

Biological Resources Assessment

25531 Mulholland Hwy (APN: 4455-058-003)

Project No. R2017-004216, Permit RPPL2017006847

October 2022 (updated August 2024, November 2024, and December 2024)

Prepared For:

Randhawa c/o Don Buckner 25531 Mulholland Highway Calabasas, California 91302

Email: westlaconsulting@twc.com

Prepared By:

Matthew South -Principal Biologist – South Environmental AJ Samra – Associate Biologist – South Environmental 2061 N Los Robles Ave., #205 Pasadena, California 91104

email: msouth@southenvironmental.com

mobile: 303-818-3632

Table of Contents

1. Introduction	1
Project Description	2
Physical Characteristics	7
Methodology	10
Biological Characteristics of the Site	15
Plant Surveys	
Plant Communities	
Sensitive Environmental Resource Areas	19
Plant and Wildlife Inventories	
Special-Status Species and Natural Communities	22
Native Trees	23
Jurisdictional Features	24
Impact Analysis and Discussion	25
Regulatory Setting	
Project Impacts and Recommendations	
Conclusion	
4. Bibliography	
Figures	
Figure 1: Regional Location	3
Figure 2: Project Vicinity	
Figure 3: Proposed Development	
Figure 4: Topographic Map	
Figure 5: Soils	
Figure 6: Plant Communities	
Figure 7: SERAs as Designated by SMM LCP	
Figure 8: SERAs as Designated by South Environmental	
Figure 9: Plant Community Impacts	
I IQUIC 10. IIIDacio 10 Denas	

Appendices

Appendix A: Photograph Log

Appendix B: Flora and Fauna Compendium and CWHR Species Report

Appendix C: Special-Status Species Analysis

Appendix D: Biological Resources Assessment Checklist

Appendix E: Biologists Resumes

Appendix F: Site Plan

Introduction

This report includes the findings of a Biological Resources Assessment (BRA) conducted by South Environmental for the 25531 Mulholland Highway project located in an unincorporated area of t Los Angeles County, California. The owner proposes to construct a single-family residence on a 47.04-acre vacant parcel (Assessor's Identification Number [AIN]: 4455-058-003) in the Santa Monica Mountains (SMM). The parcel is subject to the SMM Local Coastal Program (LCP) to be reviewed by the Environmental Review Board (ERB). The purpose of this report is to support a SMM LCP Coastal Development Permit application, The scope of this report includes a description of the proposed project, methods used to assess the biological resources, the environmental setting of the project site including vegetation communities and sensitive habitats, an assessment of the potential for special-status plants and animals to occur there, and a discussion of the project's potential impacts to biological resources. This report is prepared on behalf of Mr. and Mrs. Randhawa, along with Don Buckner (contact: westlaconsulting@twc.com), by South Environmental **Biologists** Matthew South and ΑJ Samra (contact: msouth@southenvironmental.com). Table 1 below summarizes the background information for the project.

Table 1: Summary of Project Information

Project Information	
Name	25531 Mulholland Hwy Project
Address	25531 Mulholland Hwy
	Calabasas, CA 91302
AIN	4455-058-003
Applicant	Mr. and Mrs. Randhawa c/o Don Buckner
Contact Information	Email: westlaconsulting@twc.com
Project No.	R2017-004216
Permit	RPPL2017006847
Parcel Acreage	24.54 acres
Proposed Development Acreage (including fuel modification)	3.12 acres
Report Type/Date	Biological Resources Assessment/ 10-2022,
	updated 7/2023

Project Description

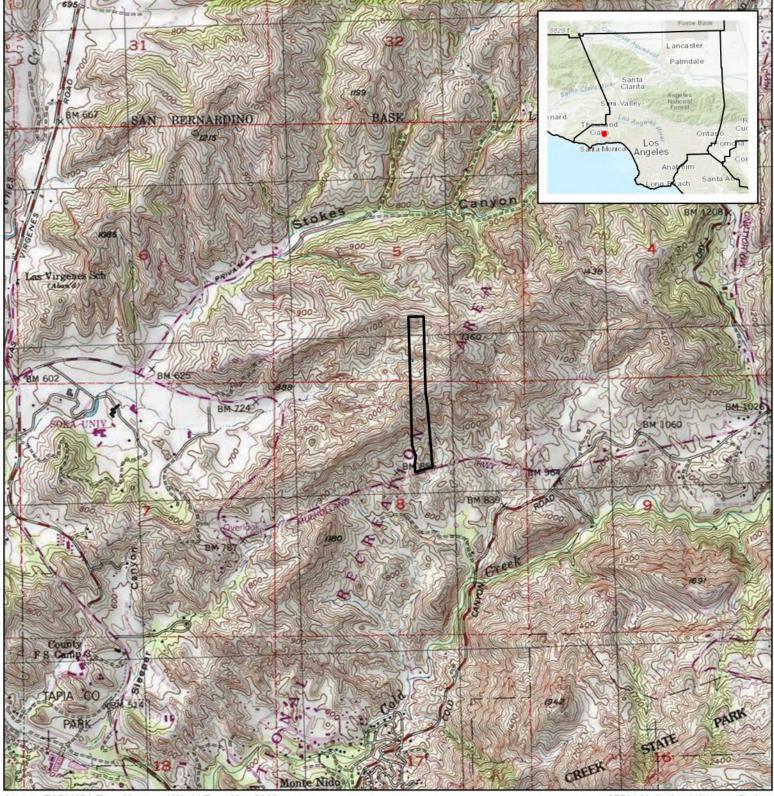
Location and Setting

The project is in an unincorporated area of Los Angeles County, approximately 1.1-mile north of the neighborhood of Monte Nido, 4.4-mile north of Pacific Coast Highway (State Route 1), 1.7mile east of Las Virgenes Road, and 3.67-miles south of U.S. Route 101. The project is within the U.S. Geological Survey (USGS) Malibu Beach 7.5 Minute Topographical Quadrangle, and within Section 8 of Township 01 South (01S) and Range 17 West (17W). The parcel address is 25531 Mulholland Hwy and is located off Mulholland Highway just before Cold Canyon Road (see Figure 1). As shown in Figure 2 below, existing housing and development are approximately 0.3 miles to the west of the parcel along Mulholland Highway, 0.2 miles south of the parcel, and 0.3 miles west of the parcel on Mulholland Highway. The remainder of the surrounding area is largely undeveloped except for dirt access roads at the south end of the property where development is proposed. According to the SMM Land Use Plan (LUP) there are two significant ridgelines on the parcel in the northern end of the parcel at the highest elevations. Hiking trails occur along the ridgelines. King Gillette Ranch Mountain Recreation Area is 1.8 miles northwest of the project parcel, Calabasas Peak State Park occurs 1.9 miles to the northwest, and Cold Creek West Preserve occurs 0.3 miles to the southeast. Representative photographs of the parcel are attached in Appendix A.

Proposed Development

The proposed development covers 3.72 acres of the parcel and off-site areas within the Fuel Modification Zone shown in Figure 3 below and includes a main house, garage, 390-foot driveway with Fire Department turnaround, pool, patios and planters, a septic system, and associated grading and slope control on the steep slopes adjacent to the development. The total project footprint is 0.98-acres. The new proposed fuel modification zone extends 200-feet from the proposed house and garage and is a requirement of the Los Angeles County Fire Department. New fuel modification areas proposed include 2.71-acres that is largely onsite (2.11-acres) and partially onto the eastern adjacent parcel (0.60-acres). According to the County of Los Angeles Department of Regional Planning (LADRP) SMM Local Implementation Program (LIP) that was amended in February 2018¹, fuel modification includes vegetation management within 200 feet of buildings or other structures on the parcel (but not off the parcel).

¹ County of Los Angeles Department of Regional Planning (LADRP). Amended 2018. Santa Monica Mountains Local Implementation Program. County of Los Angeles: Los Angeles, California.



Source: ESRI USA Topo Maps and World Topo Map 2022

25531 Mulholland Highway Project

Figure 1. Regional Location

Project Parcel: AIN 4455-058-003

Project Parcel AIN 4455-058-003 is within unincorporated Los Angeles County on the USGS Malibu 7.5-minute quadrangle map in Sections 5 and 8 of Township 01 South and Range 17 West

Center Coordinate (Decimal Degrees): Latitude: 34.1025841N Longitude: -118.6834569W

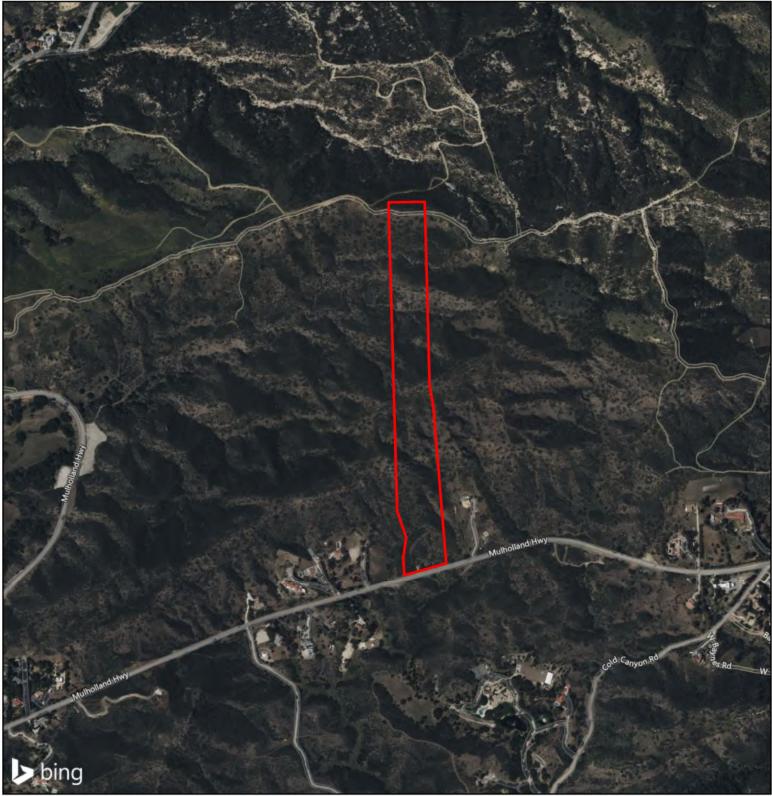


0 1,000 2,000 Feet

Scale: 1:24,000







Source: BING Aerial Imagery 2022

25531 Mulholland Highway Project

Figure 2. Project Vicinity

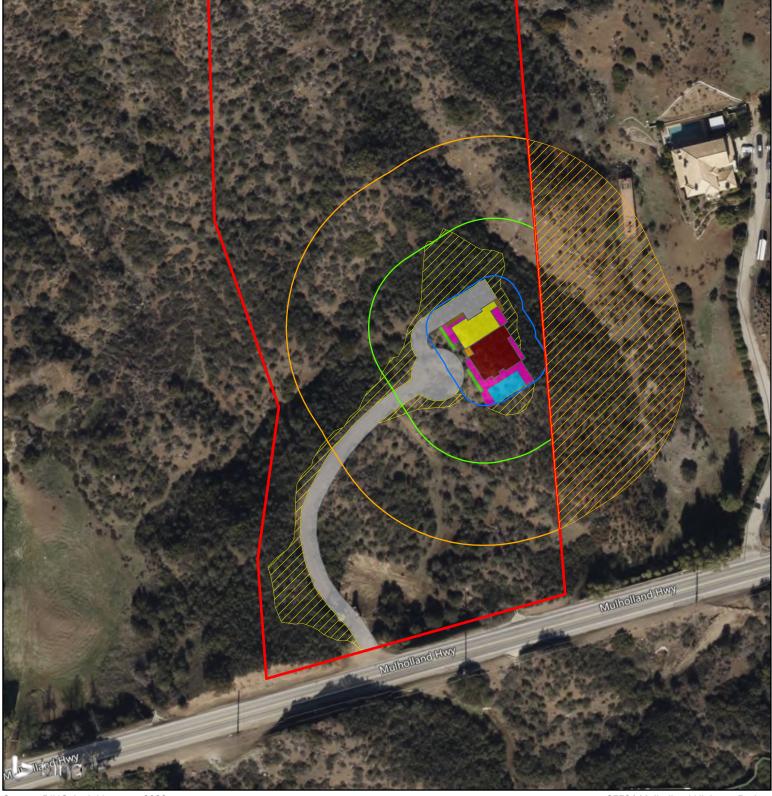
Project Parcel: AIN 4455-058-003

0 500 1,000 Feet

Scale: 1:10,000





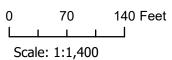


Source: BING Aerial Imagery 2022

25531 Mulholland Highway Project

Figure 3. Proposed Development









Off-site brush thinning (which is not a part of the fuel-modification plan) may be required up to 200 ft from structures as well. The thinning requirements are as follows:

- Fuel Modification Zone A includes an Ember Resistant Zone, which is a 5-foot offset from structures that require fuel modification, and also extends 30 feet beyond the edge of any combustible structure, accessory structure, appendage, or projection. Projections such as eaves, covered entryways, attached pergolas, decks etc. shall be the point at which this distance is measured. Irrigation shall be provided to maintain healthy vegetation and fire resistance. Vegetation in this zone shall consist primarily of mowed grasses, low growing ground covers and adequately spaced shrubs. The overall density and arrangement shall provide adequate defensible space and significantly reduce fire intensity. Plant species selected for Zone A shall possess characteristics which increase fire resistance. Such characteristics are high moisture content, plants producing little leaf litter, slow growing plants and plants that do not require pruning to reduce their size at maturity. Species selection should be referenced in the Fuel Modification Plant List. According to the Fuel Modification Plant List, species selection in Fuel Mod Zone A should be primarily of locally indigenous, drought tolerant plant species that shall blend with the existing natural vegetation and natural habitats on the site. The list is not a pre-approved plant list. Other species may be used subject to approval after review. Trees are generally not recommended except for dwarf varieties or mature trees less than 25' tall and wide at maturity. Trees shall be positioned so their canopies do not extend over the roof of any structure. Vines and climbing plants are not allowed on any combustible structure requiring review. Please refer to 22.44.1240.B Landscaping of the Santa Monica Mountains Local Implementation Program for a proposal of plants within Zone A.
- Fuel Modification Zone B Extends from the outer edge of Zone A an additional 70 feet for a total of 100 feet from the structure. Irrigation shall be provided to maintain healthy vegetation and fire resistance. Vegetation in this zone shall be arranged in a manner that does not create vertical or horizontal fuel ladders. Vegetation in this zone can be planted at a slightly higher density than Zone A but the overall density and arrangement shall provide adequate defensible space and significantly reduce fire intensity. Existing California native plants may be approved to remain if determined to be acceptable upon review and are properly spaced and maintained. Plant species selected for Zone B shall possess characteristics which increase fire resistance. Such characteristics are high moisture content, plants producing little leaf litter, slow growing plants and plants that do not require pruning to reduce their size at maturity. Species selection should reference the Fuel Modification Plant List. The list is not a pre-approved plant list. Other species may be used subject to approval after review. Trees in Zone B may be medium to large at maturity provided they are properly positioned and do not create any vertical or horizontal fuel

ladders. Tree selections are subject to denial upon review. Please refer to 22.44.1240.B Landscaping of the Santa Monica Mountains Local Implementation Program for a proposal of plants within Zone B.

