David Magney Environmental Consulting

BIOLOGICAL RESOURCES ASSESSMENT OF THE CARTER PROPERTY, CAYMAN ROAD, MALIBU, CALIFORNIA

Prepared for:

COUNTY OF LOS ANGELES

On behalf of:

SUE CARTER

July 2023

Mission Statement

To provide quality environmental consulting services with integrity that protect and enhance the human and natural environment

DMEC

Biological Resources Assessment of the Carter Property, 2545 Cayman Road, Malibu, California

Prepared for:

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SECTION I. INTRODUCTION

BACKGROUND

David Magney Environmental Consulting (DMEC) was contracted to conduct this biological resources assessment and impacts analysis for the Carter property and proposed project at the request of property owner Sue Carter. The entire project site's natural vegetation was burned by a wildfire most recently in 2018 (Woolsey Fire). The area of the Santa Monica Mountains containing the project site has burned several times: Sherwood/Zuma Fire (1956), Latigo Fire (1967), Dayton Canyon Fire (1982), and the Woolsey Fire (2018) (CalFire 2021).

PROJECT PURPOSE AND SCOPE

The proposed project involves the construction of a single-family residence, garage with driveway. The parcel is approximately 2.38 acres in size. The total footprint of disturbance is 0.452, including the building pad and driveway. The structures to be built is approximately 0.037 acre.

PROJECT LOCATION

The project site is located in the Santa Monica Mountains in western Los Angeles County (Figure 1, General Project Site Location Map). The Carter property (project site) is located approximately 1.81 miles NNW of the Malibu Vista community at 2545 Cayman Road, Malibu, Los Angeles County, California (APNs 4465-006-070). The project site is on the west edge of Cayman Road/Ramirez Motorway on a ridge between Ramirez and Escondido Canyons approximately 0.75 mile northeast of the Kanan-Dume Road, as shown on Figure 2, Map of Project Site with Parcel Boundary, and on Figure 3, Aerial Photo of Project Site with Parcel Boundary. The site is in the Point Dume Quadrangle (USGS 7.5-minute Series) at the approximate geographic coordinates of 34.06944°N latitude and 118.79262°W longitude, located in the SE¼NW¼ Section 20 T1S R18W, San Bernardino Base Line.

The Carter property is in the Ramirez Canyon watershed at an elevation of approximately 1,750 feet (122 meters) above mean sea level. The parcel ranges in elevation from 1,700 feet to 1,817 feet above sea level from the west edge to the northeastern corner. The Carter parcel is approximately 2.38 acres in size with the eastern edge facing Cayman Road as illustrated in Figure 2 and Figure 3, Aerial Photo of the Project Site. The project site, and all of the ocean (south) side of the Santa Monica Mountains, is within the Coastal Zone.

