³ Protected Zone means the area within the dripline of the tree and extending at least five feet beyond the dripline, or 15 feet from the trunk of the tree, whichever is greater.

Conservation Management Plan⁴). The report shall also include statements on any encroachments, impacts, recommendations and any required mitigation or replacements.

- Protective fencing of not less than five feet in height shall be placed at the limits of the TPZ of all oak and native trees of protected size within or extending into the property that may be impacted by or are in close proximity (50 feet) with construction activities. The protective fencing shall be inspected by a qualified arborist and the County Forester and Fire Warden prior to grading or ground disturbing activities, and the fencing shall be maintained and remain in place until construction is completed, and a certified arborist verifies that it can be removed. If any breach in the protective fencing occurs, all work shall be suspended until the fence is repaired or replaced.

⁴ Oak Woodlands Conservation Management Plan | DRP (lacounty.gov)
<<https://planning.lacounty.gov/oakwoodlands>>

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APPENDIX A

Santa Monica Mountains Biological Assessment Checklist

Santa Monica Mountains Biological Assessment Checklist	Page	Initials
Title Page		
A. Project name.	Cover, Page 2	DK
B. County identification numbers (Project number, Permit number, APNs).	Pending, Cover and Page 2	DK
C. Applicant name and contact information	Page 2	DK
D. Name and affiliation of preparer.	Cover, Page 1	DK
E. Date.	Cover, Footer	DK
I. Project and Survey Description		
A. Project description.	Page 2	DK
1. Project name, type of report, address of project.	Page 2	DK
2. County application identification numbers including APNs.	Pending, Page 2	DK
3. Applicant name and contact information.	Cover, Page 2	DK
4. Parcel and acreage information.	Page 2	DK
5. Location.	Page 3	DK
a. Map of regional features showing project location, including watershed boundaries, proximity to public lands, streams, drainages, and roads in region.	Fig. 1, Fig. 2	DK
b. Color aerial photograph(s) showing regional context of project, project parcel(s), existing development, open space, etc.	Fig. 2	DK
6. Detailed description of proposed project, including area of vegetation removal, modification, or disturbance, grading volumes, etc.	Page 2, Table 5, Page 35	DK
B. Description of major natural features.	Page 6-7, Page 29, Fig. 3	DK
1. Landforms and geomorphology.		
2. Drainage and wetland features.		
3. Soils (soil/geological map optional).		
C. Methodology of biological survey.	Page 3	DK
1. Date(s) of survey(s).		
2. Detailed description of survey methods.		
II. Biological Characteristics of the Site		
A. Flora.		DK
1. Map of vegetation communities, specifying system used (the use of Sawyer et al. 2009 is recommended).	Fig. 4	DK
2. Map of project site showing the habitat areas (H1, H2, H2 "High Scrutiny", H3 Habitat) from the LUP Biological Resources map.	Fig. 5	DK
3. Vegetation cover table, with acreages of each vegetation type (can be a legend in map).	Table 1	DK

Santa Monica Mountains Biological Assessment Checklist	Page	Initials
4. Location, trunk, diameter, and canopy extent mapped for each protected tree (oak, sycamore, walnut, bay) that is within 25 feet of any portion of the proposed development (on-site or off-site). Note: for protected oaks (>5" DBH) on or within 200' of property, an oak tree report is required. Include oak tree reports in an appendix.	N/A	DK
B. Fauna.		DK
1. Discussion of species observed; description of wildlife community.	Page 13	DK
C. Sensitive species.		DK
1. Table of possible sensitive species and possible sensitive vegetation, including brief description of potential impacts to any sensitive species.	Tables 3 and 4, Page 35-36, App. E	DK
2. Maps of occurrence for sensitive species observed.	Fig. 6	DK
D. List of flora and fauna observed or known from site.	App. C	DK
E. Survey Checklist (see Part B, Survey Checklist, above).	App. A	DK
III. Bibliography		
A. Bibliography of references cited in text.	Page 44-45	DK
IV. Appendices		
A. Site photographs (color).	App. D	DK
B. Qualifications of biologists and other contributors.	App. B	DK
C. Oak tree report for sites with jurisdictional native oak trees (if applicable).	N/A	DK

*Digital copies of biological assessments must be provided to DRP as .pdf for final version, including georeferenced files of vegetative data and sensitive species occurrences.

APPENDIX B

Resumes

Daryl Koutnik

Consulting Biologist

Resume

Address: 3892 Chapman Place
Riverside, CA 92506

Telephone: (949) 275-3904

Education: Doctor of Philosophy and Master of Science, Botany, University of California, Davis
Bachelor of Arts, Mathematics and Biology, California State University, Northridge

Daryl Koutnik has over 25 years of experience managing and conducting biological resources field studies for environmental compliance and planning. For 14 years he worked in and latterly managed the environmental review section of the Los Angeles County Department of Regional Planning.

As Senior Biologist and Supervising Regional Planner for the Department of Regional Planning, Dr. Koutnik managed the preparation of more than 30 EIRs for a wide variety of project types. In addition to EIRs, he managed and prepared a report on the biological resources of the Los Angeles County Santa Monica Mountains Local Coastal Program with the inclusion of resource protection provisions and criteria for the designation of Coastal Zone environmentally sensitive habitat areas (ESHA). Daryl was also the Significant Ecological Area Technical Advisory Committee (SEATAC) coordinator for the Department. As a result, he has unparalleled insight into the County's procedures and preferences relative to processing environmental documents.

Dr. Koutnik has directed, managed, and performed hundreds of biological resources inventories, special-status species surveys and identification, environmental impact assessments, biological constraints analyses, plant and wildlife studies, habitat restoration plans, and mitigation and monitoring plans for a wide variety of private and public sector clients. These have been prepared in compliance and/or coordination with CEQA, NEPA, USACE, USFWS, CDFW, RWQCB as well as local programs, and related to residential, commercial, industrial, infrastructure, and educational developments.

In addition to biology, he is an expert in the application of federal and State Endangered Species Acts, the California Environmental Quality Act (CEQA), and other regulations relevant to biological resources, as well as processing and acquisition of Coastal Development Permits within the California Coastal Zone.

Dr. Koutnik is a contributor to *The Jepson Manual: Vascular Plants of California*, Second Edition and *The Jepson Desert Manual*, a co-author of the 2004 book *Cotyledon and Tylecodon*, and is a recognized expert on members of the spurge family (Euphorbiaceae). He has taught courses on plant identification and desert wildflowers for the University of California, Riverside Extension program, which included Riverside County Environmental Programs Department staff as students.

Discipline Experience

Policy Documents and Advisory Services. Dr. Koutnik has initiated and advised different jurisdictions regarding environmental stewardship. While with Los Angeles County he managed and coordinated Significant Ecological Areas (SEA) study as a part of the County's 2000 General Plan Update as well as the

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Significant Ecological Area Technical Advisory Committee (SEATAC) established to implement designated SEA guidelines. He also initiated and managed the Los Angeles County Environmental Review Board (ERB) for development proposed within the Coastal Zone of the Santa Monica Mountains. Daryl also advised and participated in the development of the West Mojave Plan, the Bureau of Land Management's program focused on multi-species habitat conservation.

Leadership and Education. Dr. Koutnik is a former Senior Biologist and Supervising Regional Planner and for the Los Angeles County Department of Regional Planning (DRP), and is highly experienced in protocols of environmental review and the coordination of interdepartmental review. During his tenure with DRP, Dr. Koutnik initiated the Environmental Review Committee, an interdepartmental body to coordinate the County's responses and reviews of CEQA documents, with the express goal of streamlining the department's environmental review process. As part of this, Dr. Koutnik developed a standard protocol for environmental review and initiated an automation of the environmental review process through the use of GIS databases. He also managed in-house CEQA training sessions for DRP and other County departments, including the retention of outside CEQA experts for staff training, including Ron Bass, an author of the Solano Press CEQA guidance books. Dr. Koutnik also led a review of the County's environmental review process, comparing it with other jurisdictions' processes and making recommendations to the Board of Supervisors for improvement the environmental review process. He also provided staff the opportunity to receive additional outside training, primarily through the UCLA Extension program. Finally, Dr. Koutnik ensured internal staff training when planners were transferred into the former Impact Analysis section without prior CEQA background, emphasizing a standard protocol for environmental review, inclusive of GIS database resources.

Project Experience

Los Angeles City Planning, Los Angeles Wildlife Habitat Blocks, Los Angeles, CA. *Lead Biologist.*

Dr. Koutnik managed a mapping analysis of areas throughout the City of Los Angeles with potential to support wildlife habitat and movement. Potential areas identified were based on Significant Ecological Areas within the city's limits that were identified by the County of Los Angeles, as well as other natural areas, parks, and open space, which were then ground-truthed by team biologists to verify potential to support wildlife with emphasis of medium and large mammals as target species. The study also utilized data compiled from species occurrences databases (e.g., California Natural Diversity Database [CNDDDB]), citizen science databases (e.g., eBird, iNaturalist), and available roadkill data. A report prepared by ESA identifying important Protected Areas for Wildlife (PAWs) and Wildlife Movement Pathways (WMPs) within the City, as well as recommendations that the Planning Department could use to create development standards to avoid and minimize impacts to PAWs and WMPs, and balance needs for development with needs for wildlife habitat and connectivity.

County of Los Angeles General Plan EIR, Los Angeles County, CA. *Biological Resources Task Lead.* Dr.

Koutnik oversaw the preparation of the biological resources analysis for the County's General Plan Update EIR, which was prepared by another consultant for the County. The County's General Plan Update was focused on the designated Significant Ecological Areas (SEAs), for which Dr. Koutnik was invaluable in providing insights. The General Plan Update EIR was used to also provide approval for the update to the County's Antelope Valley Area Plan.

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One Valley One Vision Plan EIR, City of Santa Clarita, Los Angeles County, CA. *Biological Resources Task Lead.* Dr. Koutnik oversaw the preparation of the biological resources analysis for the EIR for the City of Santa Clarita's adopted General Plan, commonly known as One Valley One Vision. The creation of this plan was a joint effort between the County of Los Angeles, the City of Santa Clarita and the community residents and businesses. The goal was to create a single vision within the County and City's jurisdictions for future growth of the Santa Clarita Valley, with emphasis to preservation of natural resources.

Schueren Road Project, Santa Monica Mountains, Unincorporated Los Angeles County, CA. *Project Manager.* The project was a 6,500 square feet, with swimming pool and pool deck, on a 7.5-acre property. A biological resources assessment and project feasibility study were prepared for the County of Los Angeles. Dr. Koutnik directed the biological studies and directed the feasibility analysis.

Promontory Rock Single-Family Residence, Santa Monica Mountains, Unincorporated Los Angeles County, CA. *Project Manager.* The project was a proposed 16,797 square foot, 34-foot high (28 feet above existing grade), 3-level single-family, including basement, 6-car garage, swimming pool, landscaping, water well and septic system on 15.5 acres north of Pepperdine University. A biological resources assessment and a draft Initial Study/ Mitigated Negative Declaration for use and modification by County of Los Angeles Department of Regional Planning Staff were prepared. Dr. Koutnik conducted and supervised the biological resource studies and prepared the draft Initial Study.

Malibu Family Winery, Santa Monica Mountains, Unincorporated Los Angeles County, CA. *Project Manager.* The project was the proposed construction, operation, and maintenance of a 17,500 square-foot winery facilities building including a 1,000 square-foot office space, a 2,075 square-foot wine tasting room with an attached 1,500 square-foot outdoor patio area, parking, and associated infrastructure. A biological resources assessment for a project within a Significant Ecological Area (SEA) and a draft Initial Study Mitigated Negative Declaration for use and modification by County of Los Angeles Department of Regional Planning Staff were prepared. Dr. Koutnik prepared the biological resources assessment and supervised the drafting of the Initial Study.

3240 Cross Creek Road Residential Project, Santa Monica Mountains, Unincorporated Los Angeles County, CA. *Project Manager.* The project was a proposed single-family residence on a 14-acre parcel, just north of the City of Malibu boundary with Unincorporated Los Angeles County. A Biological Assessment was prepared for the processing of the coastal development permit with the County of Los Angeles and California Coastal Commission. Dr. Koutnik supervised the biological resource studies and preparation of the biological assessment.

Boy Scouts of America, Cherry Valley, Los Angeles County, CA. *Lead Biologist.* Dr. Koutnik managed preparation of the vegetation mapping and conducted a special-status plant survey in support of a biological constraints analysis for the proposed expansion of Camp Cherry Valley. The campsite was located within an approximately 40-acre site in Cherry Valley on Santa Catalina Island in Los Angeles County and was within a SEA.

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Various Private Landowners, Various Single-Family Residential Projects, Laguna Beach, CA. *Project Manager.* Dr. Koutnik managed the surveys and preparation of many biological resource technical reports required by City staff in support of applications for single-family residences.

Los Angeles County Department of Public Works, San Francisquito Canyon Road Bridge Replacement Project, Angeles National Forest, Unincorporated Los Angeles County, CA. *Biological Project Manager.* The project involves the County of Los Angeles bridge replacement on public road within the Angeles National Forest. As the manager for biological resource Dr. Koutnik is responsible for reporting, including preparation of the project Biological Assessment/ Biological Evaluation, Natural Environmental Study, and jurisdictional evaluation, and managed the biological resource field surveys, and recommendations for special-status species protection.

Los Angeles County Department of Public Works, Bridge Preventative Maintenance Program – Group 23, Los Angeles County, CA. *Biological Project Manager.* As a part of an on-call contract with the Los Angeles County Department of Public Works for federally-funded projects, professional/technical support services were provided for 12 bridges in Group 23 of the Bridge Preventative Maintenance Program. These bridges, located in the cities of Claremont, Pomona, Rosemead and San Gabriel, Los Angeles County will undergo a variety of maintenance activities geared towards extending their service. A Natural Environmental Study – Minimal Impact Report was prepared to evaluate the potential biological impacts of the maintenance activities.

Mulberry Drive and Painter Avenue Intersection Improvement Project, South Whittier, Unincorporated Los Angeles County, CA. *Project Manager.* The project involved the County of Los Angeles intersection improvements to enhance traffic operations at the intersection of Mulberry Drive and Painter Avenue, South Whittier. As project manager for entire CEQA process, Dr. Koutnik was responsible for the preparation of the project Initial Study/Mitigated Negative Declaration, including the cultural resources report, noise assessment, air quality and greenhouse gas emissions analysis.

Marvin Braude Beach Trail Gap Closure Project, Los Angeles, CA. *Biological Project Manager.* The project involved a County of Los Angeles beach trail improvement project to widen existing beach bicycle trail. As project manager Dr. Koutnik was responsible for the preparation of a biological assessment for the processing of a coastal development permit with the California Coastal Commission.

Fairmont Butte Motorsports Park EIR, Los Angeles County, CA. *Project Manager.* The proposed project request for a land division application to subdivide the 320-acre subject property into three (3) parcels. The proposed primary development was a 3.6-mile racetrack and its accessory facilities totaling 186,808 square feet in 36 buildings. The racetrack facility would regularly be leased out for use by private racing clubs or automobile companies for car testing purposes. Visitors are generally participants and their family members and friends. Racing events would occur during the day, but nighttime vehicle maintenance could occur and 24-hour security protection was proposed. Dr. Koutnik managed the preparation of the project EIR and the biological surveys for the project biological technical report. The environmental analysis included preparation of a water supply assessment consistent with the Antelope Valley groundwater pumping adjudication process.

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Aidlin Hills Residential Development EIR, Stevenson Ranch, Unincorporated Los Angeles County, CA.

Project Manager. The project proposed a 102-unit residential project on 210 acres in Stevenson Ranch with roadway access from Pico Canyon Road. Dr. Koutnik served as the project manager for entire CEQA process, including preparation of the project EIR, coordination with Native America Tribal Consultation, manage biological resource field surveys, and processing of regulatory permits.

Neptune Marina Apartments/Woodfin Suites Hotel and Wetlands Park Project EIR, Marina del Rey, Los Angeles County, CA.

Project Manager. Dr. Koutnik managed the preparation and certification of the EIR for the multi-component Neptune Marina Apartment and Anchorage/Woodfin Suite Hotel and Timeshare Resort residential and hotel project. The proposed project included the restoration of a public wetland and upland park.

The Marina del Rey Marriott Courtyard and Residence Inn Hotel (formerly Woodfin Suite Hotel and Timeshare Resort), Marina Del Rey, Los Angeles County, CA.