• **Fuel Modification Zone C** Extends from the outer edge of Zone B an additional 100 feet for a total of 200 feet from the structure. Maintenance/modification of vegetation exceeding 100 feet but not to exceed 200 feet from structures may be determined necessary. Any required maintenance/modification is to be determined upon on-site inspection (Fire Code 325.2.2). Please refer to *22.44.1240.B Landscaping* of the Santa Monica Mountains Local Implementation Program for a proposal of plants within Zone C.

Physical Characteristics

Geology and Landforms

The project site occurs in the SMM within the Transverse Ranges Province, and specifically occurs within the Conejo Volcanics Formation in the basaltic lower zone. It is comprised of Tertiary volcanic flow rock and Miocene marine rock geologic units (USGS 2022a, USGS 2022b). The primary rock type in this geologic unit is pillow basalt and includes secondary types such as pillow basalt lavas, pillow breccias and aquagene tuffs andesite and mudstone. No major landforms occur on the site or within the survey area.

Topography and Hydrology

Generally, the topography is very steep for the north half of the parcel with intermittent steep declines and inclines throughout the remainder of the south portion. Ranges in elevation are between 261 m above mean sea level (amsl) at the southern edge of the parcel to 389 m amsl at the northern edge of the parcel. As shown in Figure 4, two different blueline streams originate outside of the parcel within 100 feet to the north and 100 feet to the east. These streams are intermittent streams within the Malibu Creek watershed, and both connect to some type of freshwater forested/shrub wetland, respectively, which then drain directly into the Pacific Ocean 4.5 miles southeast of the project parcel.

Soils

Only one soil type occurs on the project parcel which is the Talepop-Rock outcrop complex, with the extent of this complex being shown in Figure 5 below (NRCS 2018).

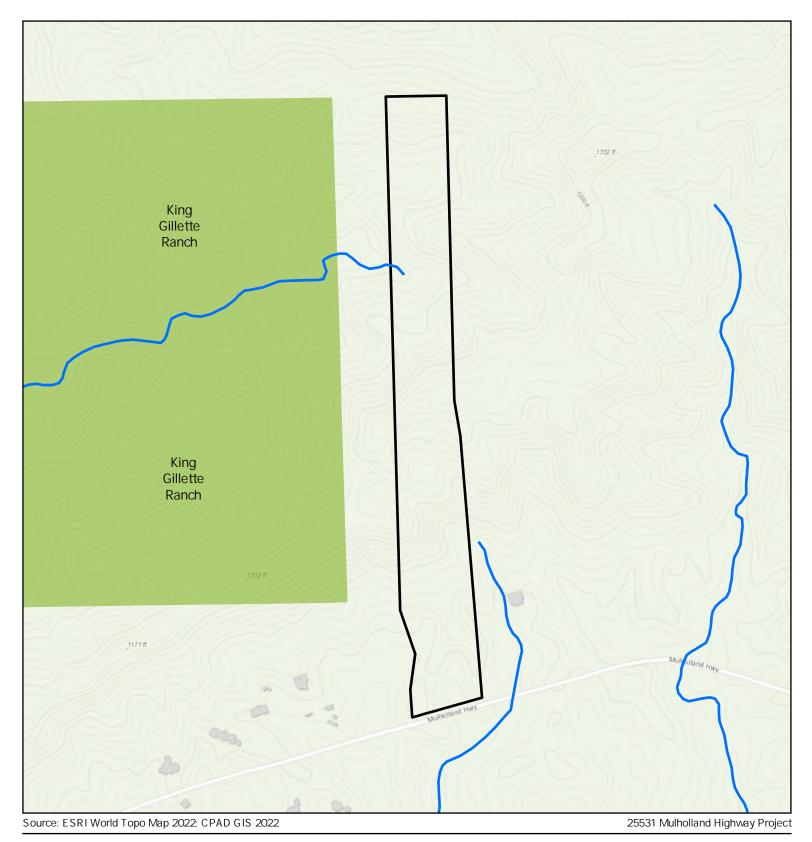


Figure 4. Topographic Map

Project Parcel: AIN 4455-058-003

California Protected Areas Database

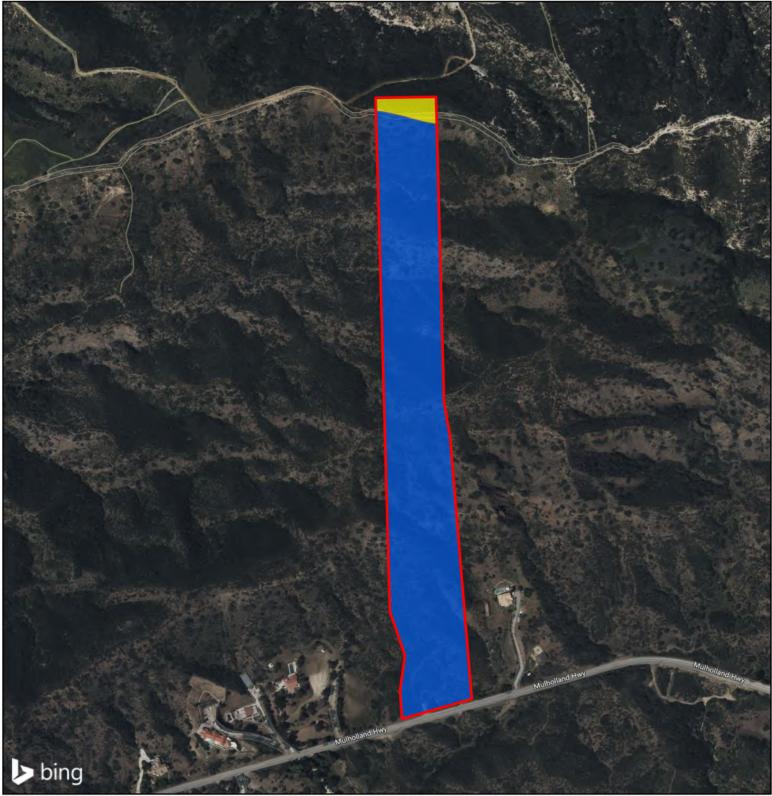
National Hydrography Dataset Streams

Stream

0 300 600 Feet Scale: 1:6,000







Source: BING Aerial Imagery 2022

25531 Mulholland Highway Project

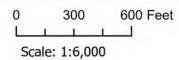
Figure 5. Soils

Project Parcel: AIN 4455-058-003

Soils

Cotharin-Talepop association, 15 to 50 percent slopes

Talepop-Rock outcrop complex, 30 to 75 percent slopes







Talepop-Rock outcrop complex, 30 to 75 percent slopes is the main soil type on the
project parcel and consist of upland soil types such as Talepop, Rock outcrop, Pachic
Argixerolls, and Lithic Haploxerolls. These soil types are found on hillsides or mountain
backslopes that are very well drained, and have high to very high runoff. There are no
hydric soils found on the site or survey area.

Habitat Linkages and Wildlife Migration Corridors

According to the Statewide Essential Habitat Connectivity Project Geospatial Dataset, the northeastern portion of the parcel is within the southwestern edge of the Castro Peak/SMMs to Pine Mountain/Sespe Condor Essential Connectivity Corridor, which is an important habitat linkage and wildlife migration corridor in southern California (CDFW 2010). This parcel is contiguous with hundreds of thousands of undeveloped areas of the SMM LCP and the parcel should be considered an important part of the habitat linkage and is an area where wildlife would migrate and disperse within the region.

Methodology

This BRA is based on information compiled through field reconnaissance and a review of appropriate reference materials and literature regarding the biological resources of the region. A general biological field reconnaissance was conducted by South Environmental Biologists AJ Samra and Matthew South on August 24, 2022. The sources and literature referenced in this BRA are provided below in Section 4. Bibliography.

Literature Review

The assessment of the project parcel began with a review of literature relating to the biological resources that are known to occur in the vicinity of the parcel. The California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) was reviewed to identify special-status plants, animals, and natural communities that have previously recorded in the USGS Malibu Beach 7.5"quad in which the project site is located within, and the five surrounding USGS 7.5"quads: Point Dume, Thousand Oaks, Calabasas, Canoga Park, and Topanga (CDFW 2022). In addition, queries were conducted of the United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) Environmental Conservation Online System (ECOS) for federally protected species (USFWS 2022b), the USFWS Designated and Proposed Critical Habitat maps (USFWS 2022c), and the California Native Plant Society (CNPS) online Inventory of Rare and Endangered Plants of California (CNPS 2022).

Field Reconnaissance

South Environmental biologists Mathew South and AJ Samra conducted a field reconnaissance of the entire parcel on August 24, 2022 between 1000 – 1130. Temperatures ranged from 78 – 85 F, wind was from 0-5 miles per hour, and the skies were partly cloudy in the morning. The purpose of the reconnaissance was to record plants and animals observed on the site, characterize and map plant communities and the extent of Sensitive Environmental Resource Areas (SERAs), and identify other locally significant resources such as native trees. A formal jurisdictional delineation of "waters of the U.S." and or wetlands was not conducted; however, a primary investigation of potential jurisdictional features was conducted during the reconnaissance to investigate the NWI and NHD database features on the parcel. The reconnaissance was conducted over the entire parcel and focused largely on identifying those biological resources within the proposed development area and proposed impact areas.

Due to steep north- and south-facing slopes, some areas of the project site were inaccessible by foot. In these areas, binoculars were used to scan the vegetation and aerial photographs were used to confirm observations made in the field.

Plant Community Mapping

Plant communities were mapped by hand in the field using aerial photographs of the parcel at an approximate 1:300' scale by delineating dominant plant types observed in the field. The areas were later digitized using ArcGIS mapping software to calculate acreages and estimate impacts from development. Plant community descriptions follow vegetation classifications specific to the SMMs (CDFW et al. 2006).

Sensitive Environmental Resource Areas (SERAs) Mapping

The parcel was assessed to determine the presence of SERAs designated by the SMM LCP for development within the Coastal Zone. According to the LCP, SERA habitats are grouped into two main categories: H1 habitat and H2 habitat. A third habitat, H3 habitat, is considered non-SERA (LADRP 2014).

• **H1 Habitats** are the highest priority of the SERA categories and includes native grasslands, riparian, and native oak (*Quercus* sp.), western sycamore (*Platanus racemosa*), southern California black walnut (*Juglans californica*), and California bay (*Umbellularia californica*) woodlands, and rock outcrops. A 100-foot buffer from H1 Habitats is required to preserve transitional habitat and minimize human disturbance. An additional 100-foot H1 Habitat Quiet Zone extends from the outer edge of the 100-foot H1 Habitat buffer to diminish disturbance to sensitive habitats.

- **H2 Habitats** are mainly classified as areas that support large, contiguous areas of coastal sage scrub and chaparral-dominated habitats, such as those dominated by ceanothus (*Ceanothus* sp.) or scrub oak (*Quercus berberidifolia*). Additionally, H2 Habitats include those identified by the CNDDB as rare communities as well as federal and state listed species or plant species listed by the CNPS as 1B or 2B associated with H2 Habitats. H2 "High Scrutiny" Habitats are areas where there is a high probability special-status species occur within the mapped areas.
- Non-SERA **H3 Habitats** consists of areas that would otherwise be designated as H2 Habitat, but the native vegetation communities have been significantly disturbed or removed as part of lawfully-established development. This category also includes areas of native vegetation that are not significantly disturbed and would otherwise be categorized as H2 habitat, but have been substantially fragmented or isolated by existing, legal development and are no longer connected to large, contiguous areas of coastal sage scrub and/or chaparral-dominated habitats.

Plant and Animal Inventory

All plant species observed during the August 24, 2022 reconnaissance were either identified in the field or collected and later identified using taxonomic keys. Since common names vary significantly between references, scientific names are included upon initial mention of each species; common names consistent throughout the report are employed thereafter. All plant species observed were recorded in field notes during the reconnaissance, and the survey focused heavily on the proposed development areas to identify all flowering species that may be impacted. There were no trees present on the parcel so a focused tree survey was not conducted. The survey included 100% visual coverage of the proposed developments and within the proposed fuel modification zone.