Figure 1. General Project Site Location Map

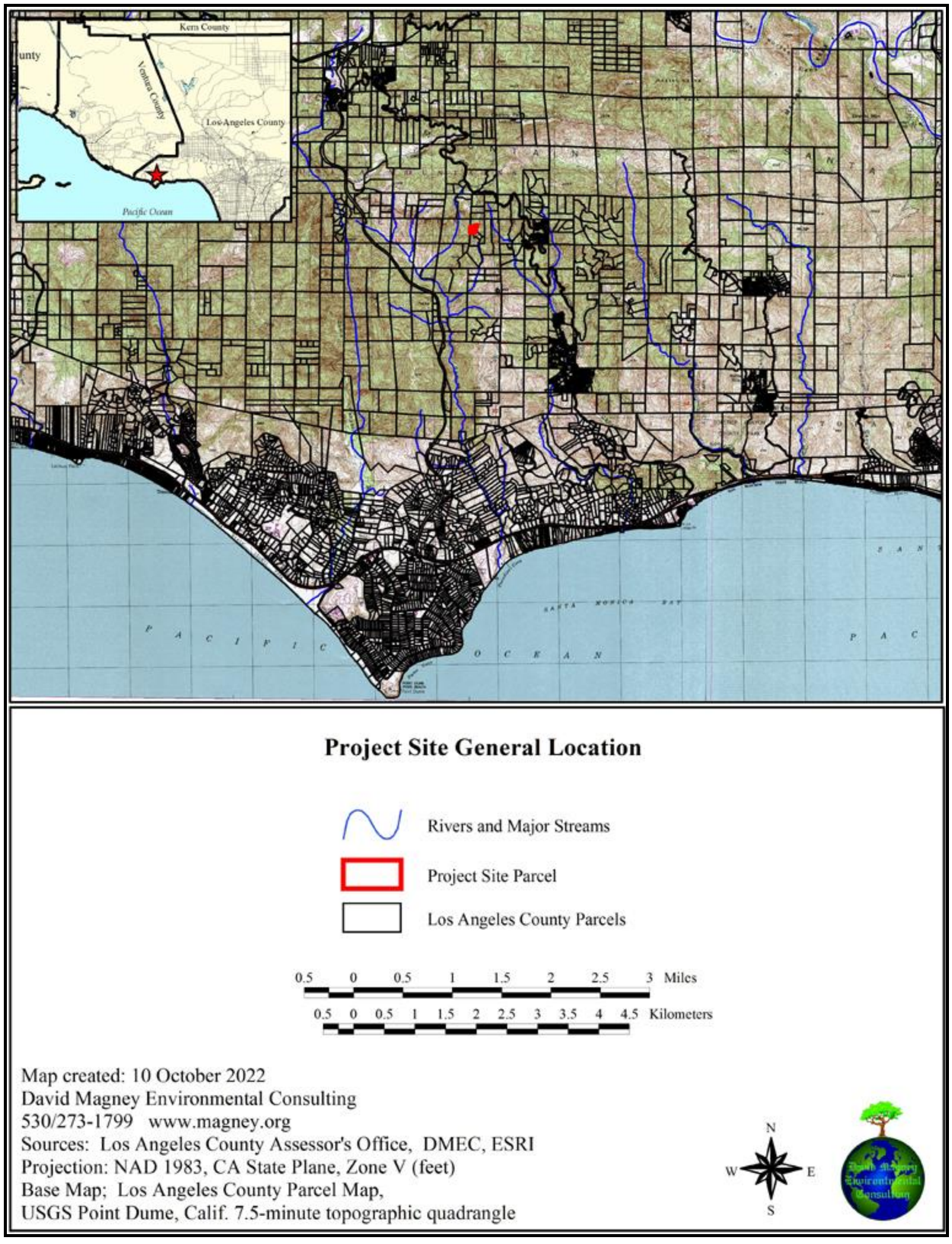


Figure 2. Map of Project Site with Parcel Boundary

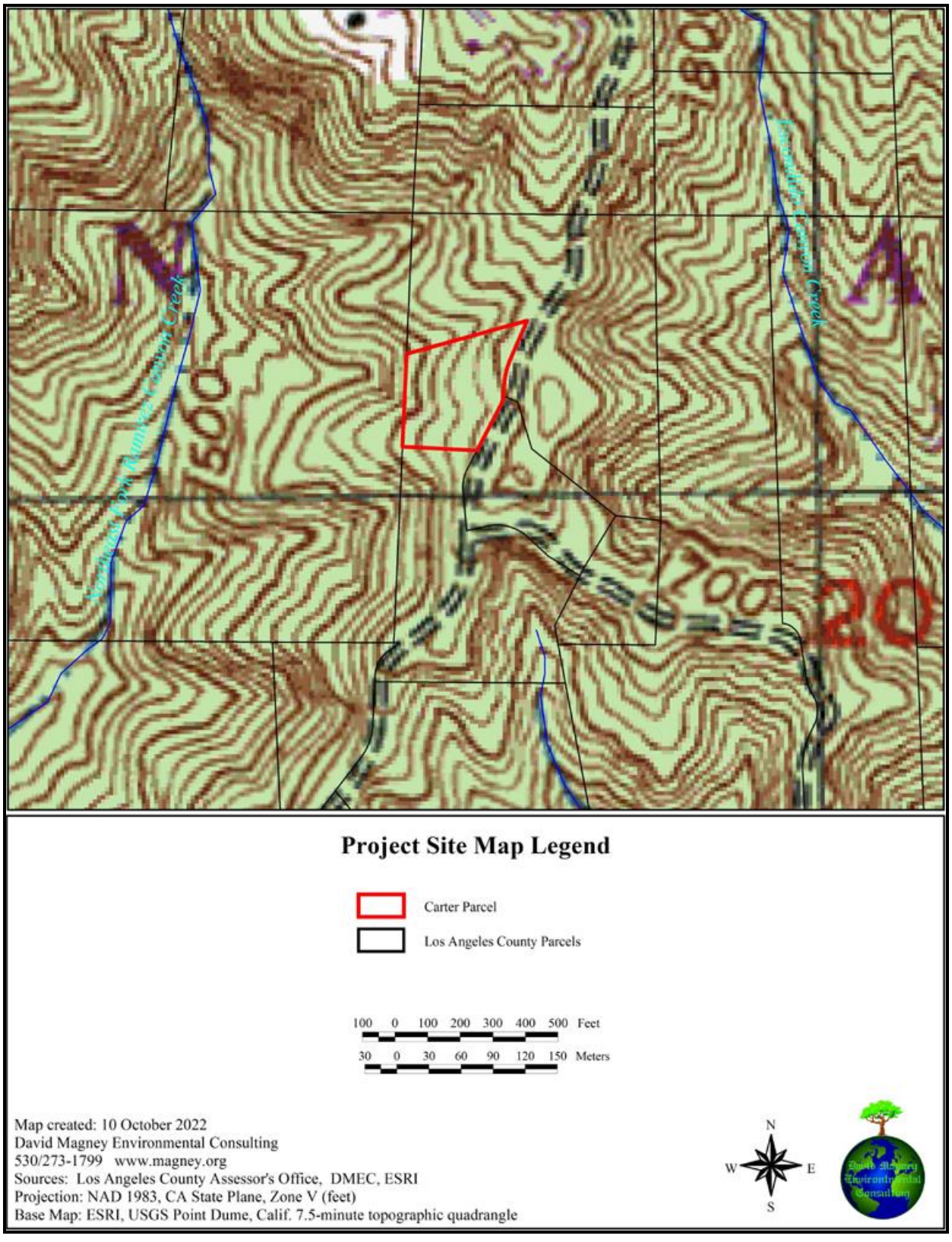
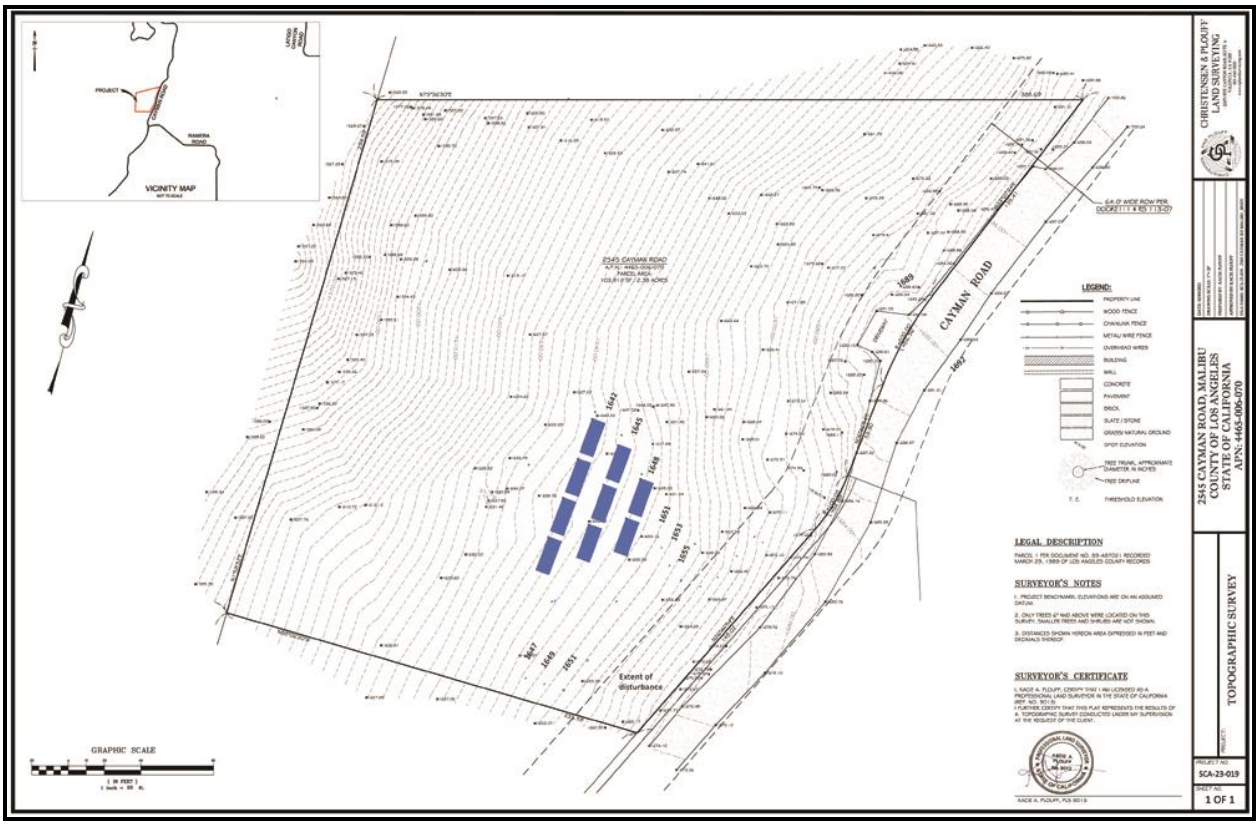


Figure 3. Aerial Photo of Project Site with Parcel Boundary

Figure 3 is a recent aerial photo (24 February 2022) from Google Earth that shows the condition of the vegetation of the project site since the Woolsey Fire of 2018. The darkest green area is a Coast Live Oak on the northern edge of the parcel. Cayman Road/Ramera Motorway is on the right (east).

Figure 4, Project Site Vegetation and Proposed Footprint, shows the proposed project site footprint with the natural vegetation delineated. The proposed development area, including driveway, all occur in areas that have been graded and disturbed in the past but have recolonized with coast scrub and chaparral.

Figure 4. Project Site and Proposed Footprint



SECTION II. EXISTING CONDITIONS

DMEC biologist David Magney conducted a surveys of the project site on 6 November 2022, 15 April, and 17 June 2023. The property was surveyed by walking over the site and the immediate surrounding areas and recording observations of plants, wildlife, and habitats, with locations tracked by GPS. Focused protocol-level surveys for special-status and listed species were not conducted. The flora, fauna, and habitats observed are described in the following sections.

SITE HISTORY

The project parcel have not been developed; however, it has has been cleared and partially graded in the past with a driveway, lateral driveways, and a small pad that extends onto the parcel to the south. This initial grading occurred prior to 17 July 1989 based on conditions visible on a USGS black & white aerial photograph of that date as shown below. Historical imagery available on Google Earth prior to 1990 is too course, of too low resolution, to detect any conditions on the Carter parcel prior to that date.

Natural vegetation recolonized the graded areas by 31 May 1994[1]. Natural revegetation continued through 30 December 2001 but the primary driveway, a portion of the pad, and one lateral driveway as regraded/cleared by 22 August 2002. The pad at the south edge of the parcel was further cleared onto the northern portion of the adjoining parcel to the south by 31 December 2002. Again these areas were allows to revegetate by 24 December 2004, but again were cleared by 15 March 2006, with another of the earlier side driveways recleared. By 22 October 2007, natural vegetation again was recolonizing the graded areas, an no further grading or clearing was evident by 26 April 2011. Revegetation continued until the Woolsey Fire of late 2018 burned the entire site, as evidenced by the aerial photo of 3 January 2018. Natural revegetation restarted after the Woolsey Fire without any further clearing or grading, as evidenced by the aerial imagery of 28 February 2021 and 24 February 2022, the most recent aerial imagery available of the project site.

Below are clips of each of the historical aerial photographs mentioned above, with the project parcel overlaying the imagery, starting with the oldest image.

[1] Based on conditions interpreted from a 31 May 1994 USGS black & white aerial photograph.


Carter Parcel
17 July 1989
Google Earth
Image U.S. Geological Survey
400 ft
N
Carter Parcel
31 May 1994
Google Earth
Image U.S. Geological Survey
400 ft
N
Carter Parcel
22 August 2002
Google Earth
Image © 2022 Maxar Technologies
400 ft
N


Carter Parcel
31 December 2002
Google Earth
Image U.S. Geological Survey
400 ft
N


Carter Parcel
24 December 2004
Google Earth
Image © 2022 Maxar Technologies
400 ft
N


Carter Parcel
15 March 2006
Google Earth
Image U.S. Geological Survey
400 ft
N


Carter Parcel
22 October 2007
Google Earth
400 ft
N


Carter Parcel
26 April 2011
Google Earth
400 ft
N


Carter Parcel
10 December 2013
Google Earth
400 ft
N


Carter Parcel
5 December 2017
Google Earth
400 ft
N


Carter Parcel
3 January 2019
Google Earth
400 ft
N


Carter Parcel
19 August 2019
Google Earth
400 ft
N

FLORA

A total of sixty-four (64) vascular plant species were observed onsite. Of these, fifty-one (51, or 80%) of the vascular plants are native species and thirteen (13, or 20%) are nonnative or exotic species. The proportions of native and nonnative taxa onsite are similar to the 75% native: 25% nonnative for other regions of California and for the entire flora of California (Hickman 1993), a result of the disturbed nature of much of the project site.

Eight (8) of the 10 exotic species observed are listed by the California Invasive Plant Council (Cal-IPC) (2006, 2007) as invasive and a threat to wildlands, including those on Cal-IPC's

inventory as High[2], Moderate[3], or Limited[4]. The 64 vascular plants that were observed are listed below in Table 1, Plant Species of the Carter Property.

Table 1. Plant Species of the Carter Property

Scientific Name[5]	Common Name	Habit[6]	Family[7]
Acmispon glaber var. *glaber*	Deerweed	S	Fabaceae
Acourtia microcephala	Sacapellote	PH	Asteraceae
Adenostoma fasciculatum var. *fasciculatum*	Chamise	S	Rosaceae
*Amaranthus albus**	White Amaranth	AH	Amaranthaceae
Amsinckia intermedia [26-23 UCSB]	Common Fiddleneck	AH	Boraginaceae
Artemisia californica	California Sagebrush	S	Asteraceae
Avena barbata *	Slender Wild Oat	AG	Poaceae
Brassica nigra *	Black Mustard	AH	Brassicaceae
Brickellia californica	California Brickellbush	S	Asteraceae
Bromus diandrus ssp. *diandrus* *	Ripgut Brome	AG	Poaceae
Bromus madritensis ssp. *rubens* *	Red Brome	AG	Poaceae
Calandrinia menziesii	Redmaids	AH	Montiaceae
Calochortus catalinae	**Catalina Mariposa Lily**	PG	Liliaceae
Calystegia macrostegia var. *intermedia* [25-23 UCSB]	Chaparral Morning-glory	PV	Convolvulaceae
Carduus pycnocephalus ssp. *pycnocephalus**	Italian Thistle	AH	Asteraceae
Castilleja applegatei ssp. *martinii*	Martin Indian Paintbrush	PH	Orobanchaceae
Caulanthus lasiophyllus	California Mustard	AH	Brassicaceae
Ceanothus spinosus	Greenbark Ceanothus	S	Rhamnaceae
*Centaurea melitensis**	Tocalote	AH	Asteraceae
Chenopodium californicum [23-23 UCSB]	California Soap Plant	PH	Chenopodiaceae
Chlorogalum pomeridianum	Soap Lily	PG	Liliaceae
Clarkia bottae		AH	Onagraceae
Claytonia perfoliata ssp. *mexicana*	Mexican Miner's Lettuce	AH	Montiaceae
Cuscuta sp.	a Dodder	AV	Convolvulaceae
Cryptantha clevelandii var. *clevelandii* [22-23 UCSB]	Cleveland Forget-Me-Not	AH	Boraginaceae

[2] High = species that have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically. (http://www.cal-ipc.org/ip/inventory/index.php#categories)

[3] Moderate – species that have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread. (http://www.cal-ipc.org/ip/inventory/index.php#categories)

[4] Limited – These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic. (https://www.cal-ipc.org/plants/inventory/about-the-inventory/)

[5] * = Introduced plant species that have become naturalized. + = escaped ornamental species. Red type indicates plants listed by the California Invasive Plant Council (Cal-IPC) (2006, 2007) as invasive and a threat to wildlands, ranked as a High, Moderate, or Limited threat. Plants in **Bold** typeface are special-status species (CNPS 2001, 2021). Scientific names of the plant species follow *The Jepson Manual* 2nd Edition (Baldwin et al. 2012) and Flora of North America Committee (1993+). Brackets [ ] indicate Magney voucher specimen collection number, to be deposited into the UCSB Herbarium.