Project Director. Dr. Koutnik served as the Project Director for the Addendum to the Certified EIR for the same project at a reduced scale known as The Marina del Rey Marriott Courtyard and Residence Inn Hotel. The Reduced-Scale Project includes development of the northerly approximately 2.2 acres of Parcel 9U and is referred to as the “The Marina del Rey Marriott Courtyard and Residence Inn Hotel.” Proposed development under the Reduced-Scale Project consists of one structure containing a five-story hotel “wing” and a six-story hotel wing with 288 hotel studios, suites, and standard guest rooms, which would include two meeting rooms, a hotel-oriented restaurant and bar/lounge, fitness center, and associated hotel operations space, such as the lobby, hallways, elevator shafts, mechanical rooms, offices, and laundry, maintenance and custodial facilities.

Deerlake Ranch, Los Angeles County, CA. *Project Manager.* The Deerlake Ranch project involved a revised project design for an approved 325-unit residential project on 400 acres, including the construction of internal circulation and two bridges. As project manager, Dr. Koutnik was responsible for the preparation of six Addendum EIRs, requiring coordination with County planning staff, consultant processing the regulatory permits and the oak tree reports.

Oaks at Monte Nido, Santa Monica Mountains, Unincorporated Los Angeles County, CA. *Project Manager.* Dr. Koutnik managed the preparation of biological resources report, including oak and native tree surveys and the EIR preparation for the proposed development of 15 single-family residences on separate individual recorded parcels within the Monte Nido Community, along the scenic route of Piuma Road.

Westlake Boulevard Parcel Map, Santa Monica Mountains, Unincorporated Los Angeles County, CA.

Project Manager. Dr. Koutnik managed the biological services for a two-lot parcel map on which the Federally- and State-listed Endangered Species, Lyon’s pentachaeta (*Pentachaeta lyonii*) occurs. An endangered species avoidance plan was drafted and represented to the project applicant before the California Department of Fish and Wildlife in the processing of a Section 2081 Incidental Take Permit.

2397 Stokes Canyon Single-Family Residence Variance Project, Santa Monica Mountains, Calabasas, Unincorporated Los Angeles County, CA.

Project Manager. Dr. Koutnik managed the drafting of the Initial Study/Mitigated Negative Declaration for use and modification by County of Los Angeles

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Consulting Biologist

Department of Regional Planning Staff for the 3,500 square-foot, single-story residence on a previously permitted graded pad with an existing paved driveway, which encroached into the protected zone of a delineated significant ridgeline in the Santa Monica Mountains, requiring the processing of a variance.

Newhall Ranch Specific Plan EIR, Valencia, Los Angeles County, CA. *Project Manager.* Dr. Koutnik managed the preparation and certification of the EIR for the 13,000-acre Newhall Ranch Specific Plan area located near Magic Mountain Entertainment Center in Valencia, California. Environmental factors analyzed included detailed water resource analysis, oak resource management per County of Los Angeles requirements, and Significant Ecological Area stewardship for both the Santa Clara River, including unarmored three spine stickleback and the Santa Susana Mountains in completing recertification of the EIR. He coordinated all subsequent environmental reports through 2006, including individual residential and wastewater treatment development located within the Specific Plan area.

Hidden Creeks Estates EIR, Los Angeles, CA. *Biology Manager.* Hidden Creek Estates is a proposed 188-unit residential project adjacent to Porter Ranch on 285 acres with the construction of a bridge over Mormon Canyon for primary access from the east. Dr. Koutnik managed the biological resource field inventories and supervise the preparation of the Biological Resources section for the EIR.

Vista Canyon Residential Project, Santa Clarita, CA. *Biology Manager.* The Vista Canyon Specific Plan project includes a mixed-use community of 1,110 residential units and including nearly 1 million square feet of office and retail space, installation of Vista Canyon bridge, new Metrolink station and transit center on 185 acres in Santa Clarita. As the biology manager he managed the field surveys, including for special-status species like spadefoot toad, and the preparation of the Biological Resources section for the EIR.

City of Diamond Bar, Crooked Creek Residential Project, Diamond Bar, CA. *Project Biologist.* Dr. Koutnik directed and conducted the biological resources surveys to support the preparation of a Mitigated Negative Declaration for the development of seven single-family residences and associated infrastructure including a southward expansion of the existing Crooked Creek Drive and a maintenance access road within the Proposed Development Area of the approximately 12.9-acre vacant Project Site. The Project consists of nine total lots: seven residential lots; one lot designated for the private roadway (i.e., southward expansion of Crooked Creek Drive); and one lot which includes the maintenance access road and approximately 10.4 acres of retained undeveloped area. The primary environmental issues included aesthetics/visual, biological resources, drainage, and construction noise.

Via Princessa East Extension EIR, Santa Clarita, CA. *Biological Survey Manager.* The project included CEQA analysis for construction of a new 1.2-mile long roadway segment for Via Princessa, a primary east-west arterial, between Golden Valley Road and the existing roadway terminus near Sheldon Avenue. As biological survey manager, Dr. Koutnik managed the biological field surveys (new vernal pool discovered) and supervise the preparation of the Biological Resources section for the EIR.

Lytle Creek Ranch Specific Plan, City of Rialto and San Bernardino County, CA. *Botanist.* Dr. Koutnik participated in the data collection and analysis regarding the listing status of the woolly star population (*Eriastrum densifolium*) within the project boundaries. In addition, Dr. Koutnik collected seed of the project site woolly star population for future propagation. Dr. Koutnik assisted in the annual vegetation

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surveys for forage plants within the San Bernardino kangaroo rat (*Dipodomys merriami parvus*) mitigation preserve.

Under Canvas, White's Landing Environmental Services, Los Angeles County, CA. Project Manager.

Under Canvas contracted for assistance with the entitlement process, environmental analysis and biological services to construct and operate a luxury campground facility with campsites and associated amenities at White's Landing on Santa Catalina Island in Los Angeles County. Dr. Koutnik is responsible for the entitlement application, CEQA document preparation, biological resources report, and overall management of the project.

Under Canvas, Joshua Tree Site Environmental and Entitlement Services, Yucca Valley, CA. Project Manager.

Dr. Koutnik is project manager for the processing the entitlement applications for the development of a 640-acre site property outside of Joshua Tree National Park. The vacant site will be developed as a high-end luxury camping operation, with 120 tent accommodations, with central reception lodge that mixes the luxuries and amenities of a hotel within a natural landscape for recreational activities. The project's development would be confined to 40 acres in the southern portion of the project site, while the remainder of the project site would be left as open space. Dr. Koutnik has assisted the Under Canvas project manager in meetings with Town staff and superintendent of the adjacent National Park. Dr. Koutnik also coordinated biological services that include surveys sensitive biological resources, with special attention to desert tortoise, and jurisdictional delineation of the project site.

Under Canvas, Sequoia Site Planning Services, Tulare County, CA. Project Biological Lead. Under Canvas contracted for assistance with the entitlement process, and inventory of biological resources for Under Canvas who proposes to construct and operate a luxury campground facility with campsites and associated amenities outside of Sequoia National Park. Dr. Koutnik is responsible for the project site inventory of biological resources and preparation of the biological technical report for the project.

City of Menifee On-Call Adjunct Staff, City of Menifee, CA. Biological and CEQA Task Leads. Dr. Koutnik oversaw the biological services for the City of Menifee in providing Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) technical advice for City Community Development staff. Services include review and determination of project consistency with the MSHCP. In addition, Dr. Koutnik coordinated assistance with CEQA compliance on EIR projects including peer review of EIR documents or preparation of EIR Addenda.

Paradiso del Mare Ocean and Inland Estates Project, Santa Barbara County, CA. Biological Task Manager. Dr. Koutnik directed the preparation of the Biological Resources section for the EIR for this 143-acre residential project in the Coastal Zone. The project site supported special-status species of white-tailed kite (*Elanus leucurus*), California red-legged frog (*Rana draytonii*), and southern tarplant (*Centromadia parryi* ssp. *australis*), and Environmental Sensitive Habitat Areas.

Santa Barbara Ranch Project, Santa Barbara County, CA. Project Manager. Dr. Koutnik managed the identification and characterization of grassland communities on the 485-acre project site in order to identify different types of grassland communities, both native and non-native, and to quantify the

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relative cover of native species within each identified grassland community type. The preparation of a restoration plan for Dos Pueblos Creek was a component of the overall project mitigation.

Travertine Point Specific Plan, Riverside and Imperial Counties, CA. Project Manager. Dr. Koutnik Managed the biological resource surveys and report for the 5,131-acre proposed master and land use plan on Travertine Point Specific Plan in Riverside and Imperial Counties located along the northwestern shore of the Salton Sea. Project was approved for up to 16,655 residential units, and includes include residential, business park, mixed use commercial, regional commercial, resort/tourism, and open space land uses. Tasks included environmental review of potential impacts associated with development of prime agricultural land, cultural resources of tribal lands, water supply assessment, hydrologic and flooding studies, air quality and greenhouse gas studies, biological and jurisdictional surveys, and other studies related to development of a new town. This project involved working with several environmental groups (e.g., California Department of Parks and Recreation, Friends of the Desert Mountains) and the accommodation of the Coachella Valley Multiple Species Habitat Conservation Plan provisions. Dr. Koutnik worked closely with the project principal in addressing general environmental issues including Native American tribal representation, cultural resource protection, and greenhouse gas analyses.

Desert Dunes Specific Plan, Coachella Valley, CA. Biological Task Lead. Dr. Koutnik oversaw the biological resource assessment for the 478-acre proposed Desert Dunes Specific Plan in Riverside County located in the Coachella Valley south of the City of Desert Hot Springs. The Desert Dunes Specific Plan proposed a residential development of up to 1,850 single-family units and a 30,000±-square-foot private recreational facility. The biological resource assessment was prepared in conjunction with Section 7 consultation with the U.S. Fish & Wildlife Service for the Federally Endangered Coachella Valley milk-vetch.

Pepper Avenue Specific Plan EIR, City of Rialto, CA. Project Biological Task Lead. Dr. Koutnik managed the preparation of the biological resources EIR section. Mitigation and project design included protection for Santa Ana River woolly star (*Eriastrum densifolium* ssp. *sanctorum*) documented within the project boundary. Additional special-status species protected within project open space include coast horned lizard (*Phrynosoma blainvillii*), loggerhead shrike (*Lanius ludovicianus*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*).

Eastern Municipal Water District (EMWD), Mountain Avenue East Project, Riverside County, CA. Project Biologist. As part of an on-call environmental and biological services contract with the EMWD, Dr. Koutnik provided biological support services and coordination with the Western Riverside County Regional Conservation Authority (RCA) for MSHCP consistency for a proposed recharge basin installation project in the City of San Jacinto and negotiate potential mitigation options for San Bernardino kangaroo rat (*Dipodomys merriami parvus*) and Los Angeles pocket mouse (*Perognathus longimembris brevinasus*).

South Coast Water District, Lift Station No. 2 Final Initial Study, City of Laguna Beach, CA. Project Biologist. Dr. Koutnik managed the preparation of the Biological Technical Report for the proposed Lift Station No. 2 to assist the District in understanding the potential biological issues associated with the project. The project is located on Country Club Drive, approximately 800 feet east of Pacific Coast Highway and adjacent to Aliso Creek. The project included the removal of two existing storage sheds and the construction of a lift station that was comprised of a generator building and an electrical building.

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The primary issues included biological resources, drainage, and retention of access on Country Club Drive to uses further to the east. Dr. Koutnik provided the plant communities mapping.

City of Ventura, Foster Park Ventura River Embankment Protection Project, Ventura, CA. *Project Manager.* Dr. Koutnik managed the initial environmental document preparation and biological technical reports for the construction and operation of the embankment protection and restoration system of the western and eastern banks of the Ventura River for the City of Ventura Department of Public Works and the Ojai Valley Sanitary District trunk sewage line. The project would protect and enhance steelhead and riparian habitat as well as revegetate and restore areas temporarily disturbed by the proposed project area. The project was prepared in consultation with the U.S. Army Corps of Engineers and the U.S. National Marine Fisheries Service.

Highland Fairview, World Logistics Center Specific Plan, Moreno Valley, CA. *Project Biology Lead.* Dr. Koutnik was responsible for coordinating updated biological surveys for the Specific Plan area and in preparing the revised Biological Resources section for a revised EIR to address deficiencies found in the original project EIR. The World Logistics Center includes 40.4 million square feet of logistics warehouse space and related land uses on a 2,650-acre site. Major issues in the Revised Final EIR included air quality, biological resources, climate change, traffic, noise, aesthetics and cumulative impacts. The Revised Final Programmatic EIR was considered and approved by the Moreno Valley City Council.

Cachuma Project EIR, Santa Ynez Valley, Santa Barbara County, CA. *Biological Resources Task Lead.* Dr. Koutnik oversaw the preparation of the biological resources analysis for the EIR for the consideration of modifications to the U.S. Bureau of Reclamation's Water Rights Permits 11308 and 11310 (Applications 11331 and 11332) to protect public trust resources and downstream water rights on the Santa Ynez River below Bradbury Dam for the State Water Resources Control Board, including the impact on and benefit to the endangered steelhead.

Fresno Canyon Flood Mitigation, Ventura County, CA. *Project Manager.* Dr. Koutnik managed the initial EIR preparation, jurisdictional delineation, and biological assessment to construct a bypass storm drain facility to transport flood water, sediments, and debris from Fresno Canyon to the Ventura River to reduce the risk of flooding in the community of Casitas Springs (proposed project), which is located north of the City of Ventura and south of the City of Ojai, for the Ventura County Watershed Protection District. The project included consultation with the U.S. Army Corps of Engineers, the U.S. National Marine Fisheries Service for protection of steelhead and the U.S. Fish and Wildlife Service for protection of red-legged frog.

Mariposa Malibu Revegetation, Malibu, CA. *Project Manager.* Dr. Koutnik supervised the preparation of a vegetation restoration plan for the Mariposa Land Company property adjacent to Malibu Creek within the City of Malibu, involving the avoidance of impacts to the tidewater goby.

Scripps College, Keck Science Center Project, Claremont, CA. *Project Biology Lead.* Dr. Koutnik coordinated the pre-construction nesting bird surveys for compliance with project conditions, Fish & Game Code, and Migratory Bird Treaty Act.

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California School for the Deaf, Campus Tree Maintenance Project, Riverside, CA. *Project Biology Lead.* Dr. Koutnik coordinated the pre-construction nesting bird surveys for compliance with California Fish & Game Code and Migratory Bird Treaty Act.

Crespi Carmelite High School, New Athletic Stadium Project, Los Angeles (Encino), CA. *Project Biology Lead.* Dr. Koutnik coordinated the pre-construction nesting bird surveys for compliance with project conditions, Fish & Game Code, and Migratory Bird Treaty Act.

Pitzer College, Pitzer Dormitory Project, Claremont, CA. *Project Biology Lead.* Dr. Koutnik coordinated the construction monitoring for a new Pitzer College Dormitory. Construction monitoring activities included oak tree fence protection, small mammal trapping and animal relocation, primarily focused on the species of special concern, San Diego desert woodrat (*Neotoma lepida intermedia*).

City of Anaheim, Gramercy Park Trail Project, Anaheim, CA. *Project Biology Lead.* Dr. Koutnik managed both the biological surveys and subsequent biological monitoring for construction of a public trail on a hillside with coastal sage scrub occupied by coastal California gnatcatcher.

City of Irvine, San Diego Creek Restoration Project, Irvine, CA. *Project Biologist.* Dr. Koutnik conducted rare plant surveys prior to maintenance of channel improvements, involving repair of rip-rap, excavation of sediments and the trimming of vegetation.

City of Irvine, Culver Drive at University Drive Intersection Improvement Project, Irvine, CA. *Project Biology Lead.* Dr. Koutnik coordinated with staff, the City of Irvine Public Works staff and regulatory agencies to finalize the required Habitat Mitigation and Monitoring Plan, as well as coordinate California Department of Fish and Wildlife conditions for least Bell's vireo and bat surveys prior to construction of the intersection improvement.

Irvine Ranch Water District, Syphon Reservoir Improvement Project, Unincorporated Orange County, CA. *Project Biologist.* Dr. Koutnik conducted rare plant surveys as part of biological resource surveys in support of the project CEQA documentation. IRWD proposes to enlarge the Syphon Reservoir and Dam, to increase its recycled water storage capacity from 500 to 5,000 acre-feet. This will allow IRWD to maximize use of its recycled water instead of discharging it into the ocean while reducing the District's dependence on imported water supplies during the summer months.

Cielo Vista Residential Project, Unincorporated Orange County, CA. *Project Biology Lead.* Dr. Koutnik coordinated with staff in the preparation of the Biological Resources section for the project EIR for the proposed development of up to 112 residential units within two separate planning areas on a total 48 acres within the 84-acre undeveloped site. Dr. Koutnik was also lead on addressing the biological comments in drafting responses for the Final EIR.