All wildlife species observed within the project site, as well as any diagnostic sign (call, tracks, nests, scat, remains, or other sign), were recorded in field notes. Binoculars and regional field guides were utilized for the identification of wildlife, as necessary. Wildlife taxonomy follows Stebbins (2003) and California Herps (2018) for amphibians and reptiles, the American Ornithologists' Union (1998) for birds, and Jameson and Peeters (1988) for mammals. Since common names, except for birds, vary significantly between references, scientific names are included upon initial mention of each species; common names consistent throughout the report are employed thereafter. The CDFW California Wildlife Habitat Relationship System (CWHR) software was used to determine other wildlife species that have the potential to use the parcel based on the vegetation communities, location, and microhabitats identified during the reconnaissance (CDFW 2018c).

Plant species observed during the reconnaissance are discussed in Section 2.1 below and wildlife observed is discussed in Section 2.3. Wildlife expected to occur was compiled into a CWHR report based on plant communities and microhabitats on the parcel, and the CWHR report as well as a table of wildlife observed on the parcel during a survey is included in Appendix B.

Preliminary Jurisdictional Features Assessment

A formal jurisdictional delineation of "waters of the U.S." and or wetlands was not conducted; however, a primary investigation of potential jurisdictional features was conducted during the reconnaissance to identify areas that may require further investigation to determine the jurisdictional status. The investigation included a review of the locations of NWI and NHD database features that are located on the parcel as shown in Figure 4 above.

Native Tree Survey

A survey was conducted for native trees with a stem diameter at breast height (dbh) greater than 6" or 8" combined for the two largest trunk). All native trees that meet the threshold for protection were measured, including dbh, height, and canopy spread. Each native tree surveyed was photographed and assessed for health and structure.

Special-Status Species and Natural Communities Assessment

The potential for special-status plants or wildlife species was assessed based upon the known occurrence of species in the area as identified from CDFW, USFWS, and CNPS databases, and the presence or absence of suitable habitat within the project site based on plant community mapping described above. Suitable habitat was defined as areas with appropriate vegetation communities, soils and/or topography (elevation) to support the species based on known occurrences in those habitats and/or CDFW and CNPS documented habitat descriptions for the species. The definitions of suitable habitat were then compared against the vegetation mapping conducted for the project site and local knowledge. A table of special-status plant species and for special-status wildlife species for which potentially suitable habitat occurs within the project site was prepared, and the potential for occurrence for each species was determined following completion of the vegetation mapping conducted during the field survey (see Appendix D).

Special-Status Natural Communities

Special-status natural communities are listed by the Vegetation Classification of the Santa Monica Mountains National Recreation Area and Environs in Ventura and Los Angeles Counties, California (CDFW et al. 2006). Communities on this list are given a global (G) and state (S) rarity ranking on a scale of 1 to 5, where communities with a ranking of 5 are the most common and communities

with a ranking of 1 are the rarest and of the highest priority to preserve. These high priority communities are denoted on the CDFW list with asterisks. For this report, special-status natural communities are those communities that have a state ranking of S3 or rarer. Special-status natural communities for the project site were identified based on the natural communities mapped for the project site.

Focused Rare Plant Survey

South Environmental conducted two focused surveys for rare plants on the project impact areas (proposed development areas and the fuel modification zone) on May 1 and July 16 of 2023. During the surveys all plant species encountered were either identified at the time or in the case of unknown species a sample was collected and the species were identified using *The Jepson Manual of Vascular Plants of California* (Baldwin et al. 2012) and by comparing them with taxonomically-related species from the area using I-Naturalist and other online digital photo sources.

Whenever possible the survey was conducted according to the *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities* developed by the California Department of Fish and Wildlife (CDFW 2018) and the *Botanical Survey Guidelines* developed by the California Native Plant Society (CNPS 2001). The survey followed the standard botanical protocol for rare, threatened, or endangered plant species surveys of identifying all plant species encountered. Although the goal was to identify all plant species, field surveyors placed a special emphasis on discovery of the special-status species identified in the literature search with the potential to occur on the site.

2. Biological Characteristics of the Site

Plant Surveys

A total of 51 plant species were observed on the proposed development area and fuel modification zone and they are listed in Table 2 below.

Table 2. Summary of Plants Observed During Focused Botanical Survey

	_	_		
Scientific name	Common name	Native/Non -Native	Growth Form	CRPR
Acmispon glaber	deerweed	Native	perennial herb	
Adenostoma fasciculatum	chamise	Native	Tree/shrub	
Antirrhinum coulterianum	Coulter's snapdragon	Native	annual herb	
Avena barbata	slender wild oat	*Non-native	annual grasslike herb	
Baccharis pilularis	coyote brush	Native	shrub	
Bromus diandrus	ripgut brome	*Non-native	annual grasslike herb	
Bromus hordeaceus	common soft brome	*Non-native	annual grasslike herb	
Bromus madritensis	compact brome	Non-native	annual grasslike herb	
Brickellia californica	California brickellbush	Native	perennial herb	
Calystegia macrostegia	coast morning glory	Native	perennial herb/vine	
Camissoniopsis hirtella	hairy suncup	Native	annual herb	
Ceanothus megacarpus	bigpod ceanothus	Native	shrub	
Chaenactis artemisiifolia	artemisia-leaved chaenactis	Native	annual herb	
Chorizanthe staticoides	Turkish rugging	Native	annual herb	
Clarkia epilobioides	canyon clarkia	Native	annual herb	
Clarkia purpurea	winecup clarkia	Native	annual herb	
Claytonia perfoliata	miner's lettuce	Native	annual herb	
Collinsia heterophylla	purple Chinese houses	Native	annual herb	
Cryptantha intermedia	clearwater cryptantha	Native	annual herb	
Deinandra fasciculata	clustered tarweed	Native	annual herb	
Delphinium cardinale	scarlet larkspur	Native perennial herb		
Diplacus brevipes	wide-throated yellow monkeyflower	Native annual herb		
Dipterostemon capitatus	blue dicks	Native	perennial herb	
Ehrharta erecta	panic veldtgrass	*Non-native	perennial grasslike herb	
Encelia californica	bush sunflower	Native	shrub	
Eriophyllum confertiflorum	golden yarrow	Native	shrub	
Erodium cicutarium	redstem stork's bill	*Non-native	annual herb	
Eriodictyon crassifolium	thickleaf yerba santa	Native	shrub	
Eriogonum fasciculatum	California buckwheat	Native	shrub	
<i>Cryptantha</i> sp.	cryptantha species	Native	annual herb	
Eulobus californicus	California primrose	Native	annual herb	
Festuca myuros	rattail sixweeks grass	*Non-native	Annual grasslike herb	
Gilia angelensis	chaparral gilia	Native	annual herb	
Hirschfeldia incana	shortpod mustard	*Non-native	perennial herb	
Lupinus succulentus	arroyo lupine	Native	annual herb	
Malosma laurina	laurel sumac	Native	tree/shrub	
Marah macrocarpa	chilicothe	Native	perennial herb/vine	

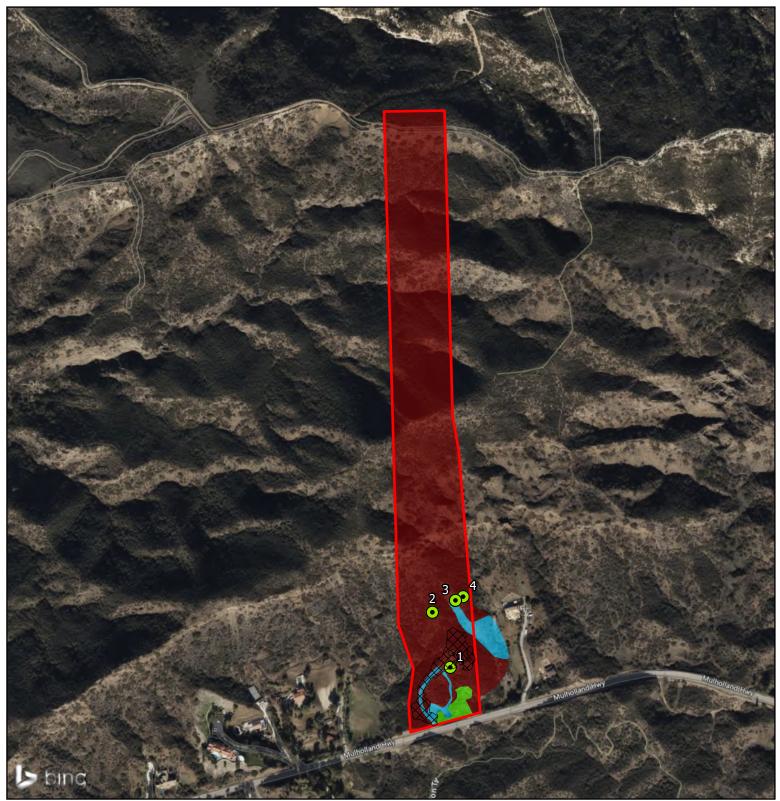
Scientific name	Common name	Native/Non -Native	Growth Form	CRPR
Marrubium vulgare	white horehound	*Non-native	perennial herb	
Melilotus indicus	small melilot	Non-native	annual herb	
Penstemon spectabilis	showy penstemon	Native	perennial herb	
Pentagramma triangularis	goldback fern	Native	fern	
Phacelia cicutaria	caterpillar phacelia	Native	annual herb	
Rhamnus ilicifolia	hollyleaf redberry	Native	shrub	
Rhus ovata	sugar bush	Native	shrub	
Sairocarpus coulterianus	Coulter's snapdragon	Native	annual herb	
Salvia columbariae	chia	Native	annual herb	
Salvia mellifera	black sage	Native	shrub	
Sambucus nigra ssp. caerulea	blue elderberry	Native shrub/tree		
Scrophularia californica	California beeplant	Native	perennial herb	
Selaginella bigelovii	,		lycophyte	
Solanum xanti	purple nightshade	Native	perennial herb/shrub	
Stephanomeria virgata	rod wirelettuce	Native	annual herb	
Trichostema lanatum	wooly bluecurls	Native	shrub	

Plant Communities

As shown in Figure 6, a total of three plant communities were mapped on the parcel. These plant communities are summarized in Table 3 and a detailed description of each is found below.

Table 3. Summary of Plant Communities

Plant Community	Acres	Acres of Impacts from Project Footprint	Acres of New Fuel Modification On-Site	Acres of New Brush Thinning Off-Site	Total Impact	Global/State Rank
Hoary Ceanothus Shrubland Alliance (H2)	23.58	0.83	1.85	0.78	3.50	G4/S
Laurel Sumac Scrub (H2)	0.41	0	0.12	0	0.12	G4/S4
Post-clearance Shrub Regeneration (H2 and H3)	0.55	0.16	0.21	0.57	0.90	None
Total	24.54	0.99	2.18	1.35	4.52	



Source: BING Aerial Imagery 2022

25531 Mulholland Highway Project

Figure 6. Plant Communities and Native Trees

Protected Laurel Sumac

Project Parcel: AIN 4455-058-003

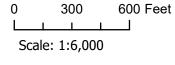
Proposed Development Footprint

Plant Communities

Hoaryleaf Ceanthus Alliance

Laurel Sumac Scrub

Post-fire and Post-clearance Shrub Regeneration







Hoaryleaf Ceanothus Shrubland Alliance

• Ceanothus crassifolius – Malosma laurina Association (G4/S4)

Hoaryleaf ceanothus (*Ceanothus crassifolus*) shrubland alliance occurs on 23.78 acres (97%) of the parcel and is the dominant plant community. Hoaryleaf ceanothus is typically located on south-facing slopes at low elevations between 40-1300 meters amsl and dominates the slopes all throughout the parcel. Hoaryleaf ceanothus shrubland alliance is dominated by hoaryleaf ceanothus (*Ceanothus crassifolus*) and on the parcel occurs as a continuous chaparral cover with few significant openings. Associated native species observed on the parcel include chamise (*Adenostoma fasciculatum*), black sage (*Salvia mellifera*), bigpod ceanothus (*Ceanothus megacarpus*), California buckwheat (*Eriogonum fasciculatum*), thickleaf yerba santa (*Eriodicyton crassifolium*), laurel sumac (*Malosma laurina*), and sugar bush (*Rhus ovata*).

Laurel Sumac Scrub

Malosma laurina Association (G4/S4)

Laurel sumac (*Malosma* laurina) scrub alliance occurs on 0.41-acres (1.67%) of the southern portion of the parcel, adjacent to the proposed driveway as well as being adjacent to Mulholland Highway where a culvert is under the highway at the base of this community. Portions of this area were recently graded per the County requirements on the project site to keep the culvert unobstructed, and a large area of bare ground was in this community as a result and native shrubs occurred at the edges of the disturbance. These types of shrubs are typically found on steep slopes, which is present intermittently throughout the parcel. Laurel sumac is the predominant shrub in this alliance, with accompanying native plants such as hoaryleaf ceanothus (*Ceanothus crassifolus*), big pod ceanothus, and black sage.