[6] Habit definitions: AG = annual graminoid; AH = annual herb; AV = annual vine; PG = perennial graminoid; PH = perennial herb; PV = perennial vine; S = shrub; T = tree.

[7] Family taxonomy follows Flora of North America Committee (1993+).

Scientific Name[5]	Common Name	Habit[6]	Family[7]
Daucus pusillus *		AH	Apiaceae
Deinandra fasciculata	Clustered Tarplant	AH	Asteraceae
Delphinium cf cardinale	Scarlet Larkspur	PH	Ranunculaceae
Diplacus longiflorus	Sticky Bush Monkeyflower	S	Phrymaceae
Dipterostemma capitatus ssp. *capitatus*	Blue Dicks	PG	Themidaceae
Elymus condensatus	Giant Wildrye	PG	Poaceae
Eriogonum cinereum	Coastal Wild Buckwheat	S	Polygonaceae
Eriogonum fasciculatum var. *foliolosum*	Leafy California Buckwheat	S	Polygonaceae
Eriophyllum confertiflorum var. *confertiflorum*	Golden Yarrow	S	Asteraceae
Erodium cicutarium *	Redstem Filaree	AH	Geraniaceae
Eschscholzia californica	California Poppy	AH	Papaveraceae
Eucrypta chrysanthemifolia var. *chrysanthemifolia*	Common Eucrypta	AH	Hydrophyllaceae
*Foeniculum vulgare**	Sweet Fennel	PH	Apiaceae
Helianthus annuus	Annual Sunflower	AH	Asteraceae
Hesperoyucca whipplei	Our Lord's Candle	S	Agavaceae
Heteromeles arbutifolia	Toyon	S	Rosaceae
*Hirschfeldia incana**	Summer Mustard	BH	Brassicaceae
Hordeum murinum ssp. *glaucum**	Hare Barley	AG	Poaceae
Isocoma menziesii var. *vernonioides* [21-23 UCSB]	Green-leaved Dune Goldenbush	S	Asteraceae
Juglans californica[8]	**Southern Calif. Black Walnut**	T	Juglandaceae
Lupinus bicolor	Bicolored Lupine	AH	Fabaceae
Malacothamnus fasciculatus	Chaparral Bushmallow	S	Malvaceae
Malacothrix saxatalis var. *tenuifolia*	Tenuate-leaved Cliff-aster	PH	Asteraceae
Malosma laurina	Laurelleaf Sumac	S	Anacardiaceae
Marah macrocarpa	Big-fruit California Man-root	PV	Cucurbitaceae
Paeonia californica	California Peony	PH	Paeoniaceae
Phacelia cicutaria var. *hispida*	Hispid Caterpillar Phacelia	AH	Hydrophyllaceae
Phacelia ramosissima var. *ramosissima*	Branching Phacelia	PH	Hydrophyllaceae
Phacelia viscida	Sticky Phacelia	AH	Hydrophyllaceae
Quercus agrifolia var. *agrifolia*	Coast Live Oak	T	Fagaceae
Quercus berberidifolia	California Scrub Oak	S	Fagaceae
Rafinesquia californica	California Chicory	AH	Asteraceae
Rhamnus ilicifolia	Hollyleaf Redberry	S	Rhamnaceae
Ricinus communis *	Castor Bean	PH	Euphorbiaceae
Salvia leucophylla	Purple Sage	S	Lamiaceae
Salvia mellifera	Black Sage	S	Lamiaceae
Sambucus mexicana	Blue Elderberry	S	Adoxaceae
Scutellaria tuberosa [27-23 UCSB]	Danny Skullcap	PH	Lamiaceae
*Sisymbrium ?**		AH	Brassicaceae
Solanum xanti [28-23 UCSB]	Chaparral Nightshade	S	Solanaceae
Sonchus asper var. *asper* *	Prickly Sow-thistle	AH	Asteraceae
Sonchus oleraceus *	Common Sow-thistle	AH	Asteraceae
Stephanomeria virgata ssp. *?*	Twiggy Wreath Plant	AH	Asteraceae
*Tribulus terrestris**	Puncture Vine	AH	Zygophyllaceae
Venegasia carpesioides	Canyon Sunflower	PH	Asteraceae
*Washingtonia robusta**	Mexican Fan Palm	T	Arecaceae

[8] Observed approximately 838 feet southeast of the Carter parcel along Rameriz Canyon Motorway.

Scientific Name[5]	Common Name	Habit[6]	Family[7]
Yabea microcarpa [24-23 UCSB]	Yabea	AH	Apiaceae

One tree species occurs onsite, Coast Live Oak (*Quercus agrifolia* var. *agrifolia*), which occurs along the northern edge of the parcel. The photo on the right shows this tree, which was burned in the most recent wildfire. All native trees are protected by county protection policies, requiring permits to remove them.

Left: View south of lone Coast Live Oak on north edge of property. Right: View southwest of same tree, which burned in the 2018 Woolsey Fire and is recovering. Photos taken on 6 November 2022.

The most common large shrub found onsite is the Greenbark Ceanothus (*Ceanothus spinosus*), a common broadleaf evergreen shrub in the Santa Monica Mountains. It occurs scattered throughout the parcel, primarily on the northern two-thirds.

FAUNA

A total of twenty-six (26) wildlife species were observed onsite, including one reptile, nine birds, four mammals, and ten invertebrates (1 arachnid and 9 insects). No special-status wildlife species was observed onsite; however, suitable habitat is present for *Neotoma lepida intermedia* (San Diego Desert Woodrat) and *Helminthoglypta traskii* ssp. *traskii* (Peninsular or Trask Shoulderband Snail). The 26 total species observed are listed below in Table 2, Wildlife Species

of the Carter Property, as well as vertebrate and invertebrate species that are expected to occur onsite or in the immediate area of the project site.

Table 2. Wildlife Species of the Carter Property

Scientific Name[9]	Common Name	Order/Family	Evidence[10]
VERTEBRATES			
Amphibians – Class Amphibia			
Batrachoseps nigriventris	Black-bellied Slender Salamander	Order Caudata: Family Plethodontidae	Expected[11]
Ensatina eschscholtzii eschscholtzii	Monterey Ensatina	Order Caudata: Family Plethodontidae	Expected
Taricha torosa	California Newt	Order Caudata: Family Salamandreidae	Possible[12]
Pseudacris hypochondriaca	Baja California Tree Frog	Order Caudata: Family Hylidae	Possible[13]
Reptiles – Class Reptilia			
Sceloporus occidentalis	Western Fence Lizard	Order Squamata: Family Iguanidae	Observed
Uta stansburiana elegans	California Side-blotched Lizard	Order Squamata: Family Iguanidae	Expected
Elgaria multicarinatus	Southern Alligator Lizard	Order Squamata: Family Anguidae	Expected
Pituophis catenifer	Gopher Snake	Order Squamata: Family Colubridae	Expected
Crotalus oreganus	Western Rattlesnake	Order Squamata: Family Viperidae	Expected
Hypsiglena ochrorhynchus	Coast Night Snake	Order Squamata: Family Colubridae	Expected
Birds – Class Aves			
Pelecanus occidentalis	Brown Pelican	Order	Expected[14]
Calypte anna	Anna's Hummingbird	Order Apodiformes: Family Trochilidae	Expected
Selasphorus sasin	Allen's Hummingbird	Order Apodiformes: Family Trochilidae	Expected
Charadrius nivosus	Western Snowy Plover	Order Charadriiformes: Family Charadriidae	Expected[15]
Zenaida macroura	Mourning Dove	Order Columbiformes: Family Columbidae	Observed
Buteo jamaicensis	Red-tailed Hawk	Order Falconiformes: Family Accipitridae	Observed
Buteo albonotatus	Zone-tailed Hawk	Order Falconiformes: Family Accipitridae	Expected
Cathartes aura	Turkey Vulture	Order Falconiformes: Family Cathartidae	Expected
Falco sparverius	American Kestrel	Order Falconiformes: Family Falconidae	Expected
Callipepla californica	California Quail	Order Galliformes: Family Phasianidae	Observed
Aphelocoma californica	Western Scrub Jay	Order Passeriformes: Family Corvidae	Observed[16]

[9] An asterisk (*) indicates introduced, non-native species. **Bold type** indicates special-status species.
[10] Evidence: Observed (animal seen, heard, or sign [e.g. tracks, scat, feathers, nest]); Expected (observed nearby [Latigo, Escondido, Malibu, and/or Ramirez Canyons] by DMEC or others in similar habitat offsite).
[11] Observed by Brandon Troth approx. 650 feet SSW in December 2019, iNaturalist.org
[12] Observed by Brandon Troth in Ramirez Canyon Creek to the W in April 2022, iNaturalist.org
[13] Observed by Max Roberts in Latigo Canyon Creek to the SE in December 2021 and approx. 600 feet S along Cayman Road in January 2020, iNaturalist.org
[14] Observed flying overhead approx. 2000 feet SE by "naturamber123" on 5 May 2018, iNaturalist.org
[15] Observed on property due N of project site by Grigory Heaton and by "andrealikesbirds" to the SSE in August 2022, iNaturalist.org
[16] Observed on 6 November 2022.