Douglas Gordon-Blackwood

Biologist III

EDUCATION

BS, Botany, California State Polytechnic University, Pomona

14 YEARS OF EXPERIENCE

CERTIFICATIONS/REGISTRATION

American Society of Consulting Arborists
Registered Consulting Arborist #689

International Society of Arboriculture, Certified Arborist/Utility Specialist -#WE-11726-AU

International Society of Arboriculture, Tree Risk Assessment Qualified (TRAQ)

Wetland Training Institute 40-hour Wetland Delineator Certification Program 2018

Helicopter Flight/Safety Training, Burns & McDonnell

CDFW Rare Plant Voucher Collecting Permit 2081(a)-17-021-V

University of California Cooperative Extension 2018 Gold-spotted Oak Borer / Invasive Shot Hole Borer Workshop

California Rapid Assessment Method (CRAM) 5-Day Practitioner Training

Douglas is a consulting biologist with 10 years of experience in biological resources consulting and habitat restoration, and 14 years with arboriculture. During his career he has conducted or supervised biological surveys and mapping of plant communities, jurisdictional areas and wildlife throughout Southern California. He has acted as lead biologist on several large utilities, development, and transportation projects throughout Southern California.

His background includes extensive survey experience for biological resource assessments, habitat and vegetation mapping, nesting bird surveys, restoration site assessments, arboricultural assessments, invasive species eradication, and biological compliance monitoring.

Experience Themes

Botany. As a botanist, Douglas has 10 years' experience conducting rare plant surveys throughout Southern and Central California. He has extensive vegetation classification and mapping experience utilizing CNPS-CDFW combined vegetation rapid assessment and Relevé methods. Douglas has overseen field efforts for clients like Southern California Edison (SCE), California High Speed Rail Authority, Caltrans, LADPW, OCPW, IRWD, and Southern California Gas.

Arboriculture Douglas is certified by the American Society of Consulting Arborists (ACSCA) as a Registered Consulting Arborist (RCA). He is certified by the International Society of Arboriculture (ISA) as a Certified Arborist, Utility Specialist, and is Tree Risk Assessment Qualified. He is also a member of the ASCA, ISA, Western chapter of the ISA, and the Utility Arborist Association. Douglas has over 14 years' experience working with native and ornamental trees throughout California. Douglas is currently pursuing his ISA Board Certified Master Arborist (BCMA).

Relevant Experience

Transportation

Los Angeles County Department of Public Works Creek Fire Restoration Projects, Sylmar, CA. *Biologist.* Douglas conducted rare plant and oak tree surveys, conducted vegetation mapping, and weed abatement monitoring for four sites (MM 15.12, 15.62, MM15.67, and MM 16.92) along Little Tujunga Road within the Angeles National Forest. 4 days; January 2019 – November 2020.

Dillon Road Bridge over Coachella Valley Stormwater Channel (aka Whitewater River Channel) Project, Dillon Road Joint Powers Authority, City of Coachella, CA. *Botanist.* Douglas acted as botanist for habitat mapping, rare

plant survey, and general biological surveys for the Dillon Road Bridge project. 3 Days; November 2019

San Bernardino County Transportation Authority I-215 Bi-County Landscape Project, Colton/Grand Terrace, CA. *Botanist/Arborist.* Douglas acted as botanist and arborist for habitat mapping, tree inventory, and biological surveys along Interstate 215 for a highway landscape renovation project in San Bernardino and Riverside Counties. Observed sensitive species include *Juglans californica*. 1 day; June 2019.

Los Angeles World Airport LAX Landside Access Modernization Program Tree Survey, Los Angeles, CA. *Arborist.* Douglas acted as project manager and arborist for the 127-acre Manchester Square property adjacent to the Los Angeles World Airport. Douglas provided arboricultural, mapping and reporting services for approximately 1100 ornamental trees within the Los Angeles World Airport property. 2.5 Weeks; January 2019.

Metro Purple Line Extension, Beverly Hills, CA. *Independent Compliance Monitor.* Douglas conducted noise and compliance monitoring for the Metropolitan Transportation Authority Purple Line Extension Project. 20-30 days; July 2017-September 2018.

California High Speed Rail Project, LA, Madera, and Fresno Counties, CA. *Botanist & General Biological Monitor.* Douglas performed rare plant and invasive plant surveys for the Palmdale – Burbank section & conducted biological and compliance monitoring for the Fresno to Merced (CP1AB) spans of the California High Speed Project. He also assisted with habitat restoration, weed management, hydroseeding, Daily EMMA reporting and agency interaction with National Forest Service botanists and various other agencies. August 2015 – Present.

Development

Mt. Baldy Development Project, Mt. Baldy, CA. *Arborist/Botanist.* Douglas acted as an arborist and botanist for a tree survey and vegetation mapping on a proposed recreation/development project in the town of Mt. Baldy. 4 days, January 2021.

Brookside Golf Course Development Project, City of Pasadena, Pasadena, CA. *Arborist.* Douglas conducted a tree survey and provided the tree report for a proposed development project within the City of Pasadena's Brookside Golf Course. October 2020.

Mammoth Mountain Resorts Woolly Tube Park/Proposed Snowmaking Facilities Botanical Survey, Mammoth Mountain, CA. *Botanist.* Douglas acted as the lead botanist (subcontracted through Ascent Environmental) for botanical surveys at Woolly's tube park and various snowmaking facilities throughout Mammoth Mountain Ski Area within Inyo/Mono National Forests. 5 Days; July 2020.



Wiley Canyon (Smiser Ranch) Mixed Use Development, Santa Clarita, CA.

Biologist/Arborist. Douglas conducted biological and arboricultural inventory and report for a mixed use development in the City of Santa Clarita. 2 Weeks; December 2019

Scripps College Science Center Preconstruction Nesting Bird Surveys, Claremont, CA.

Biologist. Douglas conducted preconstruction nesting bird surveys and nest monitoring for the construction of a science building on the campus of Scripps College in the City of Claremont. 1 Week; April 2020

Trails at Santiago Creek Development, Orange, CA.

Biologist/Botanist. Douglas conducted rare plant, vegetation mapping, Jurisdictional delineations, and Burrowing owl surveys of a 11-acre parcel of Rio Santiago, a large development located in the City of Orange. 1 week; April 2020

Calamigos Tennis Ranch Biological Support, Calabasas, CA.

Biologist/Arborist. Douglas conducted oak and native tree inventory, biological survey, mapped sensitive environmental resource areas, and provided reporting for an 8-acre mixed-use facility in support of the Santa Monica Mountains LCP Biological Assessment requirements. 7 days; October 2019 – Present

4700 Avenida Del Mar Biological Assessment, Malibu, CA.

Botanist/Biologist. Douglas conducted and wrote a general biological assessment in accordance with the City of Malibu Local Coastal Program, and including vegetation mapping, jurisdictional delineations, biological inventory and mapping of Environmentally Sensitive Habitat Areas (ESHA's). 6 Days; November 2019

25860 Dark Creek Road Biological Assessment, Monte Nido, CA.

Botanist/Biologist. Douglas conducted a general biological assessment in accordance with the Santa Monica Mountains Local Coastal Program, and including vegetation mapping, jurisdictional delineations, biological inventory and tree mapping. Douglas also wrote the biological assessment. 5 Days; December 2019

Oaks at Monte Nido/Monte Nido Estates Residences Project, Monte Nido, CA.

Biologist. Douglas conducted biological and arboricultural surveys and documentation in support of a coastal development permit application in the rural community of Monte Nido. 4 Days; November 2019

EF International Language Campus Project, Costa Mesa, CA.

Biologist. Douglas conducted a biological and landscape assessment of the former Trinity Broadcasting Network facility for a proposed college campus in support of CEQA documents. 2 Days; September 2019

Legado Properties Playa Del Rey Beachfront Properties Project, Playa Del Rey, CA.

Biologist. Douglas conducted a vegetation mapping, post impact analysis, and a historical site assessment for beachfront properties located within Environmentally Sensitive Habitat Areas. 2 Days; August 2019

Rutter Santiago Saddle Crest Development, Trabuco Canyon, CA.

Habitat Restoration Monitor. Douglas gathered transect and field data for qualitative and quantitative site assessments and annual reporting for mitigation sites within the

Cleveland National Forest. Douglas also helped produce annual reporting for Special-status plant, Sensitive Natural Communities, and Regional Water Quality Control Board annual reporting. Observed sensitive species include *Nolina cismontana* and *Calochortus weedii* var. *intermedius*. 20 Days; January 2019 - Present.

March Joint Powers Authority Heacock Street Truck Terminal Facility, March Inland Port Airport (Unincorporated Riverside County, CA). *Habitat Restoration Ecologist.* Douglas prepared the Habitat Mitigation and Monitoring Plan (HMMP) for the Heacock Street Truck Terminal project located within the March Joint Powers Authority. 5 Days; December 2018.

Trumark Homes Henry Avocado Ranch Tree Survey, Escondido, CA. *Arborist.* Douglas conducted a tree survey of 300 trees within a 34-acre proposed development in Escondido, CA. 1 Day; April 2019

Netflix Triunfo Canyon Corporate Retreat, Agoura Hills, CA. *Botanist/Arborist.* Douglas conducted rare plants, wildlife and habitat mapping of the Oak Canyon Ranch property within Triunfo Canyon. Douglas also conducted tree inventories and hazardous tree assessments. Observed sensitive species included *Lilium humboldtii* ssp. *ocellatum*, *Calochortus catalinae*, and *Juglans californica*. 2 days; May 2019 – June 2019

Stephens Ranch Cemetery Project, La Verne, CA. *Botanist.* Douglas conducted habitat mapping, wildlife surveys and rare plant surveys of the 187-acre Stephens Ranch Cemetery project located within the San Dimas Canyon/San Antonio Wash Significant Ecological Areas of Los Angeles County. Observed sensitive species included *Romneya coulteri*, *Berberis nevinii*, and *Quercus durata* var. *gabrielensis*. 3 Days; April 2019 – June 2019.

Hidden Oaks Ranch Country Club Project, Chino Hills, CA. *Botanist.* Douglas conducted habitat mapping and rare plant surveys for a 537-acre site located within the City of Chino Hills. Observed sensitive species included *Calochortus catalinae*. 2 days; May 2019 - Present

Boy Scouts of America Camp Cherry Valley Biological Constraints Survey and Reporting, Two Harbors - Santa Catalina Island, CA. *Botanist.* Douglas conducted rare plant and habitat mapping of Camp Cherry Valley property adjacent to Two Harbors. Observed sensitive species included *Constancea nevinii*, *Crossosoma californicum*, *Calochortus catalinae*, *Piperia cooperi*, *Ribes viburnifolium*, *Quercus pacifica*, *Galium catalinense* ssp. *catalinense*, *Eriogonum giganteum* var. *giganteum*, *Deinandra clementina*, *Arctostaphylos catalinae*, and *Acmispon dendroideus* var. *dendroideus*. 1 Day, June 4th, 2019

Under Canvas Joshua Tree Recreational Facility Project, Yucca Valley, CA. *Botanist.* Douglas conducted rare plant surveys, desert native plant inventory and habitat assessments of a 640-acre property within the town of Yucca Valley, CA. Observed sensitive species included *Saltugilia latimeri*. 3 Days; April 2019 – May 2019

Christopher Homes (CD/CFG Lake Ranch LLP) Lake Ranch Project, Lake Mathews (Unincorporated Riverside County), CA. *Biologist.* Douglas helped



prepare various habitat restoration documents for the Lake Ranch project including the Habitat Mitigation and Monitoring Plan, the Fencing Plan, and the Long-term Monitoring Plan for a 110-acre land development site located within the Western Riverside Multiple Species Habitat Conservation Plan. September 2018.

Berkeley Tuolumne Family Campground, Tuolumne Meadows, CA. *Lead Arborist.* Douglas conducted an arboricultural inventory for 2000+ trees burned during the 2013 Rim Fire within the City of Berkeley Family Campground. Douglas conducted tree risk assessments for each tree, mapped each location using sub-meter GPS, and tagged trees with appropriate tagging. Douglas also conducted vegetation mapping of portions of the site. 2 Weeks; January – February 2018

Seefried Industrial Properties Project, Fontana, CA *Lead Arborist.* Douglas conducted an arboricultural survey and reporting for A 17.6-acre proposed industrial site within Fontana, CA. Reporting was prepared in accordance with the City of Fontana Tree Policy Manual. 2 days; February 2018

Chevron West Coyote Hills, Fullerton, CA *Lead Botanist* Douglas conducted rare plant surveys, Calochortus spp. mapping, and habitat site assessments of the West Coyote Hills development. 2 Days; June 2017

Moreno Rose Retirement Village, Moreno Valley, CA *Burrowing Owl Support.* Douglas conducted a habitat and resources assessment, and prepared reporting for a proposed retirement community within Moreno Valley, CA. 1 Day; February 2018

Pardee Homes Butterfield DBESP, Beaumont, CA *Burrowing Owl Support.* Douglas served as burrowing owl support for protocol burrowing owl surveys of the proposed Butterfield property within the City of Beaumont, CA. 2 Days; May 2017

William Lyon Homes Avery Place, Menifee, CA. *Burrowing Owl Support.* Douglas served as burrowing owl support for MSHCP 30-day Preconstruction survey of a housing development within Menifee, CA. 1 Day; January 2019

Utility

EMWD San Jacinto Valley Raw Water Facilities Initial Study/MND, Hemet, CA. *Burrowing Owl Biologist.* Douglas conducted protocol burrowing owl surveys of multiple proposed well, pipeline, and construction staging areas throughout the city of Hemet. 3 Days; April 2021.

Department of Water Resources San Joaquin Field Division Subsidence Surveys, Kern County, CA *Burrowing Owl.* Douglas conducted burrowing owl habitat assessments, burrow inventory, and protocol surveys along the California Aqueduct within Kern County. 6 Days, June 2019 – June 2021

Inland Empire Utilities Agency Groundwater Recharge Basins Burrowing Owl Presence/Absence Surveys, Inland Empire, CA. *Burrowing Owl Support.* Douglas acted as a burrowing owl support for burrowing owl presence/absence surveys

within groundwater recharge basins throughout the Inland Empire. 14 Days, June 2019 – June 2021

Department of Water Resources Cedar Springs Spillway Repair Project, Hesperia, CA. *Biological Monitor.* Douglas provide biological monitoring and nesting bird surveys for the Cedar Springs spillway repair project located within the Silverwood Lake SRA. May 2019 – Present.

AT&T Communications Clock Tower Project, Newhall, CA. *Biologist.* Douglas conducted biological inventory, vegetation mapping and site assessment for a proposed cell tower located within the Santa Susana Mountains/Simi Hills Significant Ecological Area and prepared the corresponding Biological Constraints Analysis and Biota Report. Observed sensitive species includes *Juglans californica*. 1 Week; February 2020

Inland Empire Utilities Agency Groundwater Recharge Basins Burrowing Owl Presence/Absence Surveys, Inland Empire, CA. *Burrowing Owl Support.* Douglas acted as a burrowing owl support for burrowing owl presence/absence surveys within groundwater recharge basins throughout the Inland Empire. 10 days; May 2019 to Present.

SCE Deteriorated Pole Replacement, Southern California, CA. *Biologist.* Douglas conducted Habitat Resource Assessments for multiple deteriorated SCE utility poles throughout Southern California. Douglas conducted habitat and vegetation mapping, prepared project evaluation memos and conducted desktop analysis and monitored pole replacement in a wide range of sensitive species habitats. 10-20 Days; June 2017 - March 2018.

SCE HTRP/DRHTP Hazardous Tree Removal Program & Drought Related Hazardous Tree Program, Southern California, CA. *Biologist/Arborist.* Douglas acted as an arborist for SCE's hazardous tree program. Douglas conducted tree surveys, habitat assessment, jurisdictional assessments, and tree removal monitoring for hazardous trees throughout Southern California. 20-30 Days; June 2017 - March 2018.

Metropolitan Water District (MWD) Foothill Blow-off Feeder, Santa Clarita, CA. *Biological Monitor.* Douglas served as a biological monitor overseeing vegetation removal and site clearing for foothill feeder blow-off stations located within Santa Clarita, CA. Douglas also prepared site resource assessments for work at the feeders. 1 day; March 2018

SCE/Plains Kinsey 12 kV Restoration Site, Gorman, CA. *Restoration Ecologist* Douglas oversaw seed collection, seeding, planting, BMP maintenance, and weed abatement of a SCE and Plains Pipeline restoration site within the Angeles National Forest. Observed sensitive species included *Calochortus clavatus* var. *gracilis* and *Delphinium parryi* ssp. *purpureum*. 10 days; December 2017- March 2018

SCE Tahquitz Substation Replacement Project, Mountain Center, CA *Botanist.* Douglas conducted rare plant surveys and Special Status plant focused construction monitoring for the Tahquitz Substation wreck out and replacement.