Post-Clearance Shrub Regeneration

Post -clearance shrub regeneration occurs on 0.35 acres (1.42 %) of the eastern portion of the parcel, largely near an area along the eastern portion of the parcel where development had already occurred for another residence. This community occurs where shrubs have begun to revegetate after a disturbance such as fire, grading or clearing. The shrub layer is typically sparse and consists of California buckwheat, hoaryleaf ceanothus, laurel sumac, bigpod ceanothus, sugar bush, shortpod mustard (*Hirschfeldia incana*), black mustard (*Brassica nigra*), chamise, slender oat (*Avena barbata*), foxtail chess (*Bromus madritensis*), long-beaked stork's bill (*Erodium botrys*), horseweed (*Conyza canadensis*), telegraph weed (*Heterotheca grandiflora*), smooth cat's ear (*Hypochaeris glabra*), cudweed aster (*Lessingia filaginifolia*), tocalote (*Centaurea melitensis*), petty spurge (*Euphorbia peplus*), Russian thistle (*Salsola tragus*), and ripgut brome (*Bromus diandrus*).

Sensitive Environmental Resource Areas

Figure 7 shows the SERAs as mapped by the SMM LCP and Figure 8 shows the SERAs as mapped by South Environmental. Table 4 below summarizes the acreages of each habitat type calculated by SMM LCP and by South Environmental, and the percent difference in acreage between the two. The hoaryleaf ceanothus shrubland alliance association and laurel sumac scrub alliance would be classified as H2 habitat because they are native shrublands, and the Post-clearance shrub regeneration is a result of unauthorized developments and would also be H2 habitat as it would be native shrublands in the absence of the disturbance. A very small sliver of fuel modification zone that is associated with the neighboring residence to the east falls on the parcel and that area is considered H3 habitat because it is permitted disturbance and fuel modified areas are considered H3 by definition.

Table 4. Summary of SERAs

Plant Community	SMM LCP Acres	South Environmental Acres	Percent Difference
H1 Habitat	0.00	0.00	0%
H2 Habitat	24.54	24.33	+0.5%
H3 Habitat	0	0.21	+100%

Plant and Wildlife Inventories

A total of 51 plants were identified during the focused rare plant survey and are listed in the plant communities section above and in Table 2 above. A total of 5 birds, 1 mammal, and 1 reptile were observed (or sign was observed) on the parcel during the reconnaissance, including western fence lizard (*Sceloporus occidentalis*), turkey vulture (*Cathartes* aura), California scrub-jay (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), Bewick's wren (*Thryomanes bewickii*), wrentit (*Chamaea fasciata*), and coyote (*Canis latrans*). These species are listed in Appendix B.

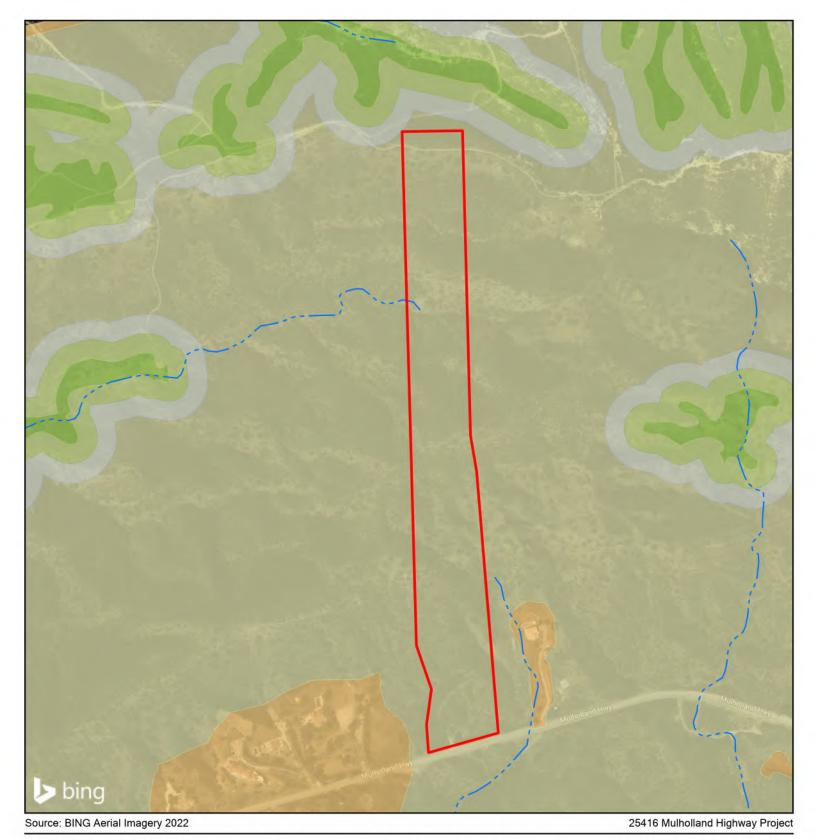


Figure 7. SERAs as Designated by SMM LCP

Project Parcel: AIN 4455-058-003 H1 Habitat 100-Foot Buffer
Stream H1 Habitat Quiet Zone
H2 Habitat (High Scrutiny) H2 Habitat
H3 Habitat





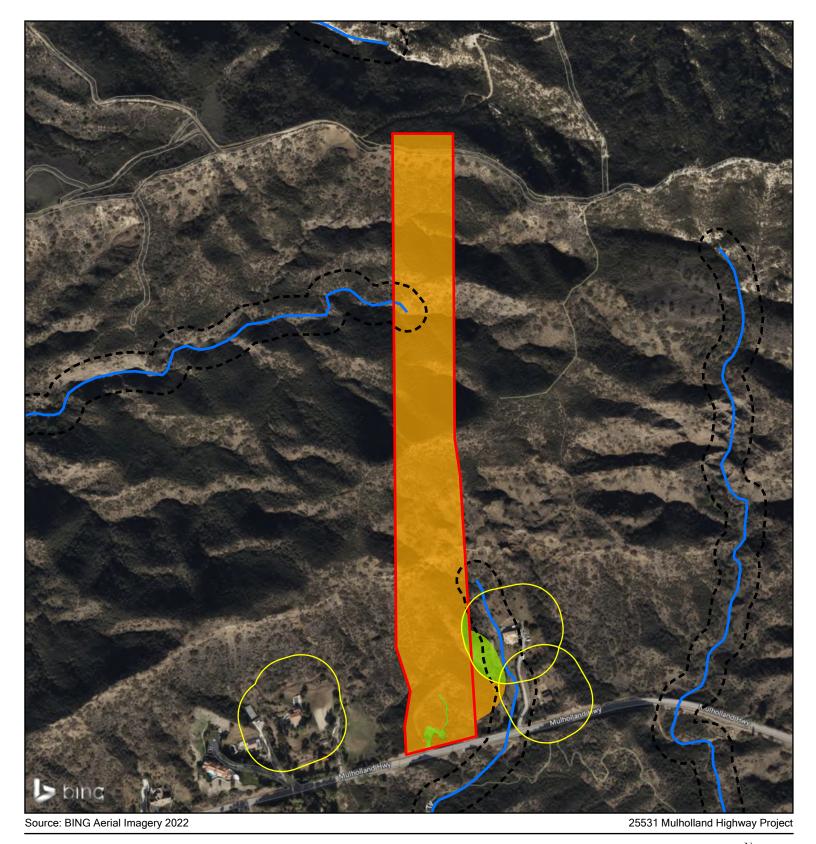


Figure 8. SERAs as Designated by South Environmental

Brush thinning zone for the neighboring residence Project Parcel: AIN 4455-058-003

Stream

Stream Buffer (100-ft)

SERAs (Designated by South Environmental)

Н3



600 Feet

300

Scale: 1:6,000

Special-Status Species and Natural Communities

Special-Status Plants

A total of 23 special-status plants are known to occur in the region and an assessment of their potential to occur on the parcel is in Appendix D. Based on the species observed during the surveys, habitats present and site conditions observed during the reconnaissance, it was determined that two special-status plants have the potential to occur on the parcel: Malibu baccharis (*Baccharis malibuensis*) and white-veined monardella (*Monardella hypoleuca ssp. hypoleuca*).

Malibu baccharis

This plant has a CRPR rating of 1B.1. This species prefers coastal scrub, chaparral, cismontane woodland, and riparian woodland. Its microhabitat is on Conejo volcanic substrates, often on exposed roadcuts. It sometimes occupies oak woodland habitat. Chaparral habitat and Conejo volcanic substrates occurs on the parcel; therefore, the species has the potential to occur on the parcel.

White-veined monardella

This plant has a CRPR rating of 1B.3. This species prefers chaparral and cismontane woodland. Its microhabitat is on dry slopes. This species has the potential to occur in the hoaryleaf ceanothus shrubland on the parcel, particularly on the slopes.

Please note that based on the findings of the focused plant survey, no special-status plants occur on the proposed development area and fuel modification zone or in the immediate vicinity. The surveys were timed to occur during the spring and early summer during times that encompass the blooming period for all special-status plants with that are known to occur in the region and also have potential to occur on or near the parcel.

Special-Status Animals

A total of 26 special-status animals are known to occur in the region and an assessment of their potential to occur on the parcel is in Appendix D. Based on the species observed during the surveys, habitats present and site conditions observed during the reconnaissance, it was determined that two special-status animals have the potential to occur on the parcel: coastal whiptail (*Aspidoscelis tigris stejnegeri*) and coast horned lizard (*Phrynosoma blainvillii*). No federal or state listed animal is anticipated to occur on the parcel.

Coastal Whiptail

This reptile is a state species of special concern. This species prefers various habitats, including chaparral, woodland, and riparian, in firm, sandy or rocky soils within sparse vegetation, open areas, woodlands and riparian communities. The species was recorded to the CNDDB in 2000 approximately 3.5 miles northwest of the parcel. Coastal whiptail has the potential to occur on the parcel within chaparral habitat, although the vegetation on-site is denser than they typically prefer in most locations.

Coast Horned Lizard

This reptile is a state species of special concern, and prefers sandy riparian and sage scrub habitats, but also occurs in valley-foothill, hardwood, conifer, juniper and annual grassland habitats below 6,000 feet. Habitats include open country, especially sandy areas, washes, flood plains, and windblown deposits. This species was recorded to the CNDDB in 1991 less than one-mile northeast of the project site. Coast horned lizard has the potential to occur on the parcel in suitable chaparral habitat, although this species' preferred habitats, including sandy riparian, is not present. The species is also likely to occur in the dirt access roads and in the post-fire and post-clearance regeneration areas.

Special-Status Natural Communities

The hoaryleaf ceanothus chaparral and laurel sumac scrub is designated as G4 and S4 habitats, respectively, and therefore are not considered as special-status natural communities. S4 habitats are those that are considered secure in the state of California throughout its range, relatively stable populations (> 100 occurences), and no current factors making it vulnerable to potential extirpation throughout its range.

Native Trees

Four laurel sumacs are on the parcel that are of the size protected as native trees. The location of these trees is shown in Figure 6 above.

Table 5. Protected Native Trees on Site

						Canopy	/ Measur	ements	(Feet)		
ID#	Species	DBH (inches)	Impact	Ν	NE	Е	SE	S	SW	W	NW
1	laurel sumac	3 trunks (7,7,8), multiple	Remove	12	16	18	12	14	16	18	14

		others at 1- inch									
2	laurel sumac	5 main stems (7,7,8, 7.5, 6.5), multiple others at 1- inch	None	16	20	27	20	15	17	24	22
3	laurel sumac	6 main stems (7,8,6.5, 7, 7.5, 8), multiple others at 1- inch	None	16	15	16	21	16	15	19	23
4	laurel sumac	2 main stems (7,8), multiple others at 1- inch	None	9	9	12	16	10	9	11	12

Protected native tree #1 is within the development footprint and will be removed. Protected native trees #2-4 are distal relative to the proposed development and will not be affected by the project.

Jurisdictional Features

No potential jurisdictional features were observed on the parcel during the reconnaissance. The nearest features are two intermittent streams (USGS blueline streams) within 100 feet to the south and to the northwest of the parcel that are within the National Hydrography Dataset. There are also several wetland features shown in the National Wetlands Inventory, but these areas were investigated during the reconnaissance and no signs of flow (i.e. drainage pattern, sedimentation, bed and bank) occurred and only upland plant species were observed. The soils on the site are upland soils and no wetlands occur. The steep north facing slopes on the parcel are areas that drain surface water into the adjacent blueline stream at its headwaters, but no features were observed on these slopes (i.e., on the parcel). These steep slopes likely provide an essential function to directing water toward the headwaters of the adjacent blueline stream but are not jurisdictional features themselves. Therefore, no potential jurisdictional features occur on the parcel or within the impact area. A culvert occurs at the southern edge of the parcel that directs surface water that gathers from the surrounding slopes and directs it under Mulholland, but there is no bed and bank or sign of flow and no other indicators of jurisdictional features present here. The results of the spring and summer focused plant surveys indicated that only upland plants occur in this area, indicating that the area is not a jurisdictional feature.

3. Impact Analysis and Discussion

For the purposes of this report, impacts to protected biological resources and SERAs are analyzed within the context of the regulatory setting. Below is an overview of the federal, state, and local regulations pertaining to protected biological resources that have the potential to occur on the parcel, and an analysis of impacts to those resources from the proposed development.

Regulatory Setting

Federal Regulations

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) protects individuals as well as any part, nest, or eggs of any bird listed as migratory. In practice, federal permits issued for activities that potentially impact migratory birds typically have conditions that require pre-disturbance surveys for nesting birds. In the event nesting is observed, a buffer area with a specified radius must be established, within which no disturbance or intrusion is allowed until the young have fledged and left the nest, or it has been determined that the nest has failed. If not otherwise specified in the permit, the size of the buffer area varies with species and local circumstances (e.g., presence of busy roads, intervening topography, etc.), and is based on the professional judgment of a monitoring biologist. A list of migratory bird species protected under the MBTA is published by USFWS.