Scientific Name[9]	Common Name	Order/Family	Evidence[10]
Corvus brachyrhynchos	American Crow	Order Passeriformes: Family Corvidae	Observed
Corvus corax	Common Raven	Order Passeriformes: Family Corvidae	Observed[17]
Toxostoma redivivum	California Thrasher	Order Passeriformes: Family Mimidae	Expected[18]
Junco hyemalis	Dark-eyed Junco	Order Passeriformes: Family Emberizidae	Expected
Pipilo maculatus	Spotted Towhee	Order Passeriformes: Family Emberizidae	Observed
Pipilo [*Kieneria*] *crissalis*	California Towhee	Order Passeriformes: Family Emberizidae	Observed[19]
Carpodacus mexicanus	House Finch	Order Passeriformes: Family Fringillidae	Expected
Chamaea fasciata	Wrentit	Order Passeriformes: Family Muscicapidae	Observed[20]
Sialia mexicana	Western Bluebird	Order Passeriformes: Family Turdidae	Observed
Setophaga coronata	Yellow-rumped Warbler	Order Passeriformes: Family Parulidae	Observed
Picoides nuttallii	Nuttall's Woodpecker	Order Piciformes: Family Picidae	Expected
Mammals – Class Mammalia			
Didelphis virginiana	Virginia Opossum	Order Marsupialia: Family Didelphidae	Expected
Odocoileus hemionus	Mule Deer	Order Artiodactyla: Family Cervidae	Observed[21]
Procyon lotor	Raccoon	Order Carnivora: Family Procyonidae	Expected
Lepus californicus bennettii	San Diego Black-tailed Jackrabbit	Order Lagomorpha: Family Leporidae	Expected[22]
Sylvilagus auduboni sanctidiegi	San Diego Desert Cottontail	Order Lagomorpha: Family Leporidae	Expected[23]
Sylvilagus bachmani cinerascens	Los Angeles Brush Rabbit	Order Lagomorpha: Family Leporidae	Observed[24]
Neotamias merriami merriami	Merriam's Chipmunk	Order Rodentia: Family Sciuridae	Expected[25]
Otospermophilus beecheyi beecheyi	California Ground Squirrel	Order Rodentia: Family Sciuridae	Expected[26]
Dipodomys agilis agilis	Agile Kangaroo Rat	Order Rodentia: Family Dipodomyinae	Expected[27]
Chaetodipus californicus dispar	Coastal Californica Pocket Mouse	Order Rodentia: Family Perognathinae	Expected[28]
Thomomys bottae botae	Botta's Pocket Gopher	Order Rodentia: Family Geomyidae	Expected
Microtus californicus stephensi	South Coast Marsh Vole	Order Rodentia: Family Cricetidae	Expected[29]
Neotoma bryanti intermedia	Bryant's Woodrat	Order Rodentia: Family Neotominae	Observed[30]

[17] Observed on 6 November 2022.
[18] Observed approx. 1200 feet E by Samuel King Johnson on 11 June 2017, iNaturalists.org
[19] Observed on 6 November 2022.
[20] Observed on 6 November 2022.
[21] Observed (scat and tracks) on 6 November 2022.
[22] Blood 2021 – see Citations for full reference.
[23] Ibid.
[24] Observed on 6 November 2022.
[25] Ibid.
[26] Ibid.
[27] Ibid.
[28] Ibid.
[29] Ibid.
[30] Observed (nest) on 6 November 2022.

Scientific Name[9]	Common Name	Order/Family	Evidence[10]
Neotoma lepida lepida	Desert Woodrat	Order Rodentia: Family Neotominae	Expected[31]
Neotoma macrotis macrotis	Big-eared Woodrat	Order Rodentia: Family Neotominae	Expected[32]
Peromyscus boylii rowleyi	Rowley's Brush Deermouse	Order Rodentia: Family Neotominae	Expected[33]
Peromyscus maculatus	Deer Mouse	Order Rodentia: Family Cricetidae	Expected
Urocyon cinereoargenteus	Gray Fox	Order Carnivora: Family Canidae	Observed[34]
INVERTEBRATES			
Mollusks – Class Gastropoda			
Helminthoglypta traskii* ssp. *traskii	**Peninsular or Trask Shoulderband Snail**	Family Helminthoglyptidae	Expected
Annelids – Class Oligochaeta			
Lumbricus sp.	Nightcrawler Earthworm	Family Lumbricidae	Expected
Crustaceans – Class Crustacea			
Armadillium vulgare	Common Pill Bug	Order Isopoda	Expected
Porcellio laevis	Dooryard Sow Bug	Order Isopoda	Expected
Arachnids – Class Arachnida			
Pholcus sp.	Pholcid Spider	Order Araneae: Family Pholcidae	Expected
Argiope argentata	Silver Argiope Spider	Order Araneae: Family Araneidae	Observed[35]
Agelenopsis sp.	Grass Spider	Order Araneae: Family Agelenidae	Expected
Bothriocyrtum californicum	California Trapdoor Spider	Order Araneae: Family Ctenizidae	Expected
Dysdera crocata	Sow Bug Killer	Order Araneae: Family Dysderidae	Expected
Lycosa tarantula	Wolf Spider	Order Araneae: Family Lycosidae	Expected
Mimetus sp.	Pirate Spider	Order Araneae: Family Mimetidae	Expected
Aphonopelma steindachneri	Steindachner's Ebony Tarantula	Order Araneae: Family Theraphosine	Expected
Leuronchus pacificus	Pacific Harvestman	Order Opiliones: Family Sclerosomatidae	Expected
Insects – Class Insecta			
Dasytinae subfamily	Soft-winged Flower Beetle	Order Coleoptera: Family Melyiidae	Observed
Eleodes sp.	Stink Beetle	Order Coleoptera: Family Tenebrionidae	Expected
Cratidus osculans	Wooly Darkling Beetle	Order Coleoptera: Family Tenebrionidae	Expected
Hippodamia convergens	Convergent Ladybird Beetle	Order Coleoptera: Family Coccinellidae	Expected
Lucilia sericata	Common Green Bottle Fly	Order Diptera: Family Calliphoridae	Observed
Symphoromyia sp.	Biting Snipe Fly	Order Diptera: Family Rhagionidae	Observed
Villa sp.	Bee Fly	Order Diptera: Family Bombyliidae	Observed
Apis mellifera	European Honey Bee	Order Hymenoptera: Family Apidae	Observed[36]
Diadasia ochracea	Ochraceous Chimney Bee	Order Hymenoptera: Family Apidae	Expected
Agopostemon texanus	Texas Striped Sweat Bee	Order Hymenoptera: Family Halictidae	Expected

[31] Ibid.
[32] Ibid.
[33] Ibid.
[34] Scat observed on 6 November 2022.
[35] Observed on 6 November 2022.
[36] Observed (heard) on 6 November 2022.

Scientific Name[9]	Common Name	Order/Family	Evidence[10]
Ceratina arizonensis	Arizona Small Carpenter Bee	Order Hymenoptera: Family Xylocopinae	Expected
Osmia coloradoensis	Colorado Mason Bee	Order Hymenoptera: Family Megachilidae	Expected
Heliopetes ericetorum	Northern White-skipper	Order Lepidoptera: Family Hesperiidae	Expected
Ochlodes agricola	Rural Skipper	Order Lepidoptera: Family Hesperiidae	Expected
Ochlodes sylvanoides	Woodland Skipper	Order Lepidoptera: Family Hesperiidae	Expected
Adelpha californica	California Sister Butterfly	Order Lepidoptera: Family Nyphalidae	Expected
Calephelis nemesis californica	California Fatal Metalmark	Order Lepidoptera: Family Riodinidae	Expected
Vanessa cardui	Painted Lady	Order Lepidoptera: Family Nyphalidae	Expected
Junonia grisea	Gray Buckeye Butterfly	Order Lepidoptera: Family Nyphalidae	Expected
Papilio rutulus	Western Tiger Swallowtail	Order Lepidoptera: Family Papilionidae	Expected
Anthocharis sara	Sara Orangetip Butterfly	Order Lepidoptera: Family Pieridae	Observed
Pieris rapae	Cabbage Butterfly	Order Lepidoptera: Family Pieridae	Expected
Gyrllus sp.	Field Cricket	Order Orthroptera: Family Gryllidae	Observed[37]
Trimeritropis pollidipennis	Pallid-winged Grasshopper	Order Orthroptera: Family Acrididae	Observed[38]
Bagrada hilaris	Bagrada Bug	Order Heteroptera: Subfamily Pentatominae	Observed
Allacrotelsa spinulata	Spinulate Silverfish	Order Zygentoma: Family Lepismatidae	Expected

HABITATS

A total of seven (7) habitat and land cover types were identified on the Carter property site and adjacent areas, which are listed in Table 3, Existing Habitats and Land Cover on the Carter Property and Expected Impacts. Table 3 provides the area in acres for each habitat and land cover and the acreage of each habitat that is considered ESHA under CCC guidelines and the Santa Monica Mountains LIP. In addition, the estimated acreage of expected project impacts on the site, within ESHA and/or SERA on the site, and off of the project site (no ESHA or SERA area expected to be impacted offsite) is listed. Each habitat and land cover type is described below. The natural vegetation and land cover types present onsite were mapped and are shown on Figure 4 above.

[37] Observed on 6 November 2022.
[38] Observed on 6 November 2022.