Observed sensitive species include *Deinandra mohavensis*, *Calochortus palmeri* var. *munzii*, and *Galium angustifolium* ssp. *jacinticum*. June 2018 to August 2018.

SCE McGrath Beach Substation and Peaker Station, Oxnard, CA. *Lead Botanist /Restoration Ecologist.* Douglas conducted Daubenmire cover class vegetation sampling and rare plant surveys for the SCE McGrath Beach Peaker Station. Douglas also oversaw site restoration, weed abatement, and irrigation maintenance of a 37-acre site associated with SCE's McGrath Beach Substation. Observed sensitive species observed included *Astragalus pycnostachyus* var. *lanosissimus* and *Juncus acutus* ssp. *leopoldii*. 2-3 weeks; April 2017 – August 2018.

EDF Energy Valentine Wind Farm and Gen-Tie, Antelope Valley, CA. *Lead Botanist.* Douglas oversaw rare plant surveys and Desert Native Plant Act (DNPA) inventory of the Valentine Wind Farm and Gen-Tie alignment. Douglas also assisted with jurisdictional delineations and reporting for the site. 5 days; June 2017

SCE Mira Loma-Serrano Alignment Project, Yorba Linda, CA. *Restoration Ecologist.* Douglas conducted annual restoration site monitoring, willow stake planting, and reporting for a disturbed riparian site adjacent to SCE's Mira Loma-Serrano Alignment. 5 Days; April 2017 – June 2017.

SCE Serrano Valley Restoration Site, Corona, CA. *Restoration Ecologist.* Douglas conducted quarterly restoration site assessments and invasive species mapping for a riparian restoration site along SCE's Serrano Valley transmission line. Douglas also oversaw weed abatement and BMP installation and maintenance for the site. 5-6 days; April 2017 - June 2017

SCE Santa Catalina Pole Replacement Surveys, Santa Catalina, CA. *Lead Botanist.* Douglas oversaw and lead botanical, wildlife and habitat assessment surveys of pole replacement impact areas for SCE distribution lines throughout Santa Catalina Island. Douglas also conducted detailed reporting and impact assessment. *Observed sensitive species* *Arctostaphylos catalinae*, *Atriplex coulteri*, *Calochortus catalinae*, *Ceanothus megacarpus* var. *insularis*, *Cercocarpus betuloides* var. *blancheae*, *Cistanthe maritima*, *Crossosoma californicum*, *Dendromecon harfordii* var. *ramnoides*, *Dichondra occidentalis*, *Dudleya virens* ssp. *hassei*, *Eriogonum giganteum* var. *giganteum*, *Galium catalinense* ssp. *catalinense*, *Galium nuttallii* ssp. *insulare*, *Harpagonella palmeri*, *Lyonothamnus floribundus* ssp. *floribundus*, *Malacothamnus fasciculatus* var. *catalinensis*, *Microseris douglasii* ssp. *platycarpha*, *Piperia cooperi*, *Quercus pacifica*, *Quercus tomentella*, *Rhamnus pirifolia*, and *Scrophularia villosa*. 1 week; April 2017.

EDF Renewable Energy Tropico Solar Project, Rosamond, CA. *JD Support.* Douglas served as a jurisdictional delineation support for a 215-acre proposed solar site. Douglas also conducted rare plant and special status wildlife general survey of the site. 3 Days; December 2018.

SCE Vista-Colton Deteriorated Pole Replacement Project, Colton, CA. *Lead Botanist.* Douglas conducted rare plant, vegetation and habitat mapping within the floodplain of the Santa Ana River. Observed sensitive species included *Eriastrum densifolium* ssp. *sanctorumi*. 2 days; April 2018

SCE Arrowhead Subtransmission Line Realignment Project, Hesperia, CA *Lead Botanist*. Douglas conducted rare plant and habitat assessments of a 115 kV transmission line. 1 Day; September 2018.

SCE Garnet Substation Project, North Palm Springs, CA *Lead Botanist*. Douglas conducted botanical and wildlife surveys of the Garnet substation and alignment near North Palm Springs, CA. Observed sensitive species include *Astragalus lentiginosus* var. *coachellae*. 2 Days; August 2017

SCE Cottonwood-Permanente Deteriorated Pole Replacement Project, Cushenbury Springs, CA *Lead Botanist*. Douglas conducted rare plant, vegetation and habitat surveys for a pole replacement project within the unique carbonate habitat of Cushenbury Springs, CA. Observed sensitive species included *Rosa woodsii* var. *glabrata* and *Calochortus striatus*. 2 days; June 2017

SCE El Casco Substation Restoration Project, El Casco, CA *Restoration Ecologist*. Douglas conducted weed abatement and restoration site assessments for a smooth tarplant (*Centromadia pungens* ssp. *laevis*) restoration site adjacent to SCE's El Casco Substation. Observed sensitive species included *Centromadia pungens* ssp. *laevis*, and *Juglans californica*. 5 days; June 2017

SCE Calcite Substation Project, Lucerne Valley, CA *Lead Botanist*. Douglas conducted botanical, wildlife, and habitat assessment surveys of the Calcite substation and alignment. Observed sensitive species *Cryptantha clokeyi*, *Eriogonum ovalifolium* var. *vineum*, *Calochortus striatus*, *Erigeron parishii*, and *Muilla coronata*. 2 Days; May 2017

SCE Alberhill – Valley Ivy Glen Alignment, Temescal Valley, CA *Lead Botanist*. *BUOW support*. Douglas conducted MSHCP Botanical, Vernal Pool, and Burrowing owl surveys of the Alberhill and Valley Ivy Glen alignment. Observed sensitive species included *Abronia maritima* var. *aurita*, *Ambrosia pumila*, *Atriplex coronata* var. *notatior*, *Centromadia pungens* ssp. *laevis*, *Chorizanthe polygonoides* var. *longispina*, *Chorizanthe xanti* var. *leucotheca*, *Chorizanthe leptotheca*, *Deinandra paniculata*, *Dodecahema leptoceras*, *Dudleya multicaulis*, *Harpagonella palmeri*, *Juglans californica*, *Lasthenia glabrata* ssp. *coulterii*, *Lepidium virginicum* var. *robinsonii*, *Pseudognaphalium leucocephalum*, and *Romneya coulteri*. 10-15 Days; April 2017 – June 2018

SCE Gale-Pisgah Alignment Project, Daggett, CA *Lead Botanist*. Douglas conducted botanical and wildlife surveys of SCE Gale-Pisgah alignment and Substation. Observed sensitive species *Menodora spinescens* var. *mohavensis* and *Funastrum utahense*. 3 days; April 2017.

SCE Eldorado-Lugo-Mohave Upgrade Project (LVRAS) Baker, CA *Lead Botanist*. Douglas conducted botanical and desert tortoise surveys of a SCE line replacement within the Mojave National Preserve between Barstow and the Nevada Border. Douglas also acted as a support for jurisdictional delineations throughout the survey area. Observed sensitive species included *Astragalus bernardinus*, *Astragalus layneae*, *Astragalus tidentromii*, *Castela emoryi*,



Cymopterus multinervatus, *Grusonia parishii*, and *Sphaeralcea rusbyi* var. *eremicola*. 3.5 Weeks; April 2017 – May 2017.

SCE La Fresa Substation, Torrance, CA *Biological Monitor*. Douglas served as a biological monitor and nesting bird biologist. Douglas conducted nest monitoring of red-tailed hawk and common raven nests within SCE's La Fresa substation. 2 days; April 2017.

SCE Lake Success Project, Porterville, CA *Lead Botanist*. Douglas conducted botanical and vegetation mapping of the Option 2 SCE alignment surrounding Lake Success. Observed sensitive species included *Clarkia springvillensis*, *Convolvulus simulans*, *Eryngium spinosepalum*, *Navarretia nigelliformis* ssp. *nigelliformis*, and *Pseudobahia perisonii*. 9 days; April 2017 – May 2017.

EDF Catalina Solar/Pacific Wind Farm, Antelope Valley, CA *Botanist*. Douglas conducted Daubenmire cover class mapping and botanical surveys throughout Catalina Solar and Pacific Wind farms in the Antelope Valley. 5 days; March 2017.

Avangrid Renewables Tule Wind Project, Boulevard, CA. *Designated Biologist*. Douglas acted as a designated biologist for 200 megawatt wind turbine project within the McCain Valley on BLM and Ewiiapaayp Tribal lands. As a restoration ecologist, Douglas oversaw large scale cactus and succulent salvage and storage. Douglas also acted as a biological monitor during the site clearing, civil work and turbine construction. 15-20 Days; October 2016 – March 2017

SCE Tehachapi Renewable Transmission Project (TRTP) – Kern, Los Angeles, and San Bernardino Counties, CA. *Lead Botanist/ Lead Biological Monitor*. Douglas served as lead botanist, lead biological monitor, lead weed abatement monitor, nesting bird surveyor, and restoration ecologist for the Southern California Edison's (SCE) TRTP project spanning a 173-mile transmission line corridor, including construction of 500 kV overhead and underground high-voltage electric transmission lines. Douglas conducted rare plant surveys throughout Kern, Los Angeles, and San Bernardino counties. Douglas oversaw invasive species mapping and removal throughout the Angeles National Forest, Puente Hills habitat preserve, and Tonner Canyon preserves. He acted as a support for riparian bird and nesting bird surveys throughout the project area for species including Coastal California gnatcatcher, least Bell's vireo, southwestern willow flycatcher, and burrowing owls. He also provided oversight for plant salvage activities within the Angeles National Forest. Observed sensitive plant species included *Heuchera caespitosa*, *Berberis nevini*, *Dudleya cymosa* ssp. *crebrifolia*, *Dudleya densiflora*, *Opuntia basilaris* var. *brachyclada*, *Centromadia parryi* ssp. *australis*, *Hulsea vestita* ssp. *gabrielensis*, *Galium grande*, *Orobanche valida* ssp. *valida*, *Lilium humboldtii* ssp. *ocellatum*, *Arctostaphylos glandulosa* ssp. *gabrielensis*, *Lepechinia fragrans*, *Calystegia felix*, *Syntrichopappus lemmonii*, *Calochortus catalinae*, *Calochortus plummerae*, *Calochortus palmeri* var. *palmeri*, *Castilleja gleasoni*, *Malacothamnus davidsonii*, *Quercus durata* var. *gabrielensis* and *Juglans californica*. 6 Years; March 2011 – March 2017.

Southern California Gas North/South Project, San Bernardino and Riverside Counties, California. *Lead Botanist*. Douglas conducted botanical and wildlife surveys of the Southern California Gas North/South alignment. 2 Days; March 2014

Municipal

Newport Bay Conservancy Big Canyon Phase 2A Restoration Project, Newport Beach, CA. *Restoration Ecologist/Arborist*. Douglas conducted habitat restoration monitoring, arboricultural assessments, and invasive Shot-hole borer assessments of Newport Bay Phase 2A big canyon site. 2 Days; August 2020

Orange County Public Works Caspers Wilderness Park Entry Road Repair Project, San Juan Capistrano, CA. *Biologist*. Douglas provided biological monitoring and reporting for an Arizona Crossing Repair project. 4 Days; July 2020 – Present

Orange County Public Works Peters Canyon Bikeway Extension Project, Orange/Tustin, CA. *Biologist*. Douglas conducted a biological assessment and composed the Natural Environment Study (Minimal Impact) for the project located within portions of the Orange County HCP. June 2020 – Present.

Los Angeles Department of Public Works Los Angeles River Bike Path (Willowcrest Ave to Barham Blvd), Universal City, CA. *Arborist*. Douglas conducted a tree inventory and reporting for the LA River bike path between Willowcrest Avenue and Barham Boulevard, and within the Universal Studios Specific Plan Area. 6 days; June 2020

Orange County Public Works Villa Park Biological Monitoring, Orange, CA. *Biologist*. Douglas provided biological and restoration monitoring and reporting for a brush clearance project at the Villa Park Dam facility and within fuel modification areas adjacent to the dam. 5 days; December 2019 – Present.

Palos Verdes Peninsula Water Reliability Project Environmental Compliance Monitoring, Palos Verdes, CA. *Compliance Monitor*. Douglas conducted daily compliance monitoring of a pipeline replacement project within Palos Verdes and Rolling Hills Estates. September 2018 – Present.

Orange County Public Works Countywide Long Term Routine Maintenance Program Channel Categorizations 2019 & 2020, Orange County, CA. *Biologist*. Douglas conducted channel categorizations, biological surveys, jurisdictional delineations, vegetation mapping and reporting for various channels and basins throughout Orange County, CA. 45 days; April 2019 – Present.

Orange County Public Works San Diego Creek Sediment Removal Project, Irvine, CA *Biologist*. Douglas conducted daily site spot checks and nesting bird surveys of a sediment removal project within the San Diego Creek. 15-20 Days; September 2018 to May 2019.

San Manuel Band of Mission Indians Hot Springs Lake Dam Project, Highland, CA. *Biologist*. Douglas conducted biological and vegetation mapping surveys of the Hot Springs Lake Dam area on the San Manuel reservation and provided technical memorandum for the project. 2 Days; September 2019



Los Angeles County Department of Public Works Santa Anita Canyon Road Improvement Project, Sierra Madre, CA. *Biologist.* Douglas conducted biological site assessment and vegetation mapping for a road repair project along Santa Anita Canyon Road. 6 Days; October 2019

Los Angeles County Department of Public Works Vasquez Canyon Road at Bouquet Bridge Project, Santa Clarita, CA. *Biological Monitor.* Douglas provided biological monitoring for a sediment removal project beneath the Vasquez Canyon bridge. 2 days; September 2019.

Los Angeles County Department of Public Works San Francisquito Canyon Creek Bridge Project, Santa Clarita, CA. *Botanist.* Douglas conducted vegetation mapping of proposed bridge replacement and road improvement project in the Angeles National Forest. Observed sensitive species included least Bell's vireo and *Berberis nevadensis*. 1 Day; August 2019.

Los Angeles County Department of Public Works Santa Monica Mountains/Mulholland Highway Storm Repair Project, Malibu, CA. *Biological Monitor.* Douglas provided biological monitoring and biological assessments for various road repair sites along Mulholland Highway. 7 Days; December 2019 – Present.

City of Los Angeles Department of Recreation and Parks Peck Park Annual Brush Clearance Monitoring, San Pedro, CA. *Biologist.* Douglas provided nesting bird surveys and biological monitoring for annual brush clearance activities for Lake Machado, Peck Park, and Harbor Park Golf Course within the city of San Pedro, CA. 4 days; June 2019 – September 2019.

Los Angeles Unified School District Elizabeth Learning Center Habitat Gardens Assessment, Cudahy, CA. *Botanist.* Douglas provided a botanical and biological inventory for specialized chaparral, vernal pool, and desert habitat gardens at Elizabeth Learning Center. September 2019.

Cali Lake RV Park Project, Santa Clarita, CA. *Botanist.* Douglas conducted a rare plant survey and vegetation mapping of recreational campground and RV park within the Santa Clara River Significant Ecological Area. 1 Day; July 2019

County of San Diego Department of Parks and Recreation 2021 Vegetation Community Mapping and Resource Specific Monitoring, San Diego County, CA. *Lead Botanist.* Douglas conducted rare plant, invasive plant, and vegetation mapping for multiple large county owned preserves throughout San Diego County. March 2021.

County of San Diego Department of Parks and Recreation Hellhole Canyon Preserve Additions Biodiversity Survey and Habitat Maps, Valley Center, CA. *Botanist.* Douglas conducted habitat mapping, rare plant, and invasive plant surveys of 5 large parcel additions to the Hellhole Canyon Preserve totaling 692 Acres. Observed sensitive species included *Harpagonella palmeri*, *Xanthisma junceum*, *Quercus engelmannii*, and *Allium marvinii*. 9 Days; March 2019 – April 2019

County of San Diego Department of Parks and Recreation Ramona Sheriff Station Vernal Pool Survey and Vegetation Mapping, Ramona, CA. *Botanist.* Douglas conducted vegetation mapping, rare plant mapping, and vernal pool surveys of a property adjacent to Ramona Sheriff Station. Observed sensitive species included San Diego fairy shrimp (*Branchinecta sandiegonensis*). 1 Day; March 2020.