California Regulations

State of California Fish and Game Code Section 3500

Section 3503.5 of the California Fish and Game Code states 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." Activities that result in the abandonment of an active bird of prey nest may also be considered in violation of this code. In addition, California Fish and Game Code, Section 3511 prohibits the taking of any bird listed as fully protected, and California Fish and Game Code, Section 3515 states that is it unlawful to take any non-game migratory bird protected under the MBTA.

Local Regulations

Santa Monica Mountains Local Coastal Program

In 1976, the California State Legislature passed the California Coastal Act, which established a comprehensive coastal protection program and secured the California Coastal Commission's role as the state agency responsible for the protection of coastal resources. The Coastal Zone encompasses approximately 840 miles of California coastline and about 287 miles of shoreline around nine offshore islands. It extends three miles into the ocean, bound by the State's seaward boundary of jurisdiction. The inland boundary of the Coastal Zone can vary, as it is measured from the Mean High Tide Line that ranges from a few hundred feet in urban areas, to up to five miles in rural areas.

In partnership with local governments, the Coastal Commission plans and regulates development and natural resource use within the Coastal Zone. LCPs are the basic planning tools that carry out this partnership between the State and local governments in their shared stewardship of the coast. Each LCP is comprised of two components. The first component is a Land Use Plan (LUP), which designates land use classifications, type and density of allowable development, and goals and policies concerning development. The second component is a LIP, which consists of the zoning ordinances required to implement the LUP.

The SMMs LCP consists of the LUP and implementing actions including the LIP, a series of ordinance sections added to the Zoning Ordinance, Title 22 of the Los Angeles County Code. The LIP is the primary implementation mechanism for the LUP and a part of the County's Zoning Ordinance. The LIP establishes district-wide, zone-specific, and area-specific regulations for new development and for the protection and management of the Coastal Zone's unique resources. The zoning consistency program is also necessary to implement the LUP. Now that the SMMs LCP is certified by the Coastal Commission, the County has the authority to issue coastal development permits.

Project Impacts and Recommendations

Plant Communities/Sensitive Natural Communities

As shown in Figure 9, a total of 4.52 acres of impacts would result from the project include 3.17 acres of the project site and 1.35 acres of off-site brush thinning. These impacts include including 0.99-acres of permanent impacts from the proposed development footprint, 2.18-acres of on-site fuel modification zones A, B, and C, and 1.35-acres of off-site brush thinning. These impacts are to 3.50-acres of hoary ceanothus chaparral, 0.12-acre of disturbed laurel sumac scrub, and 0.90-acres of post-clearance shrub regeneration. These are not considered Sensitive Natural

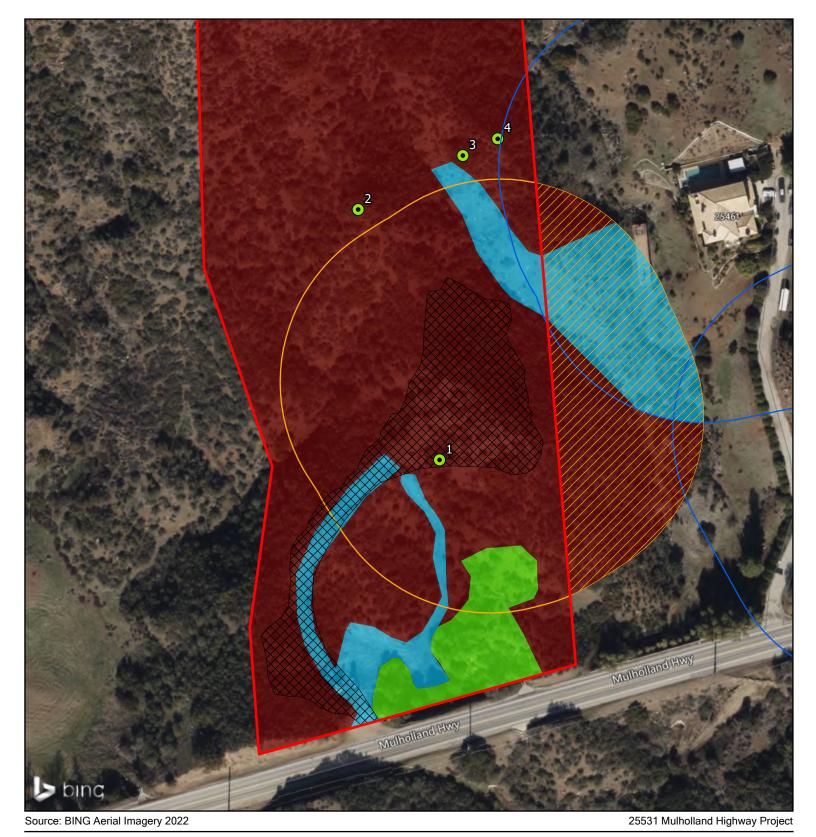


Figure 9. Plant Community and Native Tree Impacts

Protected Laurel Sumac

Project Parcel: AIN 4455-058-003

Proposed Off-Site Brush Thinning

Existing off-site brush thinning zone for the neighboring residence

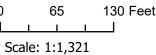
Proposed Development Footprint

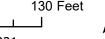
Proposed Fuel Modification Zone C

Plant Communities

Hoaryleaf Ceanthus Alliance Laurel Sumac Scrub

Post-fire and Post-clearance Shrub Regeneration









Communities and no impacts would occur to sensitive natural communities. Mitigation for these impacts is discussed in the SERAs impacts section below. The staging area during grading will be on the proposed fire department turnaround, and the staging area during construction of the house will be near the house pad within the project grading footprint. Therefore, no additional impacts would result from staging because it would occur within he proposed development footprint.

SERAs

The proposed development of the development footprint and fuel modification will be largely within H2 habitat as shown in Figure 10 and summarized below in Table 6, which is primarily the hoaryleaf ceanothus shrubland alliance. The proposed development footprint would impact 0.96-acre of H2 habitat and 0.03-acres of H3 habitat. The onsite fuel modification will remove 2.18 acres that is 2.05 acres of H2 habitat and 0.13-acre of H3 habitat. Off-site brush thinning will include a total of 1.35 acres of impacts including 0.78 acre of H2 habitat and 0.57 acre of H3 habitat.

On-site impacts [acres] Off-site impacts [acres] **Fuel-modification Habitat** New brush Total Total Construction category Construction zones thinning C Α R 0 0 0 0 **H1** 0 0 0 **H2** 0.96 0.05 0.63 1.37 $3.0\overline{1}$ 0 0.78 0.78 H2HS 0 0 0 0.03 **H3** 0 0.01 0.12 0.16 0 0.57 0.57 **Total** 0.99 0.05 0.64 1.49 3.17 0 1.35 1.35

Table 6. Summary of Impacts to SERAs

Mitigation Measure: Resource Conservation Program or Restoration

- Section 22.44.1950 of the SMM LCP describes the requirements for unavoidable impacts to H2 Habitat, and the project shall compensate for the permanent impacts to 3.79-acres of H2 Habitat associated with the proposed development and new fuel modification zones on and off the site.
- The project will be subject to a Habitat Impact fee. Fees will be assessed at time of project approval but will be itemized as determined appropriate for each CDP individually based on the current updated In-Lieu Fee.



Source: BING Aerial Imagery 2022

25531 Mulholland Highway Project

Figure 10. Impacts to SERAs

Project Parcel: AIN 4455-058-003

Proposed Fuel Modification Zone

Proposed Development Footprint

Fuel Modification Zone A

Fuel Modification Zone B

Fuel Modification Zone C

SERAs (Designated by South Environmental)

South Environme

Н3

0 65 130 Feet L L L L L L Scale: 1:1,321





Special-Status Species

Plants

Focused rare plant surveys were conducted within the proposed on-site impact areas and immediately surrounding areas during the spring and summer of 2023. No special-status species were observed in the proposed impact areas and therefore, no impacts to special-status plants would result from the proposed project.

Nesting Birds and Raptors

Birds, including sensitive species such as yellow-billed cuckoo, have the potential to nest in shrubs and on the ground in the vegetation that occurs on the project site. These species and all native nesting birds are protected from harm by the MBTA and the Fish and Game Code. If these species were present during construction, they could be directly impacted during vegetation removal or they could be struck by construction equipment. If nesting birds or raptors are within proximity to construction, they could be indirectly impacted if noise and/or vibration from the project causes them to abandon a nest and results in the loss of eggs or chicks. To avoid impacts to nesting birds, the mitigation measures below are recommended.

Nesting Bird Mitigation Measures

- To avoid impacts to nesting birds, construction of the project should be timed to occur between September 1 and January 31, which is outside the typical nesting season for birds.
- If construction occurs between February 1 and August 31 a qualified biologist should conduct a nesting bird survey within the proposed development site and a 500-foot buffer. The survey should be conducted no more than 72 hours prior to initiation of construction, and if nesting birds are identified they should be avoided by a 300-foot no-work buffer for songbirds and a 500-foot no-work buffer for raptors. The buffer should remain in place until a qualified biologist has determined that the nest is no longer active. Buffer sizes may be reduced as determined by the biologist based on the distance from proposed work, intensity of work, species sensitivity to noise, and other factors. If a buffer size is reduced, the biologist must monitor all work activities that occur near the nesting birds.

Coastal Whiptail and Coast Horned Lizard

Coastal whiptail and coast horned lizard have the potential to occur on the project parcel within areas of openings in chaparral with loose sandy soils. Loss of potential habitat for these species is insignificant due to the small size of the development and the proposed mitigation and compensation for loss of H2 Habitat described above. However, if these species are present within

the development area during construction activities they could be crushed and killed or injured, or their homes and cover sites could be destroyed during fuel modification within the undisturbed areas. To avoid direct impacts to individual lizards, the salvage program described below is proposed as mitigation for these impacts.

Special-Status Reptile Survey and Protection/Relocation

- A qualified biologist should conduct daily reptile biological monitoring during any activities involving vegetation clearing or modification of natural habitat including fuel modification. Positive detections of special-status reptiles and suitable habitat at the detection location should be mapped and photographed.
- Initial removal of vegetation shall occur using hand tools only and then can be graded.
 During the vegetation removal, a qualified biologist shall be onsite to recover any
 individuals that may be excavated with native vegetation. Individual lizards will be
 captured (if possible) and removed from the impact area and will be released into a
 predetermined area outside of construction and fuel modification in the immediate
 vicinity. The salvage program will continue until all special-status reptiles have been
 removed from the area.

Native Trees

As shown in Figure 9 above one of the protected laurel sumac trees on the site would be impacted by the project. Replacement of these trees at a 10:1 in the landscaping plan is required.

<u>Protected Native Tree Replacement Plantings</u>

• The removal of 1 laurel sumac by the project should be mitigated by planting 10 additional laurel sumacs onto the property outside of areas that will be impacted.

Wildlife Movement Corridors and Habitat Linkages

The northeastern portion of the parcel is within the southwestern edge of the Castro Peak/SMMs to Pine Mountain/Sespe Condor Essential Connectivity Corridor, which is an important habitat linkage and wildlife migration corridor in southern California. However, the development is proposed in an area near the road that is partially disturbed and near other adjacent houses, and the development would not be located within the habitat linkage areas further from the road. Enough habitat exists on the parcel for wildlife to move through the region without being impacted by the proposed houses because they can use the undisturbed areas of the parcel as a habitat linkage. No barriers such as fencing or lighting is proposed that would deter wildlife from moving on the property and development will be kept to allowable buildable areas per regulation. No alternative house alignments would be possible that could reduce impacts to the parcel or

move the impacts closer to other developments. Therefore, the proposed project will not have an impact on wildlife movement or habitat linkages.

Cumulative Impacts

The loss of H2 habitat in the region from housing developments is significant when considered cumulatively. However, the Resource Conservation Program and Habitat Impact Fee described in previous mitigation measures would compensate for the loss of H2 habitat in the SMM LCP and result in a preferable alignment of conserved habitat within the LCP with only a minimal loss of H2 areas that are located close to other developments. Therefore, the cumulative impacts would be mitigated with the Restoration and Habitat fee described previously.

Conclusion

The proposed project was mostly within H2 habitat, with a small portion as a H3 habitat in areas 200-feet away from the neighboring home that are in the brush clearance zone for that adjacent property. As a result, the impacts to biological resources associated with the development has been minimized to the smallest portion of H2 habitat that is possible considering the entire site is H2 habitat. The driveway is set in the position that would result in the least amount of slope stabilization and fill/grade requirements are minimized by using the less steep areas in the proposed driveway alignment. The project will result in the removal of one protected laurel sumac and proposed mitigation is to replace the tree with 10 replacement plantings. The results of the spring and summer focused plant surveys revealed that no special-status plants would be impacted by the proposed development as none occur in these areas. Although biological resources will be impacted by the proposed development (H2 habitat), the loss of native habitats that are contributing to the local ecology from the project has been minimized by the placement of the development at the far eastern and southern edges of the parcel as is possible to still allow for development. Proposed Resource Conservation Program and Habitat Impact Fee would compensate for the loss of H2 habitat associated with the project and the proposed preconstruction surveys for nesting birds, and the reptile salvage program described above would ensure that direct impacts to sensitive animals is avoided.