Table 3. Existing Habitats and Land Cover on the Carter Property and Expected Impacts

Existing Habitats and Land Cover Observed	Total Onsite Acres	Onsite ESHA or SERA Acres	Onsite Impact Acres	Onsite ESHA or SERA Impact Acres	Offsite Impact Acres (No ESHA)	Total Impact Acres
Disturbed Coastal Scrub	0.408	0.408	0.0408	0.408	0.0	0.408
Coast Live Oak Woodland	0.010	0.010	0.000	0.000	0.0	0.000
Ceanothus Chaparral	1.711	1.711	0.681	0.681	0.0	0.681
Chamise Chaparral	0.097	0.097	0.097	0.097	0.0	0.097
Cliff Face	0.014	0.00	0.00	0.00	0.0	0.00
Ruderal Herbaceous	0.030	0.00	0.015	0.0	0.0	0.015
Road/Paved	0.028	0.00	0.028	0.00	0.0	0.028
Acreage Totals	2.298	2.226	1.214	1.186	0.0	1.214

Scrub Habitats

Scrub habitats is a general type of vegetation that is dominated by evergreen and deciduous shrubs with small to large, thick, leathery, to soft and grayish-green leaves. The shrubs of scrublands are relatively low and open (sometimes dense), and are pre-adapted to periodic wildfires by stump sprouting or by germination from a dormant seed bank. These shrubs are also adapted to drought by deep extensive root systems, while their small thick leaf structure, gray color, waxy or hairy coating, or drought deciduousness prevents permanent damage from moisture loss (Zedler et al. 1997). Many typical chaparral species also grow intermixed as associates with scrubland species. Scrublands typically occurs on moderate to steep slopes with dry, rocky, shallow soils, becoming more abundant with higher elevations where temperatures are lower and moisture supplies are more ample.

Scrublands, as a general category, is a subdominant vegetation type onsite and in the region, occupying approximately 2.226 acre of the Carter parcel. Scrublands onsite consist of Coastal Sage Scrub, Ceanothus Chaparral, and Chamise Chaparral plant communities. These communities are generally considered H1 and H2 sensitive habitats in the coastal zone of the Santa Monica Mountains.

California Mesic Chaparral

California Mesic Chaparral is a shrubland dominated by evergreen, sclerophyllus-leaved medium to tall shrubs that is a group of chaparral that is part of the California Chaparral macro group (CNPS 2021[39]). Chaparral plant series typically exhibit a continuous distribution, often in close association with areas inhabited by Coastal Sage Scrub habitats. Due to stand variations, Chaparral is often considered part of a collection of species-specific plant series (Sawyer and Keeler-Wolf 1995).

[39] Online version of *A Manual of California Vegetation* (https://vegetation.cnps.org/alliance/525).

Chaparral on the Carter project site consists of patches dominated by Greenbark Ceanothus (*Ceanothus spinosus*), a glossy-green-leaved tall, evergreen shrub with green bark, forming the *Ceanothus spinosus* Shrubland Association (part of the *Prunus ilicifolia- Heteromeles arbutifolia - Ceanothus spinosus* Shrubland Alliance). The chaparral extends beyond the project site to the north and to the south. It occupies approximately 1.711 acres of the project site. Based on the extent and somewhat isolated condition of this chaparral type, it is considered as meeting the definition of H2 or H3 sensitive habitat.

Views south from northern area of parcel showing Greenbark Ceanothus resprouting after the 2018 Woolsey Fire. Photos taken on 6 November 2022.

Coastal Sage Scrub

Coastal Sage Scrub is a shrubland dominated by facultative drought-deciduous, low-growing, soft-leaved, and grayish-green (malacophyllus) shrubs and subshrubs. Coastal Sage Scrub plant series typically exhibit a patchy distribution, often in close association with areas inhabited by chaparral habitats. Due to stand variations, Coastal Sage Scrub is often considered part of a collection of species-specific plant series (Sawyer and Keeler-Wolf 1995).

Southern California's coastline, foothills, and western slopes were once covered by Coastal Sage Scrub, but are now largely developed. Unlike plant relatives found in the mountains and deserts, Coastal Sage Scrub species have adapted to an ecosystem that rarely freezes in the winter and only occasionally experience temperatures over 90°F during the dry California summer. Coastal Sage Scrub plants can store moisture and reduce moisture loss during the prolonged hot, dry months between April and October. The plants either conserve water by specialized leaf structures or dormancy. Tough leathery, wax-covered leaves prevent water from escaping through leaf pores. Minute white hairs keep leaf temperatures down by reflecting sunlight and reduce moisture loss by slowing dry winds. Some leaves are very reduced in size, appearing as spines, as on cacti. Other plants drop their leaves during summer months, while other species will dry up and go dormant by middle summer. Root systems can be extensive, sometimes exceeding 30 feet. The roots anchor the plants, hold soil in place, and reduce runoff during winter and spring rains. Fire is also a healthy and necessary component of its life cycle. Shrubs respond to recurrent fires by resprouting from crown and roots and by producing fire-resistant seeds that are fire-dependent for germination.

Coastal Sage Scrub at the project site is represented by relatively small patches of vegetation on open sites within the dominant chaparral vegetation. It is characterized by California Sagebrush

(*Artemisia californica*), Deerweed (*Acmispon glaber* var. *glaber*), Purple Sage (*Salvia leucophylla*), Laural Sumac (*Malosma laurina*), Coastal Wild Buckwheat (*Eriogonum cinereum*), and Giant Wildrye (*Elymus condensatus*). Understory species consist of needlegrass species (*Stipa pulchra* – Purple Needlegrass) and a variety of herbaceous annual and perennial species. Giant Wildrye (*Elymus condensatus*) is a subdominant onsite and in the region. This vegetation alliance is referred to *Salvia leucophylla* Shrubland Alliance and *Salvia leucophylla/Elymus condensatus* Shrubland Association. Disturbed Coastal Sage Scrub, such as from brush clearance or a wildfire, is often dominated first by Deerweed, such as found on the Carter property.

Disturbed Coastal Sage Scrub (*Salvia leucophylla* Shrubland Alliance) on the Carter property is dominated by *Salvia leucophylla* and *Acmispon glaber*, associated with *Malosma laurina, Malacothamnus fasciculatus* var. *fasciculatus, Toxicodendron diversilobum,* and *Stipa pulchra*, as well as many other infrequent taxa. This alliance occupies approximately 0.408 acre of the Carter parcel/project site. Based on the extent and somewhat isolated condition of this coastal scrub type, it is considered as meeting the definition of H2 or H3 sensitive habitat.

Grasslands/Herblands

Grasslands/Herblands are plant communities dominated and characterized by herbaceous plants, consisting of grasses and graminoids and wildflowers and herbs, both annual and perennial in duration, depending on the type. Grasslands/Herblands at the Carter project site consists entirely of Ruderal Grassland, which has been disturbed in the recent past by human activities.

Ruderal Herbland

Ruderal Herbland consists of annual and herbaceous perennial grasses and herbs dominated by invasive exotic plants that has been disturbed by human actions in the recent past (last 20 years), particularly by *Hirschfeldia incana, Erodium cicutarium, Bromus diandrus,* and *Avena barbata*. This plant community occurs on the east edge of the parcel and associated with human disturbance in constructing and maintaining Cayman Road and driveway pullout. This plant community does not meet the definition as a sensitive habitat.

Woodlands

Woodland habitats consist of evergreen and/or winter-deciduous broadleaved trees and large shrubs. The project site contains one type of woodland: Coast Live Oak Woodland, albeit a remnant of what was likely more extensive prior to repeated wildfires in the region. Native trees are protected species under Los Angeles County General Plan policies.

Coast Live Oak Woodland

Coast Live Oak Woodland is dominated by Coast Live Oak (*Quercus agrifolia* var. *agrifolia*), the dominant tree of coastal California. Coastal Sage Scrub, chaparral, and grassland species

often occur in openings and as the understory for this woodland. Coast Live Oak Woodland occurs as small patches along Cayman Road and Ramirez Motorway and at the norther edge of the project site, with the latter burned during the Woolsey Fire of 2018.

Coast Live Oak Woodland at the project site meets the definition as an H2 Habitat, measures 0.010 acre.

SECTION III. SENSITIVE BIOLOGICAL RESOURCES

Sensitive biological resources consist of natural vegetation or habitats that are rare or support rare or sensitive species and special-status species of plants or wildlife, and sensitive environmental habitats. Each of these categories of sensitive biological resources is described in detail below and include: Environmentally Sensitive Habitat Area (ESHA), Significant Environmental Resource Areas (SERA), Special-status Plants, and Special-status Wildlife.