County of San Diego Management & Monitoring Rare Plant Inspect and Monitoring Program 2019, Sycamore Canyon/Goodan Ranch Preserve, CA. *Botanist.* Douglas conducted Rare Plant Inspect and Manage monitoring for San Diego Thornmint (*Acanthomintha ilicifolia*) populations located within Sycamore Canyon and Goodan Ranch Preserves. Observed sensitive species included *Acanthomintha ilicifolia*, *Convolvulus simulans*, *Harpagonella palmeri*, and *Selaginella cinerescens*. April 15th and 16th, 2019.

Los Angeles Unified School District Marshall High School Nesting Bird Surveys, Los Angeles, CA. *Nesting Bird Surveyor.* Douglas provided nesting bird surveys and monitoring for a building upgrade project at Marshall High School. June 2019 – July 2019

Irvine Ranch Water District Syphon Reservoir Improvement Project, Irvine, CA *Botanist/Arborist.* Douglas conducted habitat assessments, tree mapping, western spadefoot toad surveys and rare plant surveys within Syphon Reservoir. Observed sensitive species included *Dudleya multicaulis*, *Viguiera laciniata* and *Calochortus catalinae*. 10 days; December 2018 – December 2019

City of San Diego Wetland/Restoration Mitigation Opportunities Site Evaluations, San Diego, CA. *Botanist.* Douglas conducted Wetlands Mitigation Opportunities assessments and filled out site evaluation forms of Mission Valley, Sunshine-Berardini, West Bernardo, Lopez Canyon, East Black Mountain, Camino Del Sur, Upper Penasquitos Watershed, and South-56 potential mitigation sites throughout the City of San Diego. Observed sensitive species included *Viguiera laciniata*, *Harpagonella palmeri*, *Artemisia palmeri*, *Quercus dumosa*, *Adolphia californica*, *Ferocactus viridescens*, *Selaginella cinerescens*, *Iva hayesiana*, *Adolphia californica*, and *Juncus acutus* ssp. *leopoldii*. 15 Days; March 2019 – Present.

Los Angeles County Department of Public Works Eaton Wash Reservoir, Altadena, CA. *Compliance Monitor.* Douglas conducted daily weed abatement and vegetation removal monitoring during annual maintenance activities within the Eaton Wash Flood Control Basin. 5 Days; September 2018 – October 2018.

City of Los Angeles Department of Recreation and Parks Peck Park Annual Brush Clearance Monitoring, San Pedro, CA. *Biologist.* Douglas provided nesting bird surveys and biological monitoring for annual brush clearance activities for Lake Machado, Peck Park, and Harbor Park Golf Course within the city of San Pedro, CA. 4 days; June 2019 – September 2019.

City of Los Angeles Department of Recreation and Parks Lake Machado Invasive Species Mapping, San Pedro, CA. *Botanist.* Douglas conducted invasive



species mapping of Lake Machado and surrounding Harbor Regional Park within the city of San Pedro, CA. September 2020.

APPENDIX C

Floral and Faunal Compendia

APPENDIX C1 – BLUEWATER RESIDENCE

Floral Compendium

Family	Scientific Name	Common Name	Nativity	Special-Status?
FERNS				
DRYOPTERIDACEAE		WOOD FERN FAMILY		
	<i>Dryopteris arguta</i>	wood fern	Native	No
DICOTS				
ADOXACEAE		MUSKROOT FAMILY		
	<i>Sambucus nigra</i> subsp. <i>caerulea</i>	blue elderberry	Native	No
ANACARDIACEAE		SUMAC OR CASHEW FAMILY		
	<i>Malosma laurina</i>	laurel sumac	Native	No
	<i>Rhus integrifolia</i>	lemonade berry	Native	No
	<i>Toxicodendron diversilobum</i>	western poison oak	Native	No
APIACEAE		CARROT FAMILY		
	<i>Daucus pusillus</i>	wild carrot	Native	No
	<i>Sanicula crassicaulis</i>	Pacific sanicle	Native	No
	<i>Tauschia arguta</i>	southern tauschia	Native	No
ASTERACEAE		SUNFLOWER FAMILY		
	<i>Achillea millefolium</i>	yarrow	Native	No
	<i>Artemisia californica</i>	California sagebrush	Native	No
	<i>Baccharis plummerae</i> subsp. <i>plummerae</i>	Plummer's baccharis	Native	Yes; 4.3
	<i>Baccharis salicifolia</i> subsp. <i>salicifolia</i>	mule fat	Native	No
	<i>Carduus pycnocephalus</i> subsp. <i>pycnocephalus</i>	Italian thistle	Naturalized	No
	<i>Centaurea melitensis</i>	toçalote	Naturalized	No
	<i>Chaenactis artemisiifolia</i>	white pincushion	Native	No
	<i>Corethrogyne filaginifolia</i>	common sandaster	Native	No

<i>Deinandra fasciculata</i>	clustered tarweed	Native	No
<i>Encelia californica</i>	bush sunflower	Native	No
<i>Erigeron foliosus</i>	leafy fleabane	Native	No
<i>Eriophyllum confertiflorum</i> var. <i>confertiflorum</i>	golden yarrow	Native	No
<i>Hazardia squarrosa</i>	saw-toothed goldenbush	Native	No
<i>Heterotheca grandiflora</i>	telegraph weed	Native	No
<i>Isocoma menziesii</i>	coastal goldenbush	Native	No
<i>Malacothrix saxatilis</i> var. <i>tenuifolia</i>	short leaved cliff aster	Native	No
<i>Pseudognaphalium biolettii</i>	two-color rabbit-tobacco	Native	No
<i>Pseudognaphalium californicum</i>	ladies' tobacco	Native	No
<i>Rafinesquia californica</i>	California chicory	Native	No
<i>Sisymbrium officinale</i>	hedge mustard	Naturalized	No
<i>Sonchus asper</i> subsp. <i>asper</i>	sow thistle	Naturalized	No
<i>Stephanomeria virgata</i>	twiggy wreath plant	Native	No
<i>Venegasia carpesioides</i>	canyon sunflower	Native	No
BORAGINACEAE	BORAGE FAMILY		
<i>Cryptantha intermedia</i>	common cryptanth	NATIVE	No
BRASSICACEAE	MUSTARD FAMILY		
<i>Hirschfeldia incana</i>	short podded mustard	Naturalized	No
CAPRIFOLIACEAE	HONEYSUCKLE FAMILY		
<i>Lonicera subspicata</i> var. <i>denudata</i>	Johnston's honeysuckle	Native	No
CARYOPHYLLACEAE	PINK FAMILY		
<i>Silene laciniata</i> subsp. <i>laciniata</i>	Mexican pink	Native	No
CHENOPODIACEAE	GOOSEFOOT FAMILY		
<i>Salsola tragus</i>	Russian thistle	Naturalized	No
CONVOLVULACEAE	MORNING-GLORY FAMILY		
<i>Calystegia macrostegia</i>	island false bindweed	Native	No
CUCURBITACEAE	GOURD FAMILY		
<i>Marah macrocarpa</i>	chilicothe	Native	No
EUPHORBIACEAE	SPURGE FAMILY		

<i>Croton setiger</i>	turkey-mullein	Native	No
<i>Euphorbia terracina</i>	Geraldton carnation weed	Naturalized	No
<i>Ricinus communis</i>	castor bean	Naturalized	No
FABACEAE	LEGUME FAMILY		
<i>Acmispon glaber</i>	deerweed, California broom	Native	No
<i>Acmispon maritimus</i> var. <i>maritimus</i>	coastal lotus	Native	No
<i>Astragalus brauntonii</i>	Braunton's milkvetch	Native	Yes; 1B.1, FE
<i>Astragalus trichopodus</i> var. <i>phoxus</i>	Antisell milkvetch	Native	No
<i>Lupinus longifolius</i>	long leaf bush lupine	Native	No
<i>Medicago sativa</i>	alfalfa	Naturalized	No
FAGACEAE	OAK FAMILY		
<i>Quercus agrifolia</i>	coast live oak, encina	Native	No
<i>Quercus berberidifolia</i>	scrub oak	Native	No
GERANIACEAE	GERANIUM FAMILY		
<i>Erodium cicutarium</i>	redstem filaree	Naturalized	No
GROSSULARIACEAE	GOOSEBERRY FAMILY		
<i>Ribes speciosum</i>	fuchsia-flowered gooseberry	Native	No
HYDROPHYLLACEAE	WATERLEAF FAMILY		
<i>Phacelia brachyloba</i>	short lobed phacelia	Native	No
<i>Phacelia cicutaria</i> var. <i>hispida</i>	caterpillar phacelia	Native	No
<i>Phacelia distans</i>	common phacelia	Native	No
JUGLANDACEAE	WALNUT FAMILY		
<i>Juglans californica</i>	Southern California black walnut	Native	Yes; 4.2
LAMIACEAE	MINT FAMILY		
<i>Marrubium vulgare</i>	white horehound	Naturalized	No
<i>Salvia apiana</i>	white sage	Native	No
<i>Salvia leucophylla</i>	purple sage	Native	No
<i>Salvia mellifera</i>	black sage	Native	No
<i>Salvia spathacea</i>	California hummingbird sage	Native	No
<i>Stachys rigida</i> var. <i>quercetorum</i>	rough hedge nettle	Native	No
LAURACEAE	LAUREL FAMILY		

<i>Umbellularia californica</i>	California bay	Native	No
MALVACEAE	MALLOW FAMILY		
<i>Malacothamnus fasciculatus</i>	chaparral mallow	Native	No
MYRSINACEAE	MYRSINE FAMILY		
<i>Lysimachia arvensis</i>	scarlet pimpernel	Naturalized	No
ONAGRACEAE	EVENING-PRIMROSE FAMILY		
<i>Epilobium canum</i>	California fuchsia	Native	No
OROBANCHACEAE	BROOMRAPE FAMILY		
<i>Cordylanthus rigidus</i> subsp. <i>setigerus</i>	bristly bird's beak	Native	No
PAPAVERACEAE	POPPY FAMILY		
<i>Eschscholzia californica</i>	California poppy	Native	No
PHRYMACEAE	LOPSEED FAMILY		
<i>Diplacus longiflorus</i>	southern bush monkeyflower	Native	No
PLANTAGINACEAE	PLANTAIN FAMILY		
<i>Keckiella cordifolia</i>	heart leaved keckiella	Native	No
PLATANACEAE	SYCAMORE FAMILY		
<i>Platanus racemosa</i>	western sycamore	Native	No
POLEMONIACEAE	PHLOX FAMILY		
<i>Allophyllum glutinosum</i>	sticky false gilia	Native	No
POLYGONACEAE	BUCKWHEAT FAMILY		
<i>Eriogonum cinereum</i>	coastal wild buckwheat	Native	No
<i>Eriogonum fasciculatum</i>	California buckwheat	Native	No
<i>Pterostegia drymarioides</i>	fairy mist	Native	No
RANUNCULACEAE	BUTTERCUP FAMILY		
<i>Clematis lasiantha</i>	chaparral clematis	Native	No
RHAMNACEAE	BUCKTHORN FAMILY		
<i>Ceanothus megacarpus</i> var. <i>megacarpus</i>	bigpod ceanothus	Native	No
<i>Ceanothus spinosus</i>	greenbark ceanothus	Native	No
<i>Rhamnus ilicifolia</i>	hollyleaf redberry	Native	No
ROSACEAE	ROSE FAMILY		

<i>Adenostoma fasciculatum</i>	chamise, greasewood	Native	No
<i>Cercocarpus betuloides</i> var. <i>betuloides</i>	birch-leaf mountain-mahogany	Native	No
<i>Heteromeles arbutifolia</i>	toyon	Native	No
RUBIACEAE	MADDER FAMILY		
<i>Galium angustifolium</i> subsp. <i>angustifolium</i>	narrow leaved bedstraw	Native	No
<i>Galium nuttallii</i> subsp. <i>nuttallii</i>	climbing bedstraw	Native	No
SOLANACEAE	NIGHTSHADE FAMILY		
<i>Datura wrightii</i>	Jimsonweed	Native	No
<i>Nicotiana glauca</i>	tree tobacco	Naturalized	No
<i>Solanum umbelliferum</i>	blue witch	Native	No
VERBENACEAE	VERVAIN FAMILY		
<i>Verbena lasiostachys</i> var. <i>lasiostachys</i>	vervain	Native	No
MONOCOTS			
AGAVACEAE	CENTURY PLANT FAMILY		
<i>Chlorogalum pomeridianum</i>	soap plant	Native	No
<i>Hesperoyucca whipplei</i>	Whipple's yucca	Native	No
ASPHODELACEAE	ASPHODEL FAMILY		
<i>Asphodelus fistulosus</i>	asphodel	Naturalized	No
LILIACEAE	LILY FAMILY		
<i>Calochortus catalinae</i>	Catalina mariposa lily	Native	Yes; 4.2
<i>Calochortus clavatus</i> var. <i>clavatus</i>	club-haired mariposa lily	Native	Yes; 4.3
<i>Calochortus plummerae</i>	Plummer's mariposa lily	Native	Yes; 4.2
<i>Calochortus splendens</i>	splendid mariposa lily	Native	No
MELANTHACEAE	FALSE-HELLEBORE FAMILY		
<i>Toxicoscordion fremontii</i>	Fremont's death-camas	Native	No
POACEAE	GRASS FAMILY		
<i>Avena barbata</i>	slender wild oat	Naturalized	No
<i>Bromus diandrus</i>	ripgut grass	Naturalized	No
<i>Bromus hordeaceus</i>	soft chess	Naturalized	No
<i>Bromus rubens</i>	red brome	Naturalized	No
<i>Cynodon dactylon</i>	Bermuda grass	Naturalized	No

<i>Elymus condensatus</i>	giant wild-rye	Native	No
<i>Hordeum murinum</i>	wall barley	Naturalized	No
<i>Melica imperfecta</i>	little California melica	Native	No
<i>Pennisetum setaceum</i>	crimson fountain grass	Naturalized	No
<i>Poa secunda</i> subsp. <i>secunda</i>	one-sided blue grass	Native	No
<i>Stipa lepida</i>	foothill needle grass	Native	No
<i>Stipa miliacea</i> var. <i>miliacea</i>	smilo grass	Naturalized	No
<i>Stipa pulchra</i>	purple needle grass	Native	No

THEMIDACEAE

BRODIAEA FAMILY

<i>Bloomeria crocea</i> var. <i>crocea</i>	common goldenstar	Native	No
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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)

<p>Rank 1A: Presumed extirpated in California and either Rare or Extinct elsewhere.</p> <p>Rank 1B: Rare, threatened, or endangered throughout their range.</p> <p>Rank 2A: Presumed extirpated in California, but more common elsewhere.</p> <p>Rank 2B: Rare, threatened, or endangered in California, but more common in other states.</p> <p>Rank 3: Plant species for which additional information is needed before rarity can be determined.</p> <p>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.</p> <p>Source: ESA 2022.</p>	<p><u>New Threat Code extensions and their meanings:</u></p> <p>1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)</p> <p>2 Fairly endangered in California (20-80% occurrences threatened)</p> <p>3 Not very endangered in California (<20% of occurrences threatened or no current threats known)</p>
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APPENDIX C2 – BLUEWATER RESIDENCE

Faunal Compendium

Scientific Name	Common Name	Special-status?
VERTABRATES		
Reptiles		
<i>Scleropus occidentalis</i>	western fence lizard	No
<i>Uta stansburiana</i>	common side-blotched lizard	No
Birds		
<i>Aphelocoma californica</i>	California scrub-jay	No
<i>Cathartes aura</i>	turkey vulture	No
<i>Chamaea fasciata</i>	wrenit	No
<i>Haemorhous mexicanus</i>	house finch	No
<i>Larus californicus</i>	California gull	No
<i>Melospiza crissalis</i>	California towhee	Yes ¹
<i>Thryomanes bewickii</i>	Bewick's wren	No
<i>Zenaidura macroura</i>	mourning dove	No
Mammals		
<i>Canis latrans</i>	coyote	No
<i>Odocoileus hemionus</i>	mule deer	No
<i>Ostospermophilus beecheyi</i>	California ground squirrel	No
<i>Urocyon cinereoargenteus</i>	gray fox	No
INVERTABRATES		
<i>Pieris rapae</i>	cabbage white	No

Key to Species Listing Status Codes			
*Non-native or Invasive Species			
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		

¹ Los Angeles County Bird Watchlist, Los Angeles County's Sensitive Bird Species, Los Angeles Audubon Society
<<https://planning.lacounty.gov/site/sea/wp-content/uploads/2018/08/LA-Countys-Sensitive-Bird-Species.pdf>>

APPENDIX D

Photographic Log



Photograph 1: Overview of APN 4457-002-053 and the existing driveway, facing west. Photo depicts greenbark ceanothus shrubland association and California walnut/greenbark ceanothus woodland/forest association located within the parcel.