4. Bibliography

- CDFW (California Department of Fish and Wildlife). 2022a. California Natural Diversity Database (available by subscription) and Rarefind. CDFW: Sacramento, California.
- CDFW. 2022b. Natural Diversity Database. August 2022. Special Animals List.
- CDFW. 2022c. California Wildlife Habitat Relationship System. Software version 9.0. Downloaded online: https://www.wildlife.ca.gov/data/cwhr
- CDFW. 2010. California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California. Dataset and information available online: https://www.wildlife.ca.gov/conservation/planning/connectivity/CEHC
- CDFW, CNPS, Keeler-Wolf, T., and Evens, J. 2006. Vegetation Classification of the Santa Monica Mountains National Recreation Area and Environs in Ventura and Los Angeles Counties, California. State of California Natural Resources Agency, January 2006.
- CNPS (California Native Plant Society). 2022. Inventory of Rare and Endangered Plants of California. California Native Plant Society. Available online (http://cnps.web.aplus.net/cgi-bin/inv/inventory.cgi).
- County of Los Angeles Department of Regional Planning (LADRP). 2018. Santa Monica Mountains Local Coastal Program GIS Layers. Available online at: http://planning.lacounty.gov/smmlcpnet
- LADRP 2014. Santa Monica Mountains Local Implementation Program. County of Los Angeles: Los Angeles, California.
- Natural Resource Conservation Service (NRCS). 2022. Online Web Soil Survey Mapper (https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm). U.S. Department of Agriculture (USDA). Washington, DC.
- SC Wildlands. 2008. South Coast Missing Linkages: A Wildland Network for the South Coast Ecoregion.
- United States Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS). 2022. Web Soil Survey Mapper. Accessed online: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm
- United States Fish and Wildlife Service (USFWS). 2022a. Environmental Conservation Online System (ECOS) Information for Planning and Consultation (IPaC). Accessed online: https://ecos.fws.gov/ipac/

- USFWS. 2022b. Dedicated and Proposed Critical Habitat GIS Data. Accessed online: https://www.fisheries.noaa.gov/national/endangered-species-conservation/critical-habitat#critical-habitat-designations,-maps,-and-gis-data
- USFWS. 2022c. National Wetlands Inventory Online Wetlands Mapper. Accessed online: https://www.fws.gov/wetlands/data/mapper.html
- United States Geological Service (USGS). 2022. National Hydrography Dataset (NHD) The National Map Viewer. Accessed online: https://viewer.nationalmap.gov/services/
- Yerkes, R.F., Campbell, R.H., Alvarez, Rachel, and Bovard, Kelly. 2005. Preliminary geologic map of the Los Angeles 30' X 60' quadrangle, southern California. U.S. Geological Survey.

Appendix A

Photograph Log

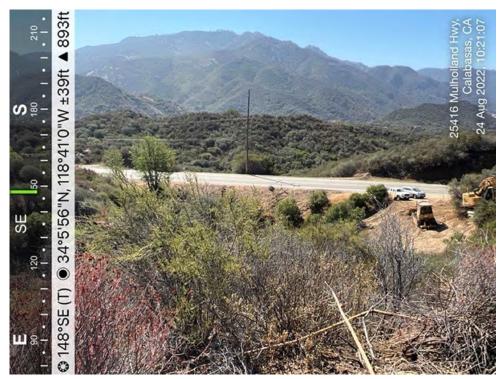


Image 1. Depicts southern view of project parcel adjacent to Mulholland Hwy with accompanying dominant vegetation Hoaryleaf Ceanothus Shrubland (Ceanothus crassifolius – Malosma laurina Association).



Image 2. Depicts grading trail along project site created by construction activities. Ceanothus crassifolius – Malosma laurina Association outside the disturbance.

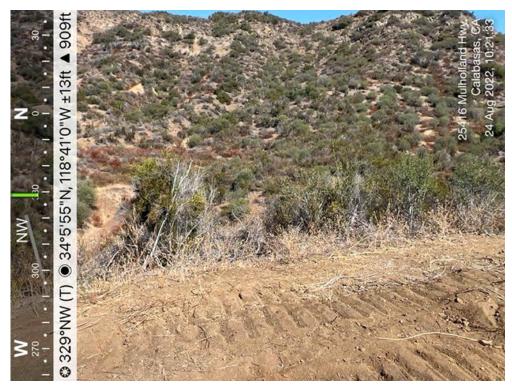


Image 3. Depicts north-facing view from graded trail of project parcel along Santa Monica Mountains.



Image 4. Depicts southwestern view of project parcel from grade trail.

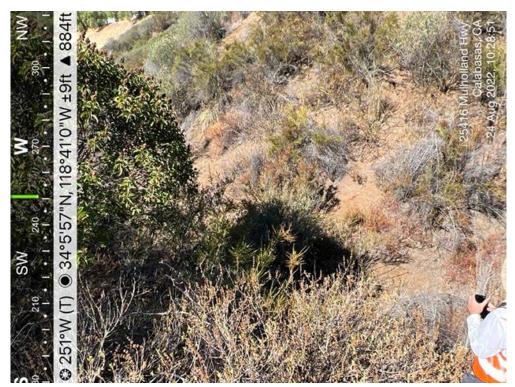


Image 5. Depicts view of canyon near proposed development.



Image 6. Depicts western view of graded area where vegetation and other debris was removed from the areas near a culvert under Mulholland on the south end of parcel. Laurel Sumac Scrub (Malosma laurina Association) is the remaining vegetation community but is highly disturbed.

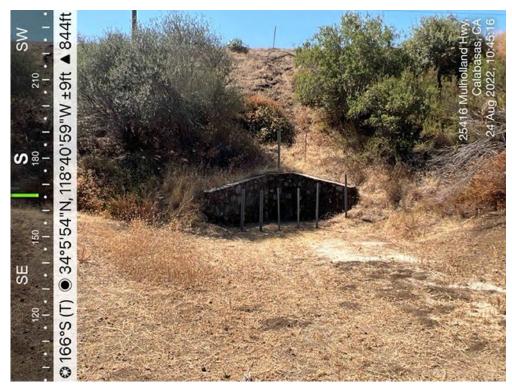


Image 7: Depicts culvert on southern edge of project parcel at bottom of graded and maintained area. Laurel Sumac Scrub (Malosma laurina Association) is the remaining vegetation community but is highly disturbed.



Image 8: Depicts eastern view of vegetation removal area near culvert. Laurel Sumac Scrub (Malosma laurina Association) is the remaining vegetation community but is highly disturbed.

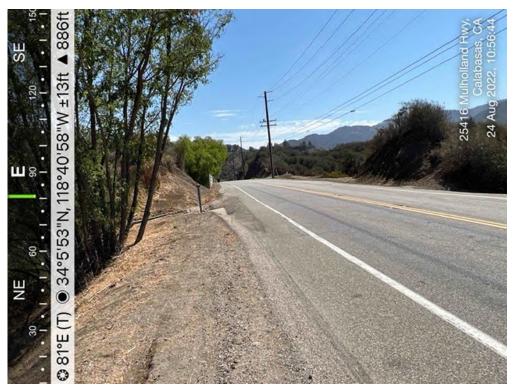


Image 9: Depicts eastern view of Mulholland Hwy facing away from project parcel.



Image 10: Depicts western view of Mulholland Hwy facing away from project parcel.

Appendix B

Flora and Fauna Compendium and CWHR Species Report

Angiosperms (Dicotyledons)

Scientific Name	Common Name
Anacardiaceae	Sumac or Cashew Family
Malosma laurina	laurel sumac
Rhus ovata	sugar bush
Asteraceae	Sunflower Family
Centaurea melitensis*	tocalote
Corethrogyne filaginifolia	cudweed aster
Erigeron canadensis	horseweed
Heterotheca grandiflora	telegraph weed
Hypochaeris glabra*	smooth cat's ear
Brassicaceae	Mustard Family
Brassica nigra*	black mustard
Hirschfeldia incana*	shortpod mustard
Chenopodiaceae	Goosefoot Family
Salsola tragus*	Russian thistle
Euphorbiaceae	Spurge Family
Euphorbia peplus	petty spurge
Fabaceae	Legume Family
Acacia melanoxylon	blackwood acacia
Geraniaceae	Geranium Family
Erodium botrys*	longbeak stork's bill
Hydropyllaceae	Waterleaf Family
Eriodicyton crassifolium	thickleaf yerba santa
Lamiaceae	Mint Family
Westringia fruticose	coastal rosemary
Salvia mellifera	black sage
Polygonaceae	Buckwheat Family
Eriogonum fasciculatum	California buckwheat
Rhamnaceae	Buckthorn Family
Ceanothus crassifolus	hoaryleaf ceanothus
Ceanothus megacarpus	bigpod ceanothus
Rosaceae	Rose Family
Adenostoma fasciculatum	chamise

Angiosperms (Monocotyledons)

Poaceae Grass Family		
Avena barbata*	slender oat	
Bromus diandrus*	ripgut brome	
Bromus madritensis*	foxtail chess	
* non native species		

Reptiles

Scientific Name	Common Name
Phrynosomatidae Zebratail, Earless, Horned,	
	Spiny, and Fringe-Toed Lizards
Sceloporus occidentalis	western fence lizard

Birds

Common Name		
Condors		
turkey vulture		
Jays and Crows		
California scrub-jay		
American crow		
Wrens		
Bewick' s wren		
Wrentits		
wrentit		

Mammals

Scientific Name	Common Name
Canidae	Dogs, Foxes, and Allies
Canis latrans	coyote

Appendix C

Special-Status Species Analysis

Special-Status Species

Special-status species are those plants and animals 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 based on 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 species include:

- Plants or 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;
- Plants or wildlife that meet the definitions of rare or endangered under CEQA Guidelines Section 15380.
- Plants or wildlife covered under an adopted NCCP/HCP;
- Plants considered by the California Native Plant Society (CNPS) to be rare, threatened, or endangered (List 1A, 1B and 2 plants) in California;
- Plants listed by the CNPS as plants in which there is limited information about distribution (List 3);
- Plants listed as rare under the California Native Plant Protection Act (Fish and Game Code 1900 et seq.);
- Wildlife designated by CDFW as species of special concern;
- Wildlife "fully protected" in California (California Fish and Game Code Sections 3511, 4700, and 5050); and
- Wildlife protected by the Migratory Bird Treaty Act (MTBA).

Federally-Protected Status

All references to Federally-protected species in this BRA include the most current published status or candidate category to which each species has been assigned by USFWS. For purposes of this assessment the following acronyms are used for Federal status species, as applicable:

- FE Federally-listed as EndangeredFT Federally-listed as Threatened
- **FPE** Federally proposed for listing as Endangered **FPT** Federally proposed for listing as Threatened
- **FPD** Federally proposed for delisting
- **FC** Federal candidate species (former C1 species)

State-Protected Status

For the purposes of this BRA, the following acronyms are used for State status species, as applicable:

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

California Rare Plant Rank

The CNPS is a private plant conservation organization dedicated to the monitoring and protection of special-status species in California. CNPS has compiled an inventory comprised of the information focusing on geographic distribution and qualitative characterization of Rare, Threatened, or Endangered vascular plant species of California (CNPS 2018). The list serves as the candidate list for listing as Threatened and Endangered by CDFW. CNPS has developed six categories of rarity known as the California Rare Plant Rank (CRPR), of which Ranks 1A, 1B, 2A, and 2B are particularly considered sensitive:

nia.

Rank 1B	Plants Rare,	Threatened,	or Endange	red in	California	and elsewhere.
---------	--------------	-------------	------------	--------	------------	----------------

Rank 2A Presumed extinct in California, but more common elsewhere.

Rank 2B Plants Rare, Threatened, or Endangered in California, but more common

elsewhere.

Rank 3 Plants about which we need more information – a review list.

Rank 4 Plants of limited distribution – a watch list.

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

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

Potential to Occur Assessment

Special-status species that present or are likely to occur within the parcel are based on one or more of the following:

- the direct observation of the species within the parcel during any field surveys;
- a record reported in the CNDDB; and
- the parcel is within known distribution of a species and contains appropriate habitat.

Special-status species that are unlikely to occur are based on one of the following:

- the parcel has the general habitat types but lacks necessary habitat elements such as suitable microhabitat or soils; or
- the parcel is outside the known elevation range or distribution of the species, and has otherwise suitable habitats;

Special-status species that have no potential to occur on the parcel are labeled as none due to the absence of suitable habitat.

Special-Status Plants

Scientific Name	Common Name	Federal/	General Habitat	Microhabitat	Potential to Occur on the Parcel
		State/CRPR			
Arenaria paludicola	Marsh sandwort	FE/CE/1B.1	Marshes and swamps (brackish, freshwater)	Openings in vegetative areas, sandy soils	None. No habitat occurs on the parcel.
Astragalus brauntonii	Braunton's milk-vetch	FE//1B.2	Chaparral, coastal scrub, valley and foothill grassland.	Recent burns or disturbed areas; usually on sandstone with carbonate layers. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 3-640 m.	Unlikely . Although chaparral occurs on the parcel, there are no open areas aside from those that are disturbed by grading. In these areas the soils are compacted and inappropriate for native plant growth, and are dominated by invasive species. The site also lacks recent burns or sandstone with carbonate layers and shallow soils.
Atriplex coulteri	Coulter's saltbush	//1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland.	Ocean bluffs, ridgetops, as well as alkaline low places. Alkaline or clay soils. 2-460 m.	None. No habitat occurs on the parcel.
Atriplex serenana var. davidsonii	Davidson's saltscale	//1B.2	Coastal bluff scrub, coastal scrub.	Alkaline soil. 0-460 m.	None. No habitat occurs on the parcel.
Baccharis malibuensis	Malibu baccharis	//1B.1	Coastal scrub, chaparral, cismontane woodland, riparian woodland.	In Conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat. 150-320 m.	Medium. Chaparral habitat and Conejo volcanic substrates occurs on site
Baccharis plummerae ssp. plummerae	Plummer's baccharis	//4.3	Broadleafed upland forest, chaparral, cismontane woodland, and coastal scrub.	Rocky substrate. 5-425 m.	Unlikely. Although chaparral occurs on the habitat, there are no rocky substrates present.
Calochortus catalinae	Catalina mariposa lily	//4.2	Chaparral, cismontane woodland, coastal scrub and valley and foothill grassland	Elevation range (15-700 m)	Unlikley. Chapparal habitat occurs on parcel, and parcel is within known species elevation range but this species is typically found on Catalina Island.
Calochortus clavatus var. gracilis	slender mariposa-lily	//1B.2	Chaparral, coastal scrub, valley and foothill grassland.	Shaded foothill canyons; often on grassy slopes within other habitat. 210-1815 m.	Unlikely . Although chaparral occurs on the parcel, no shaded foothill canyons or grassy slopes occur that are necessary for this species.
Calochortus plummerae	Plummer's mariposa lily	//4.2	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland	Granitic and rocky habitat	Unlikely. Although chaparral occurs on parcel, there is no granitic and/or rocky habitat present on site.