ENVIRONMENTALLY SENSITIVE HABITAT AREA (ESHA)

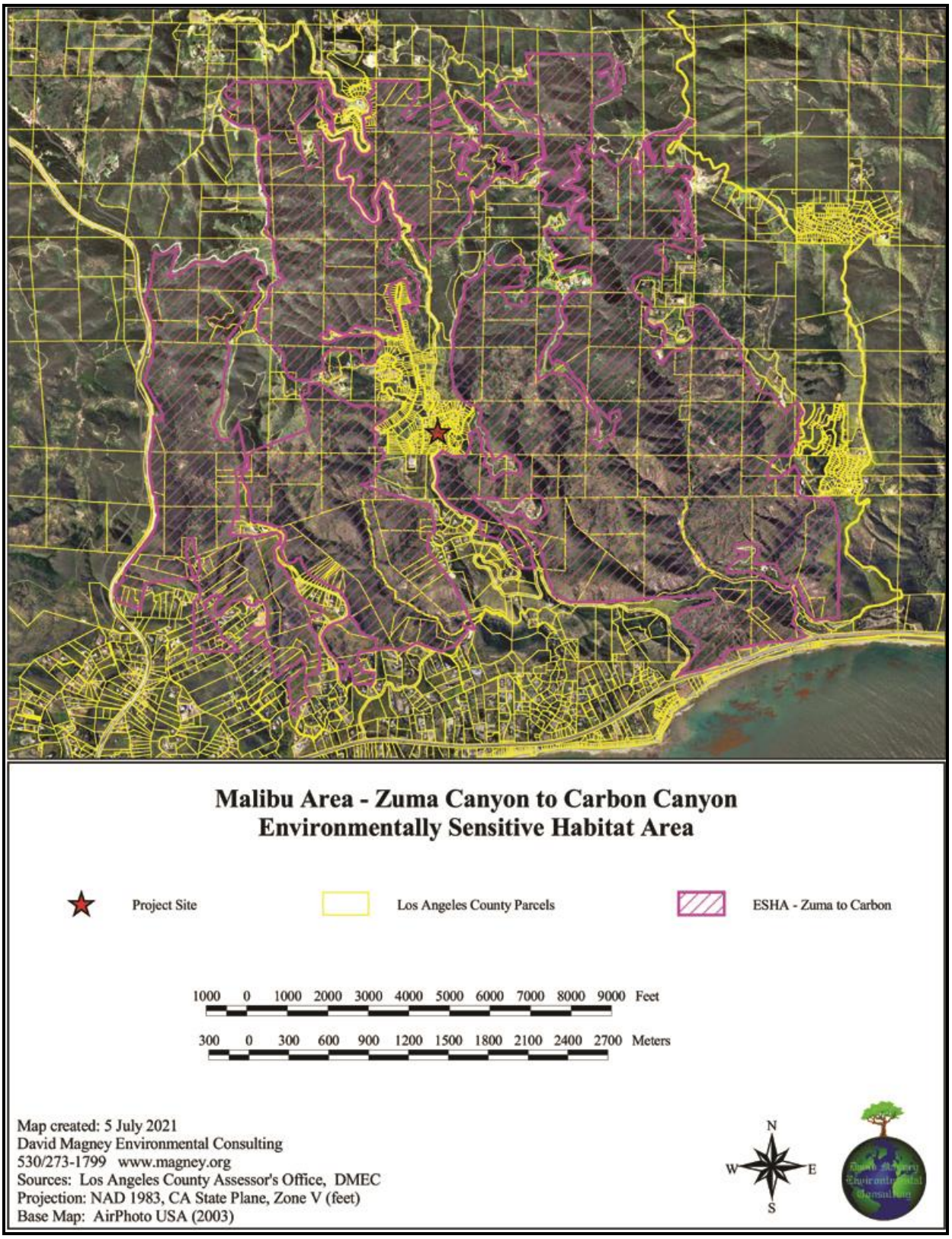
The Coastal Act defines Environmentally Sensitive Habitat Area (ESHA) as "any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments" (Section 30107.5). There are three elements important in defining ESHA:

1) a geographic area can be designated as ESHA either because of the presence of individual species of plants or animals or because of the presence of a particular habitat;
2) in order for an area to be designated as ESHA, the species or habitat must be either rare or it must be especially valuable; and
3) the area must be easily disturbed or degraded by human activities.

The CCC considers the Mediterranean Ecosystem in the Santa Mountains to be rare and especially valuable because of its relatively pristine character, physical complexity, and resultant biological diversity. Therefore, areas of undeveloped native habitat in the Santa Monica Mountains that are large and relatively unfragmented may meet the definition of ESHA by virtue of their valuable roles in that ecosystem, regardless of their relative rarity throughout the state. This is the only place in the coastal zone where the CCC has recognized Chaparral as meeting the definition of ESHA. Due to the essential role that plant communities play in maintaining the biodiversity of the Santa Monica Mountains, the historical losses and current rarity of these habitats in Southern California, and their extreme sensitivity to disturbance, the native Riparian, Coastal Sage Scrub, and Oak Woodland habitats in the Santa Monica Mountains also meet the definition of ESHA under the Coastal Act (Dixon 2003). Figure 5, Map of Chaparral-Coastal Scrub ESHA in the Malibu Region, shows the extent of chaparral/coastal sage scrub in the Latigo Canyon-Carbon Canyon-Malibu Canyon area as delineated by DMEC (2008, 2013, and 2021) to satisfy California Coastal Commission assessment requirements for a project in the upper reaches of Carbon Canyon. Figure 5 was created with a 2020 high-resolution aerial photograph as a base.

The project site and all of the Malibu Vista neighborhood to the east is just outside two large areas of contiguous ESHA as defined by the CCC (Dixon 2003), one to the west and one to the east, mapped by DMEC using the CCC criteria, as shown on Figure 5. The project site is outside by near the Latigo-Solstice Canyons ESHA area that is approximately 1,657 acres of contiguous ESHA. The ESHA area on the west side of Malibu Vista includes Escondido and Ramirez Canyons and measures approximately 1,352 acres, consists of three subareas (lower Escondido Canyon, upper Escondido Canyon, and Ramirez Canyon) divided by roads and scattered residences.

Figure 5. Map of Chaparral-Coastal Scrub ESHA in the Malibu Region



SIGNIFICANT ENVIRONMENTAL RESOURCE AREAS

Significant Environmental Resource Areas (SERAs) are sensitive habitat designations established in the Santa Monica Mountains Local Implementation Program (LIP), which is part of the Santa Monica Mountains Local Coastal Program (Los Angeles County Department of Regional Planning 2018) defined as H1 and H2 areas, defined in Section 22.44.1810 of the LIP.

H1 Habitat consists of habitats of highest biological significance, rarity, and sensitivity that includes alluvial scrub, coastal bluff scrub, dunes, wetland, native grassland and scrub with a strong component of native grasses or forbs, riparian, native oak, sycamore, walnut and bay woodlands, and rock outcrop habitat types.

H2 Habitat "consists of habitats of high biological significance, rarity, and sensitivity that are important for ecological vitality and diversity of the Santa Monica Mountains Mediterranean Ecosystem. Connectivity among habitats within an ecosystem and connectivity among ecosystems is important for the preservation of species and ecosystem integrity."[40] H2 habitat also contains CNDDB-identified rare natural communities, listed species, G1/S1 rarity ranked 1, 2, or 3 taxa and CNPS-listed plants, each of which is fully defined below.

H2 Habitat also contains a subcategory of "High Scrutiny" habitat, which is comprised of "extra-sensitive" species or habitats, such as containing listed species and CNPS List 1B and 2 plant taxa and CDFW Species of Special Concern, also defined below.

H3 Habitat consists of areas that would be designated as H2 but have been significantly disturbed or removed as part of lawfully-established development, or intact habitat that has been substantially fragmented or isolated by legal development and no longer connected to large contiguous areas of coastal sage scrub and/or chaparral-dominated habitats.[41]

Burned H1, H2, and H3 habitats are to be considered as if they were not burned as they will naturally regrow to maturity in time. Required fuel modification zones that otherwise included H1, H2, and/or H3 habitats are excluded from protection under the LIP.

SPECIAL-STATUS RESOURCES DEFINITIONS

Special-status habitats are vegetation types, associations, or sub-associations that support concentrations of special-status plant or wildlife species, are of relatively limited distribution, or are of particular value to wildlife.

Special-status species are plants and animals that are at least one of the following:

Listed as Endangered or Threatened under Federal or California Endangered Species Acts,

Listed as Rare under the California Native Plant Protection Act, or

Considered rare (but not formally listed) by resource agencies, professional organizations (e.g. Audubon Society, California Native Plant Society [CNPS], The Wildlife Society), and the scientific community.

[40] Subsection 2 of 22.44.1810 – Description of Habitat Categories of the LIP, page 490.

[41] Subsection 4 of 22.44.1810 – Description of Habitat Categories of the LIP, pages 491, 492.

Listed species are those taxa that are formally listed as Endangered or Threatened by the federal government (e.g. USFWS), pursuant to the Federal Endangered Species Act (ESA) or as Endangered, Threatened, or Tare (for plants only) by the State of California (i.e. California Fish and Game Commission), pursuant to the California Endangered Species Act (CESA) or the California Native Plant Protection Act, or those formally adopted by a local (e.g. county or city government) agency as of local concern or rare, or similar status. Special-status species are defined in Table 4, Definitions of Special-Status Species.

The CNPS' *Inventory of Rare and Endangered Plants of California* (CNPS 2001, 2022) categorizes rare California plants into one of five lists or ranks (1A, 1B, 2, 3, and 4) representing five levels of species status, one of which is assigned to a sensitive species to indicate its status of rarity or endangerment and distribution. Most taxa also receive a threat code extension following the List (e.g. 1B.1, 2.3), which replaces the R-E-D Code previously used by CNPS. Table 5, California Native Plant Society Rare Plants List, provides a definition for each List code number, and Table 6, California Native Plant Society List Threat Code Extensions, defines the CNPS List Threat Code Extensions that indicates the level of endangerment within California.

The California Natural Diversity Database (CNDDB) Element Ranking system provides a numeric global and state-ranking system for all special-status species tracked by the CNDDB (2021b). The global rank (G-rank) is a reflection of the overall condition of an element (species or natural community) throughout its global range. The state rank (S-rank) is assigned much the same way as the global rank, except state ranks in California often also contain a threat designation attached to the S-rank. This Element Ranking system is defined below in Table 7, California Natural Diversity Database Element Ranking System.