Photograph 2: View of southern boundary of APN 4457-002-053 from the southeast corner of the parcel, facing west. Photograph depicts ridgeline where driveway is proposed. Greenbark ceanothus shrubland association is depicted on the right side of the photograph and laurel sumac shrubland association to the left.



Photograph 3: View of California walnut/Greenbark Ceanothus Woodland Forest Association and H1 Habitat, facing east. Photo depicts H1 habitat within the center of APN 4457-002-053.



Photograph 4: View of Laurel Sumac Shrubland Association and H2 habitat, facing southeast. Photo depicts south facing slope of APN 4457-002-050 and ridgeline associated with proposed driveway.



Photograph 5: View from the center of APN 4457-002-053, facing east. Photo depicts eastern portion of APN 4457-002-053 and the adjacent ridgeline associated with the driveway.



Photograph 6: View of greenbark ceanothus shrubland association within center of APN 4457-002-053, facing northwest.



Photograph 7: View of laurel sumac shrubland association and laurel sumac-ashy buckwheat shrubland association along southern boundary of APN 4457-002-053, facing southeast. Photo depicts existing roadway and ridgeline associated with the proposed driveway within APN 4457-002-055 on the left side of the photograph.



Photograph 8: View of Catalina mariposa lily found within APN 4457-002-053.



Photograph 9: View of club-haired mariposa lily observed within APN 4457-002-053.



Photograph 10: View of southern California black walnut growing on north facing slopes within the study area, facing west.



Photograph 11: View of Plummer's baccharis growing off-site along existing driveway, facing south.



Photograph 12: View of Braunton's milkvetch growing off-site on upslope ridgeline, facing north.

APPENDIX E

Special-Status Species

APPENDIX E1: SPECIAL-STATUS WILDLIFE SPECIES

Common Name <i>Scientific Name</i>	Sensitivity Status ¹	Preferred Habitat/Known Distribution ²	Presence/Potential to Occur Within Biological Study Area
Invertebrates			
Clams and Mussels Pelecypoda			
<i>Western Ridged Mussel</i> <i>Gonidea angulata</i>	Federal: None State: None Local: G1, S1/S2	Primarily creeks & rivers & less often lakes. Originally in most of state, now extirpated from Central & Southern California.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Spiders and Relatives Arachnida			
Gertsch's socialchemmis spider <i>Socalchemmis gertschi</i>	Federal: None State: None Local: G1, S1	Coastal scrub. Found in only 2 localities: Brentwood and Topanga Canyon	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Order Anostraca (fairy shrimp) Crustacea			
vernal pool fairy shrimp <i>Branchinecta lynchi</i>	Federal: FT State: None Local:	Limited to vernal pools in Oregon and California. Occasionally will be found in habitats other than vernal pools, such as artificial pools created by roadside ditches.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Riverside fairy shrimp <i>Streptocephalus woottoni</i>	Federal: FE State: None Local:	Endemic to western Riverside, Orange and San Diego Counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains greater than 12 inches in depth. Hatch in warm water later in the season. Typically observed January through March.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Order Orthoptera (Grasshoppers, Locusts, Crickets) Insecta			

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
Santa Monica shieldback katydid <i>Aglaothorax longipennis</i>	Federal: None State: None Local: G1G2, S1S2	Occur nocturnally in chaparral and canyon stream bottom vegetation, in the Santa Monica Mountains of Southern California. Inhabit introduced iceplant and native chaparral plants.	Low Potential. This species has a low potential to occur due to marginally suitable habitat present on site.
Santa Monica grasshopper <i>Trimerotropis occidentiloides</i>	Federal: None State: None Local: G1G2, S1S2	Known only from the Santa Monica Mountains. Found on bare hillsides and along dirt trails in chaparral.	Low Potential. This species has a low potential to occur due to marginally suitable habitat present on site.
Order Coleoptera (beetles) Insecta			
Wawona riffle beetle <i>Atractelmis wawona</i>	Federal: None State: None Local: S1S2	Aquatic; found in riffles of rapid, small to medium clear mountain streams. Strong preference for inhabiting submerged aquatic mosses.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Sandy beach tiger beetle <i>Cincindela hirticollis gravida</i>	Federal: None State: None Local:	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
globose dune beetle <i>Coelus globosus</i>	Federal: None State: None Local:	Coastal dunes; Inhabits foredunes and sand hummocks; it burrows beneath the sand surface and is most common beneath dune vegetation.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Order Lepidoptera (butterflies & moths) Insecta			
monarch butterfly – California overwintering population <i>Danaus plexippus pop. 1</i>	Federal: None State: None Local:	Wintering sites in California are associated with wind-protected groves of large trees (primarily eucalyptus or pine [<i>Pinus</i> spp.]) with nectar and water sources nearby that are generally near the coast.	Low Potential. This species has a low potential to occur due to marginally suitable habitat present on site.
Quino checkerspot butterfly <i>Euphydryas editha quino</i>	Federal: FE State: None Local:	Sunny openings within native and non-native grasslands, coastal sage scrub, open chaparral, and other open plant community types with rocky outcroppings, cryptogrammic crusts, and presence of host plant species (<i>Plantago erecta</i> , <i>P. insularis</i> , and <i>Castilleja</i>	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat or host plant species.

Common Name Scientific Name	Sensitivity Status ¹	Preferred Habitat/Known Distribution ²	Presence/Potential to Occur Within Biological Study Area
		<i>exserta</i>) and nectar sources. Hills and mesas near the coast.	
Order Hymenoptera (ants, bees, & wasps) Insecta			
Crotch bumble bee <i>Bombus crotchii</i>	Federal: None State: SCE Local: None	Open grassland and scrub habitats that support potential nectar sources such as plants within the Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae families.	Moderate Potential. This species has a moderate potential to occur due to suitable habitat present on site.
FISH			
Trout & Salmon Salmonidae			
steelhead - southern California DPS <i>Oncorhynchus mykiss irideus pop. 10</i>	Federal: FE State: None Local:	South coast flowing waters with variable temperatures. Found in streams and rivers with at least 7 inches minimum depth.	Not Expected. This species is not expected to occur within the study area due to lack of suitable aquatic habitat.
Minnows & Carp Cyprinidae			
Arroyo chub <i>Gila orcutti</i>	Federal: None State: SSC Local:	Los Angeles Basin south coastal streams. Prefers slow water stream sections with muddy or sandy bottoms. Feeds on aquatic vegetation, insects, and associated invertebrates.	Not Expected. This species is not expected to occur within the study area due to lack of suitable aquatic habitat.
Gobies Gobiidae			
tidewater goby <i>Eucyclogobius newberryi</i>	Federal: FE State: SSC Local:	Found in shallow brackish water habitats, lagoons, and lower stream reaches along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River. Require fairly still but not stagnant water and high oxygen levels.	Not Expected. This species is not expected to occur within the study area due to lack of suitable aquatic habitat.
AMPHIBIANS			

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
Spadefoot Toads Scaphiopodidae			
western spadefoot <i>Spea hammondi</i>	Federal: None State: SSC Local:	Mixed woodland, grasslands, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Prefers washes and other sandy areas with patches of brush and rocks. Rain pools or shallow temporary pools, which do not contain bullfrogs, fish, or crayfish are necessary for breeding. Perennial plants necessary for its major food-termites.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
True Toads Bufo			
arroyo toad <i>Anaxyrus californicus</i>	Federal: FE State: SSC Local:	Gravelly or sandy washes, stream and river banks, and arroyos where flow rates are great enough to keep silt and clay suspended. Found in desert wash, riparian scrub, riparian woodland, south coast flowing waters, and south coast standing waters. Shallow sandy pools bordered sand and gravel flood terraces are needed for breeding.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
True Frogs Rana			
California red-legged frog <i>Rana draytoni</i>	Federal: FT State: SSC Local:	Aquatic habitats including pools and backwaters within streams and creeks, ponds, marshes, springs, sag ponds, dune ponds and lagoons.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
REPTILES			
Box & Water Turtles Emydidae			
western pond turtle <i>Emys marmorata</i>	Federal: None State: SSC Local:	Known to occur in slow-moving permanent or intermittent streams, ponds, small lakes, rivers, streams, marshes, irrigation ditches with abundant vegetation, reservoirs with emergent basking sites, and either rocky	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Preferred Habitat/Known Distribution ²	Presence/Potential to Occur Within Biological Study Area
		or muddy bottoms. In woodland, forest, or grassland habitats. In creeks that pool to shallower areas and with logs, rocks, cattail mats, and/or exposed banks for basking are required. Could enter brackish or even seawater. Adjacent uplands used during winter.	
Spiny Lizards Phrynosomatidae			
coast horned lizard <i>Phrynosoma blainvillii</i>	Federal: None State: SSC Local:	Prefers sandy riparian and sage scrub habitats but also occurs in valley-foothill hardwood, conifer, pine-cypress, juniper and annual grassland habitats below 6,000 feet, open country, especially sandy areas, washes, flood plains, and windblown deposits. Requires open areas for sunning, bushes and loose soil for cover and abundant supply of harvester ants.	Moderate Potential. This species has a moderate potential to occur due to suitable habitat present on site.
Whiptails & relatives Teiidae			
coastal western whiptail <i>Aspidoscelis tigris stejnegeri</i>	Federal: None State: SSC Local:	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky.	Moderate Potential. This species has a moderate potential to occur due to suitable habitat present on site.
Legless Lizards Anniellidae			
southern California legless lizard [=silvery legless lizard] <i>Anniella stebbinsi</i> [= <i>Anniella pulchra</i>]	Federal: None State: SSC Local:	Occurs in moist warm loose soil with plant cover. Moisture is essential. Occurs in sparsely vegetated areas of beach/coastal dunes, chaparral, pine-oak woodlands, desert scrub, sandy washes, and stream terraces with sycamores, cottonwoods, or oaks. Leaf litter under trees and bushes in sunny areas and dunes stabilized with bush lupine and mock heather often indicate suitable habitat. Often can be found under surface objects such as rocks, boards, driftwood, and logs. Can also be	Moderate Potential. This species has a moderate potential to occur due to suitable habitat present on site.

Common Name <i>Scientific Name</i>	Sensitivity Status ¹	Preferred Habitat/Known Distribution ²	Presence/Potential to Occur Within Biological Study Area
		found by gently raking leaf litter under bushes and trees. Sometimes found in suburban gardens in Southern California.	
<i>Egg-Laying Snakes</i> <i>Colubridae</i>			
San Bernardino ringneck snake <i>Diadophis punctatus modestus</i>	Federal: None State: None Local:	Most common in open, relatively rocky areas within valley-foothill, mixed chaparral, and annual grass habitats. Often in somewhat moist microhabitats near intermittent streams. Avoids moving through open or barren areas by restricting movements to areas of surface litter or herbaceous vegetation.	Moderate to High Potential. This species has a moderate to high potential to occur due to suitable mesic habitat providing moist conditions present on site.
<i>Live-Bearing Snakes</i> <i>Natricidae</i>			
two-striped garter snake <i>Thamnophis hammondi</i>	Federal: None State: SSC Local:	Habitat includes marsh and swamp, riparian scrub, riparian woodland, and wetland. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
BIRDS			
<i>Grebes</i> <i>Podicipedidae</i>			
<i>Clark's grebe</i> <i>Aecmophorus clarkii</i>	Federal: BCC State: None Local:	Habitat includes freshwater lakes and marshes whose edges have emergent vegetation such as reeds and rushes. Nonbreeding birds are found in both freshwater and along saltwater coasts.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
<i>New World Vultures</i> <i>Cathartidae</i>			
turkey vulture <i>Cathartes aura</i>	Federal: None State: None Local: LACSBL Watch List	Highly migratory species that forages over a wide ranges of habitats as long as carrion is present. Nests in secluded rocky outcrops away from human activity.	Observed. This species was observed within the study area during site survey. One bird was detected audibly within the BSA.

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
Hawks, Kites, Harriers, & Eagles Accipitridae			
Cooper's hawk <i>Accipiter cooperii</i>	Federal: None State: WL Local:	Inhabits cismontane woodland, riparian forest, riparian woodland, upper montane coniferous forest, or other forest habitats near water. Nests and forages near open water or in riparian vegetation.	Low Potential. This species has a low potential to occur due to marginally suitable habitat present on site.
golden eagle <i>Aquila chrysaetos</i>	Federal: BGEPA, BCC State: FP, WL Local:	Known to live in open and semi-open country featuring native vegetation across most of the Northern Hemisphere. They avoid developed areas and uninterrupted stretches of forest. They are found primarily in mountains up to 12,000 feet, Canyonlands, rimrock terrain, and riverside cliffs and bluffs. Nest on cliffs and steep escarpments in grassland, chaparral, shrubland, forest, and other vegetated areas. Forages for mammalian prey in grasslands, coastal sage scrub, chaparral, oak savannahs, open coniferous forest, and over open areas	Low Potential. This species has a low potential to occur due to marginally suitable habitat present on site.
Swainson's hawk <i>Buteo swainsoni</i>	Federal: BCC State: ST Local: LACSBL Part II	Found in Great Basin grassland, riparian forest, riparian woodland, valley and foothill grassland. Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Falcons Falconidae			
American peregrine falcon <i>Falco peregrinus anatum</i>	Federal: Delisted, BCC State: Delisted; FP Local:	Known to occur near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
<i>Plovers & relatives</i> <i>Charadriidae</i>			
western snowy plover <i>Charadrius alexandrinus nivosus</i>	Federal: FT, BCC State: SSC Local:	Found in Great Basin standing waters, sand shore, wetland. Sandy beaches, salt pond levees & shores of large alkali lakes. Requires sandy, gravelly, or friable soil substrate for nesting.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
<i>Sandpipers & relatives</i> <i>Scolopacidae</i>			
Black turnstone <i>Arenaria melanocephala</i>	Federal: BCC State: None Local:	Breeds in Alaska. Winters along the pacific coast. Found among piles of kelp at the high-tide line looking for flies, fish eggs and shellfish.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
black tern <i>Chlidonias niger</i>	Federal: None State: SSC Local:	Freshwater lakes, ponds, marshes, and flooded agricultural fields. Found in coastal lagoons and estuaries during migration.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
short-billed dowitcher <i>Limnodromus griseus</i>	Federal: BCC State: None Local:	Breed in the taiga shield ecotone. Wintering birds can be found in saltwater and brackish environments, especially estuaries and lagoons with tidal activity and abundant shallows.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
marbled godwit <i>Limosa fedoa</i>	Federal: BCC State: None Local:	Breeds in shortgrass prairies near wetlands in the northern Great Plains and Canada. Winters along the Pacific coast. On wintering grounds, they forage and rest along coastal mudflats, estuaries, and sandy beaches.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
California least tern <i>Sternula antillarum browni</i>	Federal: FE State: SE, FP Local: LACSBL Part II	Known to occur in alkali playas and coastal dune and beach habitats. Nests along the coast from San Francisco Bay south to northern Baja California. Colonial breeder on bare or sparsely vegetated, flat substrates: sand beaches, alkali flats, landfills, or paved areas.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Willet <i>Tringa semipalmata</i>	Federal: BCC State: None Local:	During the breeding season, western Willets occur far inland, where they nest near marshes and other wetlands, prairie pothole ponds, and wet fields.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
		Birds winter along both the Pacific and Atlantic coasts.	
Black skimmer <i>Rynchops niger</i>	Federal: None State: SSC Local:	Inhabits coastal beaches and islands near oceans or Gulf of Mexico; occasionally seen inland, especially in sites such as Salton Sea.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Oystercatchers Haematopodidae			
Black Oystercatcher <i>Hamatopus bachmani</i>	Federal: BCC State: None Local:	Inhabits coastal beaches and islands in view of the Pacific Ocean or adjacent bays. Nest sites include shelly, gravelly, or sandy beaches.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Auklets, Puffins, & relatives Alcidae			
marbled murrelet <i>Brachyramphus marmoratus</i>	Federal: FT State: SE Local:	Nests in old-growth redwood-dominated forests, up to six miles inland, often in Douglas-fir.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
True Owls Strigidae			
burrowing owl <i>Athene cunicularia</i>	Federal: BCC State: SSC Local: LACSBL Part II	Inhabits coastal prairie, coastal scrub, Great Basin scrub, Mojavean desert scrub, Sonoran Desert scrub, annual and perennial grasslands, bare ground, and disturbed habitats characterized by low-growing vegetation. A subterranean nester dependent upon burrowing mammals, particularly the California ground squirrel.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Hummingbirds Trochilidae			
Allen's hummingbird <i>Selasphorus sasin</i>	Federal: BCC State: None Local: LACSBL Watch List	Common in coastal forest, woodland, scrub, and chaparral from sea level to 1000 feet along the west coast.	High Potential. This species has a high potential to occur due to presence of suitable habitat.
Tits, Chickadees, Titmice Paridae			