Cerocarpus betuloides var. blancheae	Island mountain mahogany	//4.3	Closed-cone coniferous forest and chaparral.	Elevation range (30-600 m).	Unlikely. Chaparral habitat occurs on the parcel and is within the species known elevation range. However, this species is typically found in mesic areas which do not occur on the site.
Cordylanthus maritimus ssp. maritimus	Salt marsh's bird-beak	FE/CE/1B.2	Coastal dunes and marshes and swamps (coastal salt). 0-100 m.		None. No habitat occurs on the parcel.
Deinandra minthornii	Santa Susana tarplant	/SR/1B.2	Chaparral, coastal scrub.	On sandstone outcrops and crevices, in shrubland. 280-705 m.	Unlikely . Although chaparral occurs on the parcel, there are no sandstone outcrops or crevices.
<i>Dudleya blochmaniae</i> ssp. <i>blochmaniae</i>	Blochman's dudleya	//1B.1	Coastal scrub, coastal bluff scrub, chaparral, valley and foothill grassland.	Open, rocky slopes; often in shallow clays over serpentine or in rocky areas with little soil. 5- 450 m.	Unlikely . Although chaparral occurs on the parcel, there are no open areas, clay soils, or rocky areas.
<i>Dudleya cymosa</i> ssp. <i>Marcescens</i>	marcescent dudleya	FT/SR/1B.2	Chaparral.	On sheer rock surfaces and rocky volcanic cliffs. 145-670 m.	Unlikely . Although chaparral occurs on the parcel, there are no sheer rock surfaces or rocky cliffs.
<i>Dudleya cymosa</i> ssp. <i>ovatifolia</i>	Santa Monica dudleya	FT//1B.1	Chaparral, coastal scrub.	In canyons on volcanic or sedimentary substrates; primarily on north-facing slopes. 150-335 m.	UnLikely. Chaparral occurs on the parcel, within elevation range, and is primarily north-facing slope habitat. However, appropriate rock type (andesitic outcrops and breccias) are not present.
Isocoma menziesii var. decumbens	decumbent goldenbush	//1B.2	Coastal scrub, chaparral.	Sandy soils; often in disturbed sites. 1-915 m.	Low . This species has the potential to occur in the hoaryleaf ceanothus shrubland on the parcel, particularly in areas that have been previously disturbed. However, this species was not observed during surveys within the impact area.
Juglans californica	Southern California black walnut	//4.2	Chaparral, coastal scrub, cismontane woodland.	Slopes, canyons, alluvial habitats. 50-900 m.	Absent. Although chaparral occurs on the parcel, there is no presence of alluvial soils and habitats.
<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>	Coulter's goldfields	//1B.1	Coastal salt marshes, playas, vernal pools.	Usually found on alkaline soils in playas, sinks, and grasslands. 1-1375 m.	None. No habitat occurs on the parcel.
<i>Monardella hypoleuca</i> ssp. <i>hypoleuca</i>	white-veined monardella	//1B.3	Chaparral, cismontane woodland.	Dry slopes. 50-1280 m.	Medium . This species has the potential to occur in the hoaryleaf ceanothus shrubland on the parcel, particularly on the slopes. However, this species was not observed during surveys within the impact area.
Navarretia ojaiensis	Ojai navarretia	//1B.1	Chaparral, coastal scrub, valley and foothill grassland.	Openings in shrublands or grasslands. 275-620 m.	Unlikely . Although chaparral occurs on the parcel, there are no openings or grasslands necessary for this species to occur.
Orcuttia californica	California Orcutt grass	FE/SE/1B.1	Vernal pools.	10-660 m.	None . No habitat occurs on the parcel.

Pentachaeta Iyonia	Lyon's pentachaeta	FE/SE/1B.1	Chaparral, valley and foothill grassland, coastal scrub.	Edges of clearings in chaparral, usually at the ecotone between grassland and chaparral or edges of firebreaks. Rocky, clay soils in pocket grasslands of chaparral and coastal scrub mosaics (USFWS 2008) ² . 30-630 m.	Unlikely . The parcel lacks the rocky clay soils and mosaics of grasslands necessary for this species to occur.
Rorippa gambellii	Gambel' s watercress	FE/CT/1B.1	Marshes and swamps (brackish freshwater)	Elevation range (5-330 m)	None. No habitat occurs on the parcel.

.

² USFWS. 2008. (*Pentachaeta lyonii*) Lyon's pentachaeta 5-Year Review: Summary and Evaluation.

Special-Status Wildlife

Scientific Name	Common	Federal/	General Habitat	Microhabitat	Potential to Occur on the
	Name	State/Other			Parcel
Insects					
Bombus crotchii	Crotch bumble bee	//	Coastal California east to the Sierra-Cascade crest and south into Mexico.	Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Unlikely . Many of the food plants necessary for this species to occur are absent from the parcel, and those that do occur (Phacelia and Eriogonum) are not abundant.
Danaus plexippus pop. 1	monarch - California overwintering population	//USFS:S	Closed-cone coniferous forest. Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico.	Roosts located in wind-protected tree groves (eucalyptus, Monterey pine, cypress), with nectar and water sources nearby.	None . No habitat occurs on the parcel.
Euphydryas editha quino	quino checkerspot butterfly	FE/ /XERCES:CI	Sunny openings within chaparral & coastal sage shrublands in parts of Riverside & San Diego counties.	Hills and mesas near the coast. Need high densities of food plants Plantago erecta, P. insularis, and Orthocarpus purpurescens.	None . The parcel lacks sunny openings in the chaparral and it is outside the current known range for the species. Finally, the parcel lacks the necessary food plants for this species to occur.
Fishes					
Eucyclogobius newberryi	tidewater goby	FE//SSC	Brackish water habitats along the California coast from Agua Hedionda Lagoon, San Diego County to the mouth of the Smith River.	Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water and high oxygen levels.	None . No habitat occurs on the parcel.
Gila orcuttii	arroyo chub	//SSC	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego river basins.	Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	None . No habitat occurs on the parcel.
<i>Oncorhynchus</i> <i>mykiss irideus</i> pop. 10	steelhead - southern California DPS	FE//AFS:EN	Aquatic and South coast flowing waters. Federal listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego County).	Southern steelhead likely have greater physiological tolerances to warmer water and more variable conditions.	None . No habitat occurs on the parcel.
Amphibians					
Rana draytonii	California red- legged frog	FT//SSC	Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation.	Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.	None . No habitat occurs on the parcel.

Scientific Name	Common	Federal/	General Habitat	Microhabitat	Potential to Occur on the
	Name	State/Other			Parcel
Reptiles					
Anniella stebbinsi	southern California legless lizard	//SSC	Broadleaved upland forest, Chaparral, Coastal dunes, Coastal scrub. Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County.	Variety of habitats; generally, in moist, loose soil. They prefer soils with a high moisture content.	Low . Although chaparral occurs on the parcel, there is only moist near the detention basin. The parcel is mostly dry, upland areas, and lacks the areas of sparse vegetation with moist soils.
Aspidoscelis tigris stejnegeri	coastal whiptail	//SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas.	Ground may be firm soil, sandy, or rocky.	High . This species is likely to occur in areas with sparse vegetation on the parcel, such as the post-fire-post-clearance shrub regeneration.
Diadophis punctatus modestus	San Bernardino ringneck snake	//USFS:S	Most common in open, relatively rocky areas. 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 veg.	Unlikely . There are portions of intermittent streams on the parcel, however there are no moist microhabitats on the parcel.
Phrynosoma blainvillii	coast horned lizard	//SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes.	Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects.	High . It is likely that this species occurs in the chaparral and in the post-fire and post-clearance shrub regeneration on the parcel.
Birds					
Aquila chrysaetos	golden eagle	//BLM_S	Rolling foothills, mountain areas, sage- juniper flats, and desert.	Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Unlikely Although there are rolling foothills and mountain areas, it is unlikely that this species would nest in this highly disturbed area with no large trees or cliff-walled canyons.
Brachyramphus marmoratus	Marbled murrelet	FT//SSC	Coastal waters and bays	Nesting sites can be found inland at mountains near coast.	None . No habitat occurs on the parcel.
Charadrius nivosus nivosus	Western snowy plover	FT//SSC	Sandy beaches, salt pond levees and shores of large alkali lakes.	Needs sandy, gravelly or friable soils for nesting.	None . No habitat occurs on the parcel.

Scientific Name	Common	Federal/	General Habitat	Microhabitat	Potential to Occur on the
	Name	State/Other			Parcel
Coccyzus americanus	Yellow-billed cuckoo	FT/SE/BLM_S	Riparian forest.		Unlikely. Although the chaparral habitat on the property can be considered riparian during flooding, it is too disturbed to be considered a potential nesting spot.
Empidonax traillii extimus	Southwestern willow flycatcher	FE//	Riparian habitat, standing water nearby.	Saturated soils, streams, pools, and cienegas nearby; evidence of flood activity.	None . No habitat occurs on the parcel.
Falco peregrinus anatum	American peregrine falcon	//CDF_P	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.	Unlikely. Although there are banks on site from intermittent streams, the site is not near wetlands or other large water sources.
Polioptila californica californica	coastal California gnatcatcher	FT//SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California.	Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	None . No habitat occurs on the parcel.
Sterna antillarum browni	California least tern	FE/SE/	Beaches, mudflats, and sand dunes.	Nest near shallow estuaries and lagoons with access to open oceans.	None . No habitat occurs on the parcel.
Vireo bellii pusillus	least Bell's vireo	FE/SE/	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft.	Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	None . No habitat occurs on the parcel.
Mammals					
Euderma maculatum	spotted bat	//SSC	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.	None . No habitat occurs on the parcel.
Eumops perotis californicus	western mastiff bat	//SSC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral, etc.	Roosts in crevices in cliff faces, high buildings, trees and tunnels.	Unlikely . Although there is chaparral habitat on the parcel, there are no trees or high buildings for roosting.
Lasiurus blossevillii	western red bat	//SSC	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests.	Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	None . No habitat occurs on the parcel.

Scientific Name	Common	Federal/	General Habitat	Microhabitat	Potential to Occur on the
	Name	State/Other			Parcel
Myotis ciliolabrum	western small- footed myotis	//BLM:S	Wide range of habitats mostly arid wooded & brushy uplands near water. Seeks cover in caves, buildings, mines, and crevices.	Prefers open stands in forests and woodlands. Requires drinking water. Feeds on a wide variety of small flying insects.	None . No habitat occurs on the parcel.
Myotis yumanensis	Yuma myotis	//BLM:S	Optimal habitats are open forests and woodlands with sources of water over which to feed.	Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.	None . No habitat occurs on the parcel.
Neotoma lepida intermedia	San Diego desert woodrat	//SSC	Coastal scrub of Southern California from San Diego County to San Luis Obispo County.	Moderate to dense canopies preferred. They are particularly abundant in rock outcrops, rocky cliffs, and slopes.	None . No habitat occurs on the parcel.