Table 4. Definitions of Special-Status Species

○ Plants and animals legally protected under the California and Federal Endangered Species Acts or under other regulations.	
○ Plants and animals considered sufficiently rare by the scientific community to qualify for such listing; or	
○ Plants and animals considered to be sensitive because they are unique, declining regionally or locally, or are at the extent of their natural range.	
Special-Status Plant Species	**Special-Status Animal Species**
○ Plants listed or proposed for listing as threatened or endangered under the Federal Endangered Species Act (50 CFR 17.12 for listed plants and various notices in *Federal Register* for proposed species). ○ Plants that are Category 1 or 2 candidates for possible future listing as threatened or endangered under the Federal Endangered Species Act (55 CFR 6184, February 21, 1990). ○ Plants that meet the definitions of rare or endangered species under the CEQA (*State CEQA Guidelines*, Section 15380). ○ Plants considered by CNPS to be "rare, threatened, or endangered" in California (Lists 1B and 2 in CNPS 2001). ○ Plants listed by CNPS as plants needing more information and plants of limited distribution (Lists 3 & 4 in CNPS 2001). ○ Plants listed by CNPS as locally rare (Lake et al. 2021 for Alameda & Contra Costa Counties, Magney 2020 for Ventura County, Wilken 2018 for Santa Barbara County). ○ Plants listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (14 CCR 670.5).	○ Animals listed/proposed for listing as threatened/endangered under the Federal Endangered Species Act (50 CFR 17.11 for listed animals and various notices in *Federal Register* for proposed species). ○ Animals that are Category 1 or 2 candidates for possible future listing as threatened or endangered under Federal Endangered Species Act (54 CFR 554). ○ Animals that meet the definitions of rare or endangered species under the CEQA (*State CEQA Guidelines*, Section 15380). ○ Animals listed or proposed for listing by the State of California as threatened and endangered under the California Endangered Species Act (14 CCR 670.5). ○ Animal species of special concern (SSC) to the CDFW. ○ Animal species that are fully protected in

○ Plants listed under the California Native Plant Protection Act (California Fish and Game Code 1900 et seq.). ○ Plants considered sensitive by other federal agencies (i.e. U.S. Forest Service, Bureau of Land Management) or state and local agencies or jurisdictions. ○ Plants considered sensitive or unique by the scientific community; occurs at natural range limits (*State CEQA Guidelines*, Appendix G).	California (California Fish & Game Code, Sections 3511 [birds], 4700 [mammals], 5050 [reptiles, amphibians]). ○ Animals considered rare or sensitive locally by a local agency or scientific community (*State CEQA Guidelines*, Appendix G)

Table 5. California Native Plant Society Rare Plant Ranks (CNPS Lists)

CNPS Rank	Definition
1A	Presumed Extinct in California
1B	Rare, Threatened, or Endangered in California and elsewhere
2	Rare, Threatened, or Endangered in California, but more common elsewhere
3	Need more information (a Review List)
4	Plants of Limited Distribution (a Watch List)

Table 6. California Native Plant Society Risk Threat Code Extensions

CNPS Threat Code Extension	Definition
x.1	Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat)
x.2	Fairly endangered in California (20-80% occurrences threatened)
x.3	Not very endangered in California (<20% of occurrences threatened)

Table 7. California Natural Diversity Database Element Ranking System

Global Ranking (G)	
G1	Less than 6 viable element occurrences (pops for species), OR less than 1,000 individuals, OR <809.4 hectares (ha) (2,000 acres [ac]).
G2	6 to 20 element occurrences OR 809.4 to 4,047 ha (2,000 to 10,000 ac).
G3	21 to 100 element occurrences OR 3,000 to 10,000 individuals OR 4,047 to 20,235 ha (10,000 to 50,000 ac).
G4	Apparently secure; rank lower than G3, factors exist to cause some concern (i.e. there is some threat, or somewhat narrow habitat).
G5	Population, or stand, demonstrably secure to ineradicable due to being commonly found in the world.
GH	All sites are **historic**; the element has not been seen for at least 20 years, but suitable habitat still exists.
GX	All sites are **extirpated;** this element is extinct in the wild.
GXC	Extinct in the wild; exists in cultivation.
G1Q	The element is very rare, but there is a taxonomic question associated with it.
Subspecies Level: Subspecies receive a **T-rank** attached to the G-rank. With the subspecies, the G-rank reflects the condition of the entire species, whereas the T-rank reflects the global situation of just the subspecies or variety. **For example:** *Chorizanthe robusta* var. *hartwegii* is ranked G2T1. The G-rank refers to the whole species range (*Chorizanthe robusta*), whereas the T-rank refers only to the global condition of the variety (var. *hartwegii*).	

State Ranking (S)	
S1	Less than 6 element occurrences OR less than 1,000 individuals OR less than 809.4 ha (2,000 ac). S1.1 = very threatened S1.2 = threatened S1.3 = no current threats known
S2	6 to 20 element occurrences OR 3,000 individuals OR 809.4 to 4,047 ha (2,000 to 10,000 ac). S2.1 = very threatened S2.2 = threatened S2.3 = no current threats known..
S3	21 to 100 element occurrences OR 3,000 to 10,000 individuals OR 4,047 to 20,235 ha (10,000 to 50,000 ac). S3.1 = very threatened S3.2 = threatened S3.3 = no current threats known
S4	Apparently secure within California; this rank is clearly lower than S3 but factors exist to cause some concern (i.e. there is some threat, or somewhat narrow habitat). NO THREAT RANK.
S5	Demonstrably secure to ineradicable in California. NO THREAT RANK.
SH	All California sites are **historic**; the element has not been seen for at least 20 years, but suitable habitat still exists.
SX	All California sites are **extirpated;** this element is extinct in the wild.
Notes	
1. Other considerations used when ranking a species or natural community include the pattern of distribution of the element on the landscape, fragmentation of the population/stands, and historical extent as compared to its modern range. It is important to take an aerial view when ranking sensitive elements rather than simply counting element occurrences.	
2. Uncertainty about the rank of an element is expressed in two major ways: by expressing the rank as a range of values (e.g. S2S3 means the rank is somewhere between S2 and S3), and by adding a ? to the rank (e.g. S2?). This represents more certainty than S2S3, but less than S2.	

CNDDB SEARCH RESULTS

This section addresses the special-status biological resources observed, reported, or having the potential to occur on the project site. These resources include plant and wildlife species that have been afforded special-status and/or recognition by federal and state resource agencies, as well as private conservation organizations. In general, the principal reason an individual taxon (i.e. species, subspecies, or variety) is given such recognition is the documented or perceived decline or limitations of its population size, geographic range, and/or distribution resulting in most cases from habitat loss.

DMEC conducted a search of CDFG's CNDDB RareFind3 for the Point Dune, California USGS Quadrangle (in which the project site is found), and for the five surrounding quadrangles, including Triunfo Pass, Newberry Park, Thousand Oaks, Calabasas, and Malibu Beach. This search was updated by an examination of the current, 2022, version of the CNDDB GIS database. DMEC conducted this database search to account for special-status species tracked by CNDDB in the area and with potential to occur at the project site, as well as the iNaturalist.org and Calflora.org databases for recent local observations. This includes CDFW Sensitive Species not mapped by the CNDDB. One hundred nine (109) special-status elements were reported by CNDDB, including sixty-three (63) plant species (61 vascular plants and 2 mosses), thirty-eight (38) wildlife species, and eight (8) habitats, plus another seven (7) wildlife species not mapped

by CNDDB but considered special-status species either statewide or locally. Figure 6, Map of Special-status Species, illustrates the local distribution of each of three categories, plants, wildlife, and habitats, including those species observed onsite or adjacent to the Carter parcel. Two taxa mapped on Figure 6 are based on DMEC's research and mapping, *Calochortus catalinae* and *Helminthoglypta traskii* ssp. *traskii*.

DMEC also conducted a search of CNPS's *Inventory of Rare and Endangered Plants of California* (CNPS 2001, 2022) to account for CNPS-listed plants not tracked on the CNDDB database with potential to occur in the vicinity of the proposed project site. All plants ranked by CNPS are also considered species of concern by the CNDDB (2021b). The CNDDB Special Animals List (CNDDB 2022) was also referenced to account for other listed animal species.

Special-status Plants

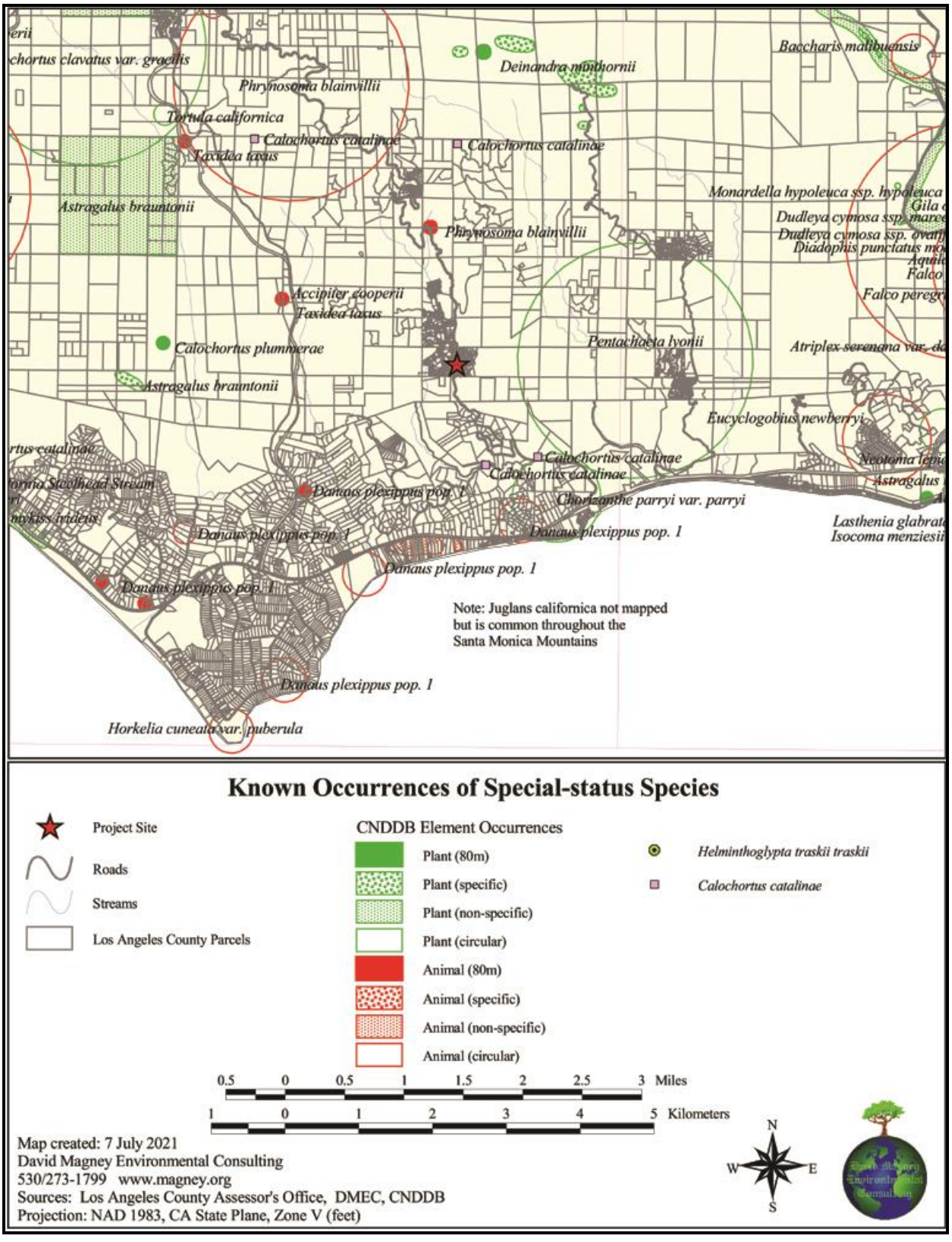
A total of sixty-two (62) special-status plant species tracked by CNPS are known to occur within the region of the project site, which are also tracked by CNDDB, are known or reported in the vicinity of the Carter property site and have the potential to occur onsite. Table 8, Special-Status Plants Potentially Occurring Onsite, summarizes the CNPS and CNDDB reports for the 62 special-status plant species tracked for the six USGS quadrangles[42], and provides each species' scientific and common names, status, habitat requirements, and likelihood of occurrence on the project site.