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
Oak titmouse <i>Baeolophus inornatus</i>	Federal: BCC State: None Local: LACSBL Watch List	Year round resident of the Pacific slope. Live mostly in warm, open, dry oak-pine woodlands. Will use scrub oaks or other brush as long as woodlands are nearby.	High Potential. This species has a high potential to occur due to presence of suitable habitat.
Woodpeckers Picidae			
Lewis's woodpecker <i>Melanerpes lewis</i>	Federal: BCC State: None Local: LACSBL Watch List	Inhabits open ponderosa pine forests, woodlands near streams, oak woodlands, pinyon-juniper woodlands, orchards, agricultural areas with scattered trees and burned forests of the interior, rare on coast.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Tyrant Flycatchers Tyrannidae			
southwestern willow flycatcher <i>Empidonax traillii eximius</i>	Federal: FE State: SE Local: LACSBL Part II	For nesting, species requires dense riparian habitats (cottonwood/willow and tamarisk vegetation) with microclimatic conditions dictated by the local surroundings. Saturated soils, standing water, or nearby streams, pools, or cienegas are a component of nesting habitat that also influences the microclimate and density vegetation component. Habitat not suitable for nesting may be used for migration and foraging. Recurrent flooding and a natural hydrograph are important to withstand invading exotic species (tamarisk).	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Vireos Vireonidae			
least Bell's vireo <i>Vireo bellii pusillus</i>	Federal: FE State: SE, SSC Local: LACSBL Part II	Known to occur in riparian forest, scrub, and woodland habitats. Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2,000 feet. Highly territorial and nests primarily in willow, mule fat, or mesquite habitats.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
Swallows Hirundinidae			
bank swallow <i>Riparia riparia</i>	Federal: None State: ST Local: LACSBL Part II	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Parrotbill Paradoxornithidae			
wrentit <i>Chamaea fasciata</i>	Federal: BCC State: None Local: LACSBL Watch List	Known to occur in chaparral, oak woodlands, and scrub throughout California.	High Potential. This species has a high potential to occur due to presence of suitable habitat.
Gnatcatchers Poliophtidae			
coastal California gnatcatcher <i>Poliophtila californica californica</i>	Federal: FT State: SSC Local: LACSBL Part II	Species is an obligate, permanent resident of coastal sage scrub habitats dominated by California sagebrush and flat-topped buckwheat, mainly on cismontane slopes below 1,500 feet in elevation. Low coastal sage scrub in arid washes, on mesas and slopes.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Sparrows Passerellidae			
southern California rufous-crowned sparrow <i>Aimophila ruficeps canescens</i>	Federal: None State: WL Local: LACSBL Watch List	Known to frequent relatively steep, often rocky hillsides with grass and forb species. Resident in southern California coastal sage scrub and mixed chaparral habitats.	High Potential. This species has a high potential to occur due to presence of suitable habitat.
California towhee <i>Melozone crissalis</i>	Federal: None State: None Local: LACSBL Watch List	California brush, chaparral, open woodlands, and along streams adjacent to desert slopes. Found throughout the state.	Observed. This species was observed within the study area during site survey. One bird was detected audibly within the BSA.

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
Blackbirds Icteridae			
tricolored blackbird <i>Agelaius tricolor</i>	Federal: None State: ST; SSC Local: LACSBL Part II	Known to occur in freshwater marsh, marsh, swap, and wetland. Highly colonial species, most numerous in Central Valley and vicinity. Requires open water, protected nesting substrate, and foraging area with insect prey within a few kilometers of the colony.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Finches Fringillidae			
Lawrence's goldfinch <i>Spinus lawrencei</i>	Federal: BCC State: None Local:	Occurs in valley foothill hardwood, valley foothill hardwood-conifer, desert riparian, palm oasis, pinyon-juniper and lower montane habitats	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Wood-Warblers Parulidae			
common yellowthroat <i>Geothlypis trichas</i>	Federal: BCC State: None Local:	Found in riparian forest, scrub, and woodland. Riparian plant associations in close proximity to water throughout Southern California.	Low Potential. This species has a low potential to occur due to marginally suitable habitat present on site.
MAMMALS			
Leaf-Nosed Bats Phyllostomidae			
California leaf-nosed bat <i>Macrotus californicus</i>	Federal: None State: SSC Local:	Preferred habitats are caves, mines, and rock shelters, mostly in Sonoran desert scrub.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Evening Bats Vespertilionidae			
pallid bat <i>Antrozous pallidus</i>	Federal: None State: SSC Local:	Occurs in a wide variety of habitats including chaparral, coastal scrub, desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, riparian woodland, Sonoran Desert scrub, upper montane coniferous	Moderate Potential. This species has a moderate potential to occur due to suitable rocky roosting and foraging habitat present on site.

Common Name <i>Scientific Name</i>	Sensitivity Status ¹	Preferred Habitat/Known Distribution ²	Presence/Potential to Occur Within Biological Study Area
		forest, valley and foothill grasslands. Most common in open, dry habitats with rocky areas for roosting. For roosting, prefers rocky outcrops, cliffs and crevices with access to open habitats for foraging. Roosts must protect species from high temperatures. Very sensitive to disturbance of roosting sites.	
spotted bat <i>Euderma maculatum</i>	Federal: None State: SSC Local:	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
western red bat <i>Lasiurus blossevillii</i>	Federal: None State: SSC Local:	Prefers edges or habitat mosaics that have trees for roosting and open areas for foraging. Requires nearby water source. Roosting habitat includes forests and woodlands from sea level up through mixed conifer forests. Feeds over a wide variety of habitats including grasslands, shrublands, open woodlands and forests, and croplands. Not found in desert areas.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
hoary bat <i>Lasiurus cinereus</i>	Federal: None State: None Local:	Inhabits broadleaved upland forest, cismontane woodland, lower montane coniferous forest, and north coast coniferous forest.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
western small-footed myotis <i>Myotis ciliolabrum</i>	Federal: None State: None Local:	Inhabits deserts, semi-deserts, and desert mountains, and roosts in crevices and cracks in canyon walls, caves, mine tunnels, behind loose tree bark, or in abandoned houses.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Yuma myotis <i>Myotis yumanensis</i>	Federal: None State: None Local:	Occurs in lower montane coniferous forest, riparian forest, riparian woodland, and upper montane coniferous forest. Roosts in buildings, mines, caves, or crevices, but has also been seen roosting in abandoned swallow nests and under bridges.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status¹	Preferred Habitat/Known Distribution²	Presence/Potential to Occur Within Biological Study Area
Free-Tailed Bats Molossidae			
western mastiff bat <i>Eumops perotis californicus</i>	Federal: None State: SSC Local:	Known to occur in habitat consisting of extensive open areas within dry desert washes, flood plains, chaparral, cismontane oak woodland, coastal scrub, open ponderosa pine forest, and grasslands. Roosts primarily in crevices in rock outcrops and buildings.	Moderate Potential. This species has a moderate potential to occur due to suitable rocky roosting and foraging habitat present on site.
Mice, Rats, & Voles Muridae			
San Diego desert woodrat <i>Neotoma lepida intermedia</i>	Federal: None State: SSC Local:	Found in a variety of coastal scrub, desert scrub, chaparral, cactus, and rocky habitats. Nests primarily against rock outcroppings, boulders, cacti, or areas of dense undergrowth.	Low Potential. This species has a low potential to occur due to marginally suitable habitat present on site.
Weasels & relatives Mustelidae			
American badger <i>Taxidea taxus</i>	Federal: None State: SSC Local:	Found in a variety of habitats, including alkali marsh, desert wash, Great Basin scrub, marsh and swamp, meadow and seep, Mojavean desert scrub, riparian scrub, riparian woodland, valley and foothill grassland. Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils, and open, uncultivated ground to dig burrows. Preys on burrowing rodents.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Cats & relatives Felidae			
mountain lion <i>Puma concolor</i>	Federal: None State: SCE Local:	Prefers large, unfragmented habitats such as mountains, forests, and deserts.	Observed. This species has been observed within the study area during previous surveys of the site.

¹ Sensitivity Status

Federal (USFWS)

BGEPA	<i>Bald and Golden Eagle Protection Act</i>
FE	<i>Federally Endangered</i>
FT	<i>Federally Threatened</i>
FPE	<i>Federally Proposed as Endangered</i>
FPT	<i>Federally Proposed as Threatened</i>

State

FP	<i>Fully Protected</i>
SE	<i>State Endangered</i>
ST	<i>State Threatened</i>
SCE	<i>State Candidate as Endangered</i>
SCT	<i>State Candidate as Threatened</i>
SSC	<i>State Species of Special Concern</i>
WL	<i>Watch List</i>
WBWG	<i>Western Bat Working Group Regional Priority Matrix Species</i>

Local Include the local sensitivity rankings as applicable to the project.

Los Angeles County Sensitive Bird List (LACSBL)

² Sources for Preferred Habitat:

CDFW. 2021a. California Natural Diversity Database (CNDDDB). RareFind, Version 5.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Available online at: <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed on September 14, 2021.

CDFW. 2021b. California Wildlife Habitat Relationships. Available online at: <https://wildlife.ca.gov/Data/CWHR/Life-History-and-Range>. Accessed on September 14, 2021.

eBird. 2021. Species Maps. Available online at: <https://ebird.org/map>. Accessed on September 14, 2021.

iNaturalist. 2021. Observations. Available online at: <https://www.inaturalist.org/observations>. Accessed on September 14, 2021.

Source: ESA, 2022.

APPENDIX E2: SPECIAL-STATUS PLANT SPECIES

Common Name <i>Scientific Name</i>	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Study Area
BRYOPHYTES (Mosses)				
Bryaceae (Moss Family)				
California screw moss <i>Tortula californica</i>	Federal: None State: S2 Local: 1B.2	N/A	Chenopod scrub, Valley and foothill grassland; grows within sandy soils. Elevation range extends from 10-1,640 meters. Found in Los Angeles, Riverside, Kern, Modoc, Monterey, Santa Barbara, San Diego, and Ventura counties,	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
PTERIDOPHYTES (FERNS)				
ASPLENIACEAE (Spleenwort Family)				
western spleenwort <i>Asplenium vespertinum</i>	Federal: None State: S3.2 Local: 4.2	Feb.-Jun.	Rocky, chaparral, cismontane woodland, coastal scrub. Elevation range extends from 180-1,000 meters. Found in Los Angeles, Riverside, San Diego, Orange, San Bernardino, Ventura counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Thelypteridaceae (Thelypteris Family)				
Sonoran maiden fern <i>Thelypteris puberula</i> var. <i>sonorensis</i>	Federal: None State: None Local: 2B.2	Jan.-Sep.	Meadows and seeps; grows along streambanks and within seeps. Elevation range extends from 50-610 meters. Found in Los Angeles, Riverside, Santa Barbara, San Bernardino counties, Arizona, Baja California, Sonora Mexico.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Study Area
ANGIOSPERMS (DICOTYLEDONS)				
Apiaceae (Carrot Family)				
western bristly scaleseed <i>Spermolepis lateriflora</i>	Federal: None State: None Local: 2A	Mar.-Jun.	Rocky or sandy areas in Sonoran Desert scrub Elevation range extends from 365-670 meters. Found in Los Angeles and San Diego.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Asteraceae (Sunflower Family)				
Malibu baccharis <i>Baccharis malibuensis</i>	Federal: None State: None Local: 1B.1	Aug.	Chaparral, cismontane woodland, coastal scrub, riparian woodland. Elevation range extends from 150-305 meters. Found in Los Angeles and Orange.	Low Potential. This species has a low potential to occur within the study area due to marginally suitable habitat on site.
Plummer's baccharis <i>Baccharis plummerae</i> ssp. <i>plummerae</i>	Federal: None State: None Local: 4.3	May-Oct.	Rocky areas in broadleafed upland forest, Chaparral, Cismontane woodland, Coastal scrub Elevation range extends from 5-425 meters. Found in Los Angeles, Santa Barbara, and Ventura Counties.	Observed. This species was observed immediately outside the study area and is presumed to occur within the study area. Several plants were observed along the road in the center of the project (APN 4457-002-055).
Santa Susana tarplant <i>Deinandra minthornii</i>	Federal: None State: Rare Local: 1B.2	Jul.-Nov.	Chaparral, coastal scrub; rocky. Elevation range extends from 280-760 meters. Found in Los Angeles and Ventura counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
decumbent goldenbush <i>Isocoma menziesii</i> var. <i>decumbens</i>	Federal: None State: None Local: 1B.2	Apr.-Nov.	Chaparral and coastal scrub; sandy, often in disturbed areas. Elevation range extends from 10-135 meters. Found in Los Angeles, Orange, San Diego counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Study Area
Coulter's goldfields <i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Federal: None State: None Local: 1B.1 MSHCP (d)	Feb.-Jun.	Salt-marsh, playas, vernal-pools, coastal; usually occurs in wetlands but occasionally in non-wetlands. Elevation range extends from 1-1,220 meters. Found in Orange, Riverside, Ventura, San Diego, and possibly Los Angeles, Kern and San Bernardino counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Lyon's pentachaeta <i>Pentachaeta lyonii</i>	Federal: FE State: SE Local: 1B.1	Mar.-Jun.	Chaparral, valley and foothill grassland, coastal scrub. Edges of clearings in chaparral, usually at the ecotone between grassland and chaparral or edges of firebreaks. Elevation range extends from 30-670 meters Found in Los Angeles and Ventura Counties	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
chaparral ragwort <i>Senecio aphanactis</i>	Federal: None State: None Local: 2B.2	Jan.-Apr.	Chaparral, cismontane woodland, coastal scrub; sometimes alkaline soil. Elevation range extends from 15-800 meters. Found in Los Angeles, Riverside, Orange, San Diego, Santa Barbara, Ventura counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Brassicaceae (Cabbage Family)				
beach spectaclepod <i>Dithyrea maritima</i>	Federal: None State: ST Local: 1B.1	Mar.-May	Coastal dunes, coastal scrub (sandy). Elevation range extends from 3-50 meters. Found in Los Angeles, Santa Barbara, Santa Catalina Island, San Luis Obispo, San Miguel Island, San Nicolas Island, Ventura.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Gambel's water cress <i>Rorippa gambelii</i>	Federal: FE State: CT Local: 1B.1	Apr.-Oct.	Marshes or swamps. Elevation range extends from 5-330 meters.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

Common Name <i>Scientific Name</i>	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Study Area
			Found in Los Angeles, Orange, San Diego, possibly San Bernardino counties.	
Caryophyllaceae (Pink Family)				
marsh sandwort <i>Arenaria paludicola</i>	Federal: FE State: SE Local: 1B.1	May-Aug.	Marshes and swamps (freshwater or brackish)/sandy, openings Elevation range extends from 3-170 meters. Found in Los Angeles, San Bernardino, San Luis Obispo counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Chenopodiaceae (Goosefoot Family)				
Coulter's Saltbush <i>Atriplex coulteri</i>	Federal: None State: None Local: 1B.2	Mar.-Oct.	Alkaline or clay soils; coastal bluff scrub, coastal dunes, Coastal scrub, Valley and foothill grassland. Elevation range extends from 3-460 meters. Found in Los Angeles, Orange, San Diego, San Bernardino, Ventura counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
South Coast saltscal <i>Atriplex pacifica</i>	Federal: None State: None Local: 1B.2	Mar.-Oct.	Coastal bluff scrub, Coastal dunes, Coastal scrub, Playas. Elevation range extends from 0-140 meters. Found in Los Angeles, Orange, Riverside, San Diego, Ventura counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Parish's brittlescale <i>Atriplex parishii</i>	Federal: None State: None Local: 1B.1 MSHCP(d)	Jun.-Oct.	Shadscale scrub, alkali sinks, freshwater wetlands, wetland-riparian; playas, vernal pools. Elevation range extends from 25-1,900 meters. Found in Orange, Riverside, San Diego, and possibly Los Angeles and San Bernardino counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