Appendix D

Biological Resources Assessment Checklist

Santa Monica Mountains Biological Assessment Checklist

Report	Section	n	Page #	Initials	
Title Pa	age		Cover Page	MS	
A.	Projec	t Name	1	MS	
B.	Count	y Identification Numbers	1	MS	
C.	Applic	ant Name and Contact Information	1	MS	
D.	Name	and Affiliation of Preparer	Cover Page	MS	
E.	Date				
Project	and Su	urvey Description	2	MS	
A.	Projec	t Description	2	MS	
	1. Pr	roject Name, Type of Report, Address of Project	1, 2	MS	
	2. C	ounty Application Identification Numbers Including APNs	1, 2	MS	
	3. A	pplicant Name and Contact Information	1	MS	
	4. Pá	arcel and Acreage Information	1, 2	MS	
	5. Lo	ocation	1-5	MS	
	a.	Map of regional features showing project location, including watershed boundaries, proximity to public lands, streams, drainages, and roads in region.	3-5	MS	
	b.		3-5	MS	
	6. D	etailed description of project, including area of vegetation	2-5	MS	
	re	emoval, modification, or disturbance, grading volumes, etc.			
B.	Descri	ption of Major Natural Features	6	MS	
	1. La	andforms and Geomorphology	6	MS	
	2. D	rainage and Wetland Features	6	MS	
	3. Sc	oils (soil/geological map optional)	6-8	MS	
C.	Metho	odology of Biological Survey	9-13	MS	
	1. D	ate(s) of survey(s)	9-13	MS	
	2. D	etailed Description of Survey Methods	9-13	MS	
Biolog	Biological Characteristics of the Site		14	MS	
A.	A. Flora			MS	
	1. N	Map of vegetation communities, specifying system used	15	MS	
		Map of project site showing the habitat areas from the LUP Biological Resources Map	18-19	MS	
	3. \	egetation cover table, with acreages of each vegetation type	14-17	MS	
	4. L F 2	Location, trunk, diameter, and canopy extent mapped for each protected tree that is within 25 feet of any portion of the proposed development. Note: for protected oaks on or within 200' of property, an oak tree report is required. Include oak tree reports in an appendix.	25, Appendix C	MS	

Report	Section	Page #	Initials
В.	Fauna	17, 20	MS
	1. Discussion of species observed, description of wildlife	17, 20,	MS
	community	Appendix B	
C.	Sensitive Species	20-23	MS
	1. Table of possible sensitive species and possible sensitive	Appendix D,	MS
	vegetation, including brief description of potential impacts to	20-23, 32-	
	any sensitive species	33	
	2. Maps of occurrence for sensitive species observed	N/A	MS
D.	List of flora and fauna observed or known from site	Appendix B	MS
E.	Survey Checklist	Appendix E	MS
Bibliogr	aphy	37	MS
A.	Bibliography of references cited in text	37	MS
Append	ices	39	MS
A.	Site Photographs (color)	Appendix A	MS
B.	Qualifications of Biologists and Other Contributors	Appendix F	MS
C.	Oak Tree Report for Sites with Jurisdictional Native Oak Trees	Appendix C	MS
Digital	copy of biological assessment, including georeferenced files of	Separate	MS
vegetat	ve data and sensitive species occurrences		

Appendix E

Biologists Resumes

Email: msouth@southenvironmental.com
Mobile: 303-818-3632

EDUCATION

B.S., Wildlife Ecology, University of Wisconsin-Madison, 2004

CERTIFICATIONS

Certified Wildlife Biologist, The Wildlife Society 2014

ISA Certified Arborist (WE-12564A) 2019

Certified Technical Service Provider (TSP) for Fish and Wildlife Management Plans, USDA NRCS 2017

Authorized Desert Tortoise Biologist – Numerous BOs

Unmanned Aircraft System Pilot Certification, FAA #4177603

TRAINING

Wetland Delineation Training Course – The Wetland Institute (2014)

Southwest Willow Flycatcher Workshop, 2017

USGS Desert Tortoise Health Assessment and Tissue Collection Techniques Training, 2009

Matthew South

PRINCIPAL BIOLOGIST

Matthew South founded South Environmental in 2018. He is a certified wildlife biologist and certified arborist with 20 years of professional experience providing natural resources consulting services for a wide variety of clients that include residential, commercial, government, utility, infrastructure, research, and non-profit projects. For the last 15 years, Mr. South has been an environmental consultant in southern California acting as a Wildlife Biologist and Geographic Information System (GIS) Analyst. In early 2018 he started South Environmental and has since been supporting clients in Los Angeles, Ventura, San Bernardino, and Riverside Counties.

Mr. South's background in ecology has led to a passion for conservation planning and resources assessments for the purpose of preservation and management. The integration of the latest technologies such as advanced GIS systems, mobile computing, and drone sensing allows him to innovate new data collection, analysis, and collaboration tools for the environmental sciences that produce more accurate data and better-informed resource managers.

EXPERTISE

- Conservation and Management Planning. Mr. South's has extensive experience preparing mitigation and monitoring plans, habitat conservation plans, and technical biological resources management plans that are compliant with federal, state, and local regulations. Mr. South is the only active NRCS TSP for Fish and Wildlife Plans Certified in California.
- **Biological Resources Assessment.** Mr. South has completed dozens of biological resources assessments throughout southern California.
- Rare Plants and Arborist Services. Mr. South has surveyed and assessed thousands of native and landscaped trees in southern California. He is a certified arborist with 5-years of tree survey experience working closely with some of the most experienced arborists in California. In addition, he has performed hundreds of hours of rare plant surveys and habitat assessments.
- Wetland & Jurisdictional Delineations. Mr. South has conducted dozens of jurisdictional and wetland delineations per the guidelines and methods from the US Army Corps of Engineers (USACE), California Department of Fish and Wildlife (CDFW), and the state Regional Water Quality Control Boards (RWQCB).
- **GIS.** Mr. South is an expert at spatial data collection and analysis using ESRI mobile and desktop software products and Trimble hardware.

SELECT MOUNTAIN LION ASSESSMENT EXPERIENCE

Mountain Lion Study – Granito Drive Project (2022). Mr. South planned and implemented a focused mountain lion study for a large single-family development within the Santa Monica Mountains that assessed habitat, wildlife movement corridors, impacts to habitat blocks, and impacts foraging, denning, and movement areas. The study was a local, regional, and population wide assessment of mountain lions. The study relied on a site survey, camera trap study, and a literature review. The study was prepared in response to comments from the City of Los Angeles biologists and public comments on the biological resources assessment regarding potential impacts to mountain lions.

Focused Mountain Lion Assessment – Marlay Drive Project (2022). Mr. South was contracted as a subject-matter expert to prepare focused mountain lion habitat assessment for a proposed single-family home development in the Santa Monica Mountains. The focused study relied on a literature review and assessment of habitat from existing sources and was in response to comments from the City of Los Angeles and CDFW on a report written by another firm.

Various Biology Reports with Mountain Lion Assessments (2020-present). Mr. South has prepared or overseen the preparation of hundreds of biological resources assessment reports with mountain lion focused assessments since the mountain lion became a candidate for listing to the California Endangered Species Act. These reports are prepared within the range of the population of mountain lions that is the target of the listing status, in the Santa Monica Mountains, San Gabriel Mountains, Simi Hills, and Verdugo Hills. Select Projects include:

- Baseline Road in LaVerne
- Altadena Hills Project
- 16 Beverly Park
- 64 Beverly Park
- 74 Beverly Park
- 79 Beverly Park
- Toyopa Drive
- Mapleton Drive
- Tigertail
- 680 Sarbonne
- 777 Sarbonne
- Stradella Road
- Tower Grove
- Bella Drive
- Chautauqua Boulevard
- Benedict Canyon

- Haslam Terrace
- Summitridge Drive
- Rial Lane
- Outpost Ave
- Pasquera
- Beverly Grove
- Multiple Granito Drive Projects
- Floral and Electra Drive Project
- Hillside
- Magnolia
- Swallow
- Sierra Mar
- Beverly Grove
- Stradella
- Chalon Road
- Moraga

- Brentridge
- Viewcrest
- Old Chimney Road
- Multiple Developments or Mulholland Highway
- Berkley Hall School Project
- Charmel Lane
- Paseo Miramar Roadway Project
- Posetano-Revello Project
- Palmera
- Shadow Mountain Drive
- Astral Project
- Nofral Road Projects
- San Onofre Drive
- Crescent Drive

OTHER SELECT PROJECT EXPERIENCE

Southern California Gas (SCG) As-Needed Natural and Cultural Resources Services (2022-ongoing). As a subconsultant on this contract Mr. South has overseen the assessment numerous resources from single point locations to many miles of pipelines. More recently he has begun to conduct biological assessment in the coastal zone in Santa Barbara County as well as endangered species Biological Assessments (BAs) in support of Coastal Development Permits for SCG. Wetland delineation and permitting, biological resources assessments, and resources surveys and monitoring are services that Mr. South both provides personally and oversees a team of specialists that support the environmental impacts analysis and permitting for SCG.

Santa Clarita VTTM Multi-Use Development Project (2018-ongoing). South Environmental prepared a biological resources assessment report, jurisdictional delineation, rare plant survey, and a focused oak tree survey and report for a proposed large-scale development that includes mixed uses such as senior living, commercial areas, and residential developments. South Environmental has been retained to prepare permit applications following the completion of the projects CEQA analysis.

City of Palmdale - Confidential Project (2022-ongoing). South Environmental prepared a jurisdictional delineation and permit applications to CDFW and RWQCB for the project. Services included EPIMS application and RWQCB Dredge and Fill Application and coordination including for mitigation management and alternatives analysis. This is a large-scale warehouse development next to a major river and has many protected resources and multi-agency involvement.

Southern California Edison (SCE) As-Needed Natural and Cultural Resources Services (2021-ongoing). As a subconsultant on this contract for multiple Primes (SWCA, EI, Rincon, and Stantec), South Environmental has focused its biological resources services on wetland delineations and permitting efforts for SCE throughout all its regions. From single pole delineations in roadside ditches to several hundred poles through miles of wet meadows in the Sierras, the projects vary in size and complexity as well as location. Primarily, delineations have been in the Sierras with the largest and most complex projects in Inyo and Mono Counties and several in Kern and Tulare. A few of the specific projects include

- Pickle Meadow: Aquatic Resources Delineation Report and Permitting for 300-poles located in a wet meadow behind Bridgeport Reservoir.
- Kern River: Wetland Delineation and Permitting for 15 pole replacements in Kernville.
- June Lake to Tom's Place: Wetland Delineation and Permitting for 40 poles spread through Inyo and Mono Counties.
- Cajon Wash: Jurisdictional Delineation and SBKR Assessment and Permitting for 10 pole replacements and realignment for a capital project located in SBKR Critical Habitat.
- Pipes Wash: Delineation and Permitting for 25-poles that are within Pipes Wash, a large ephemeral wash in the San Bernardino desert.



Mobile: 530-713-9250



EDUCATION

B.S., Biological Sciences, California State University, Chico, 2019

M.S., Conservation and Restoration Science, University of California, Irvine, 2022

SKILLS

- -Remote Sensing through QGIS
- -Plant Identification through dichotomous keys and regional literature
- -Wildlife Identification through field guides and prior experience
- -Endangered Species Management including Least Bells Vireo, California Least Tern, and Santa Ana Sucker
- -GIS Planning
- -Statistical Modeling and Analyses through R Studio
- -Scientific collection and management of field data
- -Technical Writing

Certifications

- -Wilderness First Aid Certification
- -Boating Education Certificate, California Course for Safe Boating

Ajeet "AJ" Samra

ASSOCIATE BIOLOGIST

AJ Samra is a current environmental professional and recent graduate from University of California, Irvine's Masters in Conservation and Restoration Science Program. He has over 2 years of natural resource management, biological monitoring, habitat restoration, and endangered species assessment experience. He has conducted field biological research both in the northern California and southern California regions, respectively. More recently, AJ had worked as a Natural Resources Intern for the Orange County Water District where he was able to further advance his skills in endangered species assessment through the monitoring of Least Bell's Vireo, California Least Tern, and Santa Ana Sucker within the Prado Basin in Riverside County. It was during this time that he also obtained experience in managing mitigation sites where native plants were grown in accordance with a contract set with CDFW.

Mr. Samra's academic and professional background in ecology has led to an interest in researching more on restoration and conservation practices, specifically on how they are adapted as various ecosystems continue to change as climate change continues to affect our planet. He also seeks to apply skills of data analytical techniques with R and remote sensing methodologies with QGIS toward different research projects centered around the conservation of critical natural resources.

EXPERTISE

- **Biological Monitoring.** Mr. Samra has experience identifying various species of wildlife that are found throughout the southern California region, including endangered avian species such as Least Bell's vireo, California least tern and California gnatcathcer.
- Plant Identification. Mr. Samra has extensive knowledge in identifying native, non-native, and invasive plant species throughout the southern California region, specifically in wetland, riparian, and chapparal environments.
- Data Management and Analysis. Mr. Samra has significant expertise
 in conducting statistical analyses on field data through R Studio. Many
 of the tests he has conducted include analysis of variance (ANOVA),
 linear regression, log-response ratio, and correspondence analysis, to
 name a few
- **GIS and QGIS.** Mr. Samra is proficient at mapping spatial data using ArcGIS and performing remote sensing assessments on specific environments by analyzing satellite imagery through QGIS.

SELECT PROJECT EXPERIENCE

Orange County Water District (OCWD) Natural Resources Intern (2020-2022). As a Natural Resources Intern for the OCWD, AJ's responsibilities were to provide support to the on-staff biologists as much as possible. Duties included:

- Conduct biological monitoring and research on terrestrial, aquatic and avian species, both migratory and resident
- Assist in native habitat restoration planning and implementation in terrestrial and stream settings
- Conduct territory assessments and nest monitoring surveys for listed species such as Least Bell's Vireo,
 California Least Tern, California Gnatcatcher, and Santa Ana Sucker
- Participate with a team of Natural Resources biologists on policy coordination, program implementation and evaluation and monitoring wetland regulation compliance on district facilities at Prado Wetlands in Corona, the Santa Ana River, and surrounding groundwater basins in Anaheim
- Effectively communicate and coordinate with conservation agencies, partners, biological consultants and universities in field studies of wildlife and habitat management studies and surveys
- Conducted a remote sensing study on vegetation health and soil moisture within listed species' habitat and presented findings and significance to department biologists

City of Los Angeles Biological Resources Assessments (2022 – present). AJ conducts site assessments for biological resources, surveys for special-status plants and animals, maps and characterizes plant communities and wetlands/streams, and assesses potential impacts to biological resources from proposed developments. AJ has worked on the following reports:

- 1420 Killarney Avenue Biological Resources Assessment Report
- 607 Muskingum Avenue Biological Resources Assessment Report
- 14999 La Cumbre Biologist's Declaration of Biological Resources Report
- 11968 Brentridge Statement of Habitat
- 408 Museum and 391 Crane Biological Resources Assessment Report
- 13444 Java Drive Biological Resources Assessment Report
- 5271 Marmol Drive Statement of Habitat
- 3301 Longridge Statement of Habitat

Southern California Edison On-Call Biological Resources Services (2022-present). AJ conducts surveys for biological resources in support of SCEs deteriorated poles and vegetation management program. He has conducted Jurisdictional Delineations and habitat assessments for pole replacement projects and utility infrastructure management project.

Appendix F

Site Plan