Common Name <i>Scientific Name</i>	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Study Area
Davidson's saltscale <i>Atriplex serenana</i> var. <i>davidsonii</i>	Federal: None State: None Local: 1B.2 MSHCP(d)	Apr.-Oct.	Coastal sage scrub, wetland-riparian; coastal. Elevation range extends from 10-200 meters. Found in Orange, Riverside, San Diego, and possibly Los Angeles and San Bernardino counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Convolvulaceae (Morning-glory Family)				
Small-flowered morning-glory <i>Convolvulus simulans</i>	Federal: None State: None Local: 4.2 MSHCP	Mar.-Jul.	Clay soils, serpentinite seeps; openings in chaparral; coastal sage scrub; valley and foothill grassland. Elevation range extends from 0-305 meters. Found in Kern, Los Angeles, Riverside, Orange, San Diego, Santa Barbara counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Western dichondra <i>Dichondra occidentalis</i>	Federal: None State: None Local: 4.2	Jan.-Jul.	perennial rhizomatous herb. Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland Elevation range extends from 50-500 meters. Found in Orange, Los Angeles, San Diego, Ventura counties.	Low Potential. This species has a low potential to occur within the study area due to marginally suitable habitat on site.
Crassulaceae (Stonecrop Family)				
Blochman's dudleya <i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Federal: None State: None Local: 1B.1	Apr.-Jun.	Coastal bluff scrub, coastal scrub, valley and foothill grassland/often clay. Elevation range extends from 5-450 meters. Found in Los Angeles, Orange, Santa Barbara, Ventura counties.	Low Potential. This species has a low potential to occur within the study area due to marginally suitable habitat on site.
Agoura Hills dudleya <i>Dudleya cymosa</i> ssp. <i>agourensis</i>	Federal: None State: None Local: 1B.2	May-Jun.	Rocky, volcanic substrates in chaparral and cismontane woodland communities.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Study Area
			Elevation range extends from 200 and 500 meters. Found in Los Angeles, Ventura counties.	
marcescent dudleya <i>Dudleya cymosa</i> ssp. <i>marcescens</i>	Federal: FT State: SR Local: 1B.2	Apr.-Jul.	Rocky, volcanic substrates in chaparral communities. Elevation range extends from 150 and 520 meters. Found in Los Angeles, Ventura counties.	Low Potential. This species has a low potential to occur within the study area due to marginally suitable habitat present on site.
Santa Monica dudleya <i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	Federal: FT State: None Local: 1B.1	Mar.-Jun.	Chaparral, coastal scrub. Grows on north-facing slopes within canyons and sedimentary substrates. Elevation range extends from 210-500 meters. Found in Los Angeles, Orange counties.	Moderate Potential. This species has a moderate potential to occur within the study area and collections of the plant have been made within 1 mile of the site.
many-stemmed dudleya <i>Dudleya multicaulis</i>	Federal: None State: None Local: 1B.2 MSHCP(b)	Apr.-Jul.	Chaparral, coastal scrub, valley and foothill grassland often on clay soils. Elevation range extends from 15-790 meters. Found in Los Angeles, Orange, Riverside, San Bernardino, San Diego counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Conejo dudleya <i>Dudleya parva</i>	Federal: FT State: None Local: 1B.2	May-Jun.	Coastal scrub, valley and foothill grassland; grows on rocky and grassy slopes within clay or volcanic soils. Elevation range extends from 60-450 meters.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Fabaceae (Legume Family)				
Braunton's milk-vetch <i>Astragalus brauntonii</i>	Federal: FE State: None Local: 1B.1	Jan.-Aug.	Chaparral, coastal scrub, valley and foothill grassland; recent burns or disturbed areas, usually sandstone with carbonate layers. Elevation range extends from 4-640 meters.	Observed. This species was observed growing 200 feet upslope within an adjacent parcel (APN 4457-004-075).

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Study Area
			Found in Los Angeles, Orange, Riverside, Ventura counties.	
Ventura marsh milk-vetch <i>Astragalus pycnostachyus</i> var. <i>lanosissimus</i>	Federal: FE State: CE Local: 1B.1	Jun.-Oct.	Coastal dunes, coastal scrub, marshes and swamps (edges, coastal salt or brackish). Elevation range extends from 1-35 meters. Found in Los Angeles, Orange, Santa Barbara, and Ventura counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
coastal dunes milk-vetch <i>Astragalus tener</i> var. <i>titi</i>	Federal: FE State: CE Local: 1B.1	Mar.-May	Coastal bluff scrub (sandy), coastal dunes, coastal prairie (mesic); often vernal mesic areas. Elevation range extends from 1-50 meters. Found in Los Angeles and San Diego counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Fagaceae (Oak Family)				
Nuttall's scrub oak <i>Quercus dumosa</i>	Federal: None State: None Local: 1B.1	Feb.-Aug.	Sage scrub and chaparral; sandy clay loam or sandstone. Elevation range extends from 15-400 meters. Found in Orange, San Diego, Ventura counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Juglandaceae (Walnut Family)				
Southern California black walnut <i>Juglans californica</i>	Federal: None State: None Local: 4.2	Mar.-Aug.	Chaparral, cismontane woodland, coastal scrub, riparian woodland; alluvial. Elevation range extends from 50-900 meters. Found in Los Angeles, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, Ventura counties.	Observed. This species was observed within the study area. Many walnut trees were observed throughout the property.
Lamiaceae (Mint Family)				

Common Name <i>Scientific Name</i>	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Study Area
fragrant pitcher sage <i>Lepechinia fragrans</i>	Federal: None State: None Local: 4.2	Mar.-Oct.	Chaparral. Elevation range extends from 20-1,310 meters. Found in Los Angeles, Santa Barbara, San Bernardino, Ventura counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
white-veined monardella <i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i>	Federal: None State: None Local: 1B.3	Apr.-Dec.	Chaparral, cismontane woodland. Dry slopes. Elevation range extends from 50-1,525 meters. Found in Los Angeles, Santa Barbara, Ventura counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Malvaceae (Mallow Family)				
salt spring checkerbloom <i>Sidalcea neomexicana</i>	Federal: None State: None Local: 2.2	Mar.-Jun.	Chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas; alkaline and mesic soils. Elevation range extends from 15-1,530 meters. Found in Kern, Orange, Riverside, Ventura, San Bernardino, San Diego, possibly Los Angeles counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Onagraceae (Evening-primrose Family)				
Lewis' evening-primrose <i>Camissoniopsis lewisii</i>	Federal: None State: None Local: 3	Mar.-Jun.	Coastal bluff scrub; cistomane woodland, coastal dunes, coastal scrub; valley and foothill grassland; sandy or clay soils. Elevation range extends from 0-300 meters. Found in Los Angeles. San Diego, possibly Orange counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Study Area
Orobanchaceae (Broomrape Family)				
Salt marsh bird's beak <i>Chloropyron maritimum</i> ssp. <i>maritimum</i>	Federal: FE State: SE Local: 1B.2	May-Oct.	Coastal dunes, marshes, and swamps. Elevation range extends from 0-30 meters. Found in Los Angeles, Orange, San Diego, San Bernardino, Ventura counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Papaveraceae (Poppy Family)				
Coulter's matilija poppy <i>Romneya coulteri</i>	Federal: None State: None Local: 4.2 MSHCP(e)	Mar.-Jul.	Dry washes and canyons in sage scrub and chaparral. Elevation range extends from 0-1,200 meters. Found in Los Angeles, Orange, Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Polemoniaceae (Phlox Family)				
spreading navarretia <i>Navarretia fossalis</i>	Federal: FT State: None Local: 1B.1 MSHCP(b)	Apr.-Jun.	Coastal sage scrub, wetland-riparian; occurs almost always under natural conditions in wetlands. Elevation range extends from 30-655 meters. Found in Los Angeles, Riverside, San Diego counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Ojai navarretia <i>Navarretia ojaiensis</i>	Federal: None State: None Local: 1B.1	May-Jun.	Chaparral, coastal scrub, and valley and foothill grassland; openings in shrublands or grasslands. Elevation range extends from 275-620 meters.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Polygalaceae (Milkwort Family)				
Fish's milkwort <i>Polygala cornuta</i> var. <i>fishiae</i>	Federal: None State: None Local: 4.3	May-Aug.	Cismontane woodland, riparian woodland, chaparral; typically grows among oaks along ridges and scree	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Study Area
	MSHCP (e)		slopes and is often found along streams. Elevation range extends from 100-1,000 meters.	
Polygonaceae (Buckwheat Family)				
San Fernando Valley spineflower <i>Chorizanthe parryi</i> var. <i>fernandina</i>	Federal: FC State: FE Local: 1B.1	Apr.-Jul.	Coastal scrub (sandy), valley and foothill grassland; Elevation range extends from 150-1,220 meters. Found in Los Angeles, Ventura, possibly Orange counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Parry's spineflower <i>Chorizanthe parryi</i> var. <i>parryi</i>	Federal: None State: None Local: 1B.1	Apr.-Jun.	Openings/clearings in coastal or desert sage scrub, chaparral or interface; dry slopes or flat ground; sandy soils. Elevation range extends from 275-1,220 meters. Found in Los Angeles, Riverside, San Bernardino counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
conejo buckwheat <i>Eriogonum crocatum</i>	Federal: None State: None Local: 1B.2	Apr.-Jul.	Chaparral, coastal scrub, valley and foothill grassland; grows within conejo volcanic outcrops. Elevation range extends from 50-580 meters. Found in Ventura County.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Portulacaceae (Purslane Family)				
Brewer's calandrinia <i>Calandrinia breweri</i>	Federal: None State: None Local: 4.2	Mar.-Jun	Sandy or loamy, disturbed sites and burns; chaparral, coastal scrub. Elevation range extends from 10-1,220 meters. Found in Los Angeles, Orange, Riverside, San Bernardino, San Diego, Ventura counties.	Low Potential. This species has a low potential to occur within the study area due to marginally suitable habitat present on site.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Study Area
Ranunculaceae (Buttercup Family)				
dune larkspur <i>Delphinium parryi</i> ssp. <i>blochmaniae</i>	Federal: None State: None Local: 1B.2	Apr.-May	Chaparral, coastal dunes; found in rocky sites and coastal dunes. Elevation range extends from 0-200 meters.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Mt. Pinos larkspur <i>Delphinium parryi</i> ssp. <i>purpureum</i>	Federal: None State: None Local: 4.3	May-Jun.	Pinyon-juniper woodland, Mojavean desert scrub, chaparral. Elevation range extends from 1,000-2,600 meters.	Not Expected. This species is not expected to occur within the study area because the study area is outside the suitable elevation range for the species.
Rosaceae (Rose Family)				
island mountain-mohogany <i>Cercocarpus betuloides</i> var. <i>blancheae</i>	Federal: None State: None Local: 4.3	Feb.-May	Chaparral, closed-cone coniferous forest. Elevation range extends from 30-600 meters. Found in Los Angeles, Santa Catalina Island, Santa Cruz Island, Santa Rosa Island, and Ventura.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
mesa horkelia <i>Horkelia cuneata</i> var. <i>puberula</i>	Federal: None State: None Local: 1B.1	Feb.-Jul. (uncommonly Sep.)	Chaparral (maritime), cismontane woodland, coastal scrub/sandy or gravelly. Elevation range extends from 70-810 meters. Found in Los Angeles, Orange, San Bernardino, San Diego, Ventura, possibly Riverside counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
ANGIOSPERMS (MONOCOTYLEDONS)				
Juncaceae (Juncus)				
southwestern spiny rush <i>Juncus acutus</i> ssp. <i>leopardii</i>	Federal: None State: None Local: 4.2	Mar.-Jun.	Mesic soils in coastal dunes; alkaline seeps in meadows; coastal salt marshes and swamps. Elevation range extends from 3-900 meters.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

Common Name <i>Scientific Name</i>	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Study Area
			Found in Los Angeles, Orange, San Diego, Ventura counties.	
Liliaceae (Lily Family)				
Catalina mariposa lily <i>Calochortus catalinae</i>	Federal: None State: None Local: 4.2	Feb-Jun.	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland. Typically found in heavy soils within openings. Elevation range extends from 15-700 meters. Found in Los Angeles, Orange, Santa Barbara, San Bernardino, Ventura counties.	Observed. This species was observed within the study area. Plants were observed in bloom along ridgeline on previous surveys of the property.
club-haired mariposa lily <i>Calochortus clavatus</i> var. <i>clavatus</i>	Federal: None State: None Local: 4.3	May-Jun.	Chaparral, cismontane woodland, valley and foothill grassland, and coastal scrub; typically found growing in serpentine clay, rocky soils. Elevation range extends from 75-1,300 meters.	Observed. This species was observed within the study area. Plants were observed in flower along the ridgeline leading to the proposed project.
slender mariposa lily <i>Calochortus clavatus</i> var. <i>gracilis</i>	Federal: None State: None Local: 1B.2	Mar.-Jun.	Chaparral, coastal scrub, valley and foothill grassland; found on the valley floor within shaded canyons typically on grassy slopes. Elevation range extends from 320-1,000 meters. Found in Los Angeles, Orange, Riverside, San Bernardino, Ventura counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Plummer's mariposa lily <i>Calochortus plummerae</i>	Federal: None State: None Local: 4.2 MSHCP(e)	May-Jul.	Chaparral (openings), cismontane woodland, coastal scrub, valley and foothill grassland, granitic/rocky. Elevation range extends from 100-1,700 meters. Found in Los Angeles, Orange, Riverside, San Bernardino, Ventura counties.	Observed. This species was observed within the study area. Plants were observed on previous surveys of the property and fruiting specimen were observed during focused rare plant surveys.

Common Name Scientific Name	Sensitivity Status ¹	Flowering Period	Preferred Habitat/Known Elevation and Distribution ²	Presence/Potential to Occur Within Biological Study Area
Humboldt lily <i>Lilium humboldtii</i> ssp. <i>humboldtii</i>	Federal: None State: None Local: 4.2	Mar.-Jul.	Chaparral, Cismontane woodland, Lower montane coniferous forest Elevation range extends from 90-1,280 meters. Found in Amador, Butte, Calaveras, El Dorado, Los Angeles, Nevada, Placer, Plumas, Santa Barbara, San Diego, Sierra, Tehama, and Yuba Counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
ocellated Humboldt lily <i>Lilium humboldtii</i> ssp. <i>ocellatum</i>	Federal: None State: None Local: 4.2 MSHCP* USFS	Mar.-Jul.	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland, openings. Elevation range extends from 30-1,800 meters. Found in Los Angeles, San Bernardino, Riverside, Orange, San Diego counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Poaceae (True Grass Family)				
California Orcutt grass <i>Orcuttia californica</i>	Federal: FE State: SE Local: 1B.1 MSHCP (b)	Apr.-Aug.	Vernal pools. Elevation range extends from 15-660 meters. Found in Los Angeles, Riverside, San Diego, Ventura counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.
Ruscaceae (Ruscus Family)				
chaparral nolina <i>Nolina cismontana</i>	Federal: None State: None Local: 1B.2	May-Jul.	Xeric Diegan sage scrubs, open chaparral, coastal scrub. Generally, grows within sandstone and shale substrates and occasionally within gabbro. Elevation range extends from 140-1,275 meters. Found in Orange, Riverside, San Diego, Ventura counties.	Not Expected. This species is not expected to occur within the study area due to lack of suitable habitat.

¹ Sensitivity Status

Federal

- FE *Federally Endangered*
- FT *Federally Threatened*
- FC *Federal Candidate*
- FPE *Federally Proposed as Endangered*
- FPT *Federally Proposed as Threatened*
- FPD *Federally Proposed for Delisting*

State

- SE *State Listed as Endangered*
- ST *State Listed as Threatened*
- SCE *State Candidate for Endangered*
- SCT *State Candidate for Threatened*
- SR *State Rare*

Local

CRPR *California Rare Plant Ranks:*

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

Threat Code extensions and their meanings:

- 0.1-Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)
- 0.2-Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)
- 0.3-Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

MSHCP *Western Riverside County Multiple Species Habitat Conservation Plan covered species*

- MSHCP (a) *Surveys may be required as part of wetlands mapping per MSHCP Section 6.1.2.*
- MSHCP (b) *Surveys may be required within Narrow Endemic Plant Species survey area per MSHCP Section 6.1.3.*
- MSHCP (c) *Surveys may be required per MSHCP Section 6.3.2.*
- MSHCP (d) *Surveys may be required within Criteria Area per MSHCP Section 6.3.2.*
- MSHCP (e) *These Covered Species will be considered to be Covered Species Adequately Conserved when conservation requirements identified in species-specific conservation objectives have been met per MSHCP Section 9.0 (Table 9-3).*
- MSHCP (f) *These Covered Species will be considered to be Covered Species Adequately Conserved when a Memorandum of Understanding is executed with the Forest Service that addresses management for these species on Forest Service Land per MSHCP Table 9-3.*

² Sources for Preferred Habitat:

Calflora. 2021. Information on Wild California Plants. Available online at: <https://www.calflora.org/>. Accessed on September 14, 2021.
 CDFW. 2021. California Natural Diversity Database (CNDDDB). RareFind, Version 5.0 (Commercial Subscription). Sacramento, California: CDFW, Biogeographic Data Branch. Available online at: <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed on September 14, 2021.
 Source: *ESA, 2021.*