One special-status plant species was observed onsite, Catalina Mariposa Lily (*Calochortus catalinae* – photo on right), was found onsite. Additionally, three small populations have been found south and north of the Carter parcel, at approximately 4,657 feet south, 5,475 feet south-southeast, and 9,880 feet north.

Southern California Black Walnut (*Juglans californica*) was observed south of the project site, but not onsite. The Southern California Black Walnut and Catalina Mariposa Lily are CNPS Rank 4 species, species of Limited Distribution. The remaining 60 special-status plants are assessed in Table 8 below.

[42] Standard protocol for the CNDDB and CNPS database searches is to include the quadrangle on which the project site occurs plus all the surrounding quadrangles; however, in this case, since there is no land south of the Point Dume quad, the three quads normally occurring to the south do not exist. Therefore, the search included only six quadrangles.

Figure 6. Map of Special-status Species



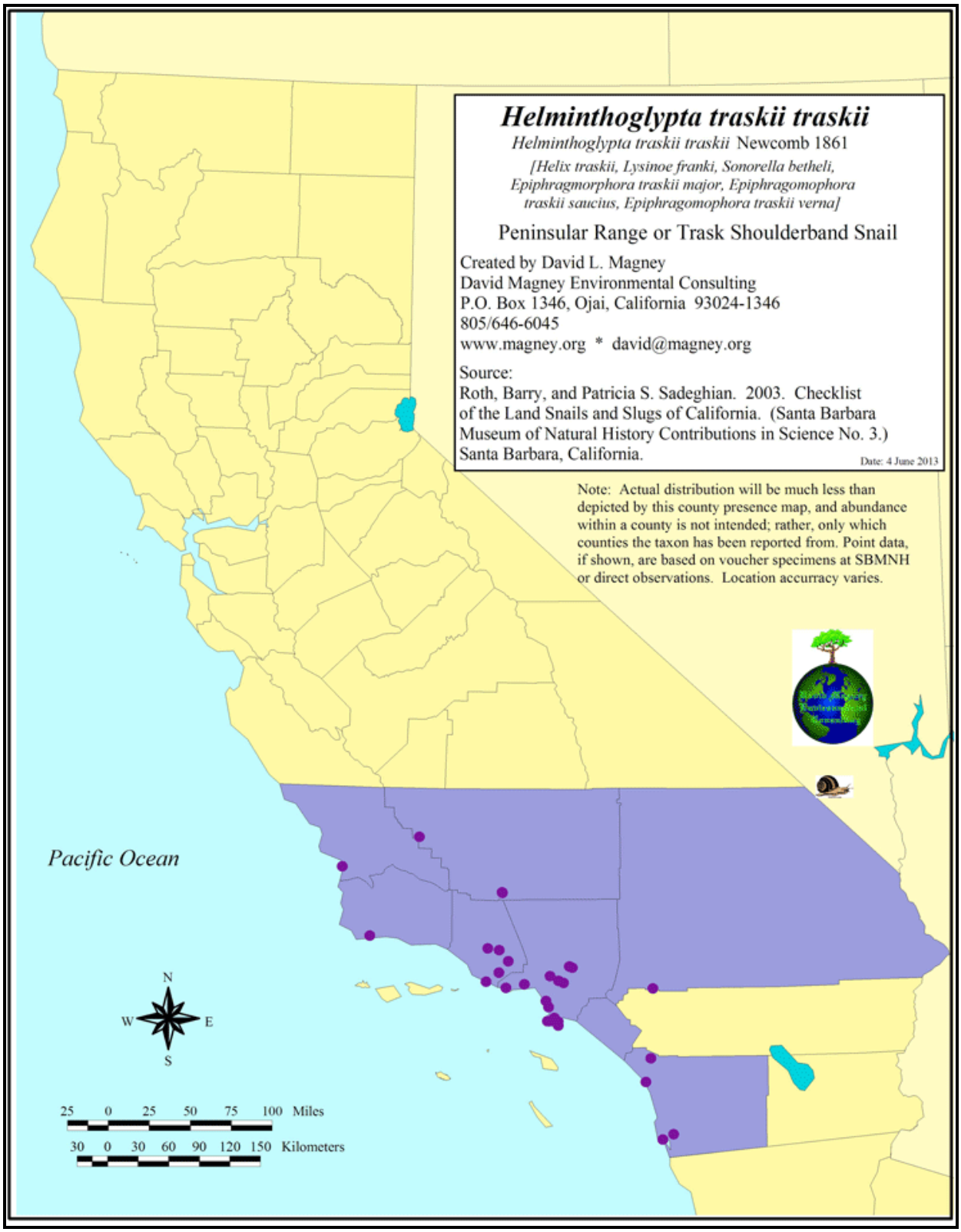
Special-status Wildlife

A total of thirty-seven (37) special-status wildlife species tracked by CNDDB are known or reported in the vicinity of the Carter property site and have the potential to occur onsite. Table 9, Special-status Wildlife Potentially Occurring Onsite, summarizes the CNDDB reports for the 37 special-status wildlife species tracked for the six quads, and provides each species' scientific and common names, status, habitat requirements, and likelihood of occurrence. Table 10, CNDDB Special Animal List and Locally Rare Species Potentially Occurring Onsite, lists seven (7) wildlife species on the CNDDB Special Animals List or that are locally rare that have potential to occur onsite. In addition to the species listed in Tables 9 and 10, it should be noted that all raptors, raptor nests (active or inactive), and other active bird nests are protected under Fish and Game Code Section 3503. Blood (2021) provides updated taxonomy and known distribution of mammals of Los Angeles County.

No special-status wildlife species was observed onsite, or near to the Carter parcel; however, San Diego Desert Woodrat (*Neotoma lepida* ssp. *intermedia*) and Peninsular Shoulderband Snail (*Helminthoglypta traskii* ssp. *traskii*) are both known in the immediate area have have potential to occur onsite. San Diego Desert Woodrat occurs in coastal scrub in Southern California from San Diego County to San Luis Obispo County. It prefers moderate to dense canopies, and is particularly abundant in rock outcrops and rocky cliffs and slopes.

Peninsular Shoulderband Snail occurs in chaparral and coastal scrub in coastal Southern California. It is known from Ventura, Los Angeles, Orange, and San Diego Counties, and Baja California del Norte (Figure 7, Distribution Map of Peninsular Shoulderband Snail). The nearest known locations are 4.06 miles southwest at just west of Trancas and 10.36 miles northwest at the western end of the Simi Hills.

Figure 7. Distribution Map of Peninsular Shoulderband Snail



DMEC

Table 8. Special-status Plants Potentially Occurring Onsite

Scientific Name	Common Name	G Rank[43]	S Rank	Fed	CA	CNPS	Habitat Requirements	Likelihood of Occurrence[44]
Abronia maritima	Red Sand Verbena	G4	S3?	-	-	4.2	Coastal dunes; sand. Elev. 0-100 m. Reported Point Dume, Zuma Beach, and Malibu State Beach.	Highly Unlikely [HA]
Adolphia californica	California Adolphia	G3	S2	-	-	2B.1	Deciduous shrub in coastal scrub, chaparral, in clayey soils. Elev. 35-2,430 feet. Reported from Santa Monica Mountains; Topanga State Park. Between Rustic Canyon and Temescal Canyon at 1,197 feet (*P. Saadat 5* 16-May-1999 SFV).	Possible [HP]
Asplenium vespertinum	Western Spleenwort	G4	S4	-	-	4.2	Chaparral, oak woodland, coastal sage scrub. Elev. 180-1,000 m. Known from Newberry Park and Thousand Oaks to the NW.	Possible [HP]
Astragalus brauntonii	Braunton's Milkvetch	G2	S2	E	-	1B.1	Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland. Recent burns or disturbed areas; in stiff gravelly clay soils overlying granite or limestone. Elev. 4-640 m. Reported at Malibu Lagoon, Zuma Loop Trail, Lower Zuma Ridge Motorway above Point Dume at 679 feet, and in Topanga Canyon.	Possible [HP]

[43] See Tables 4 through 7 above for descriptions of rank and status categories. Federal (Fed or F) and State (CA or S) status listings: E = Endangered; SC = Species of Concern.

[44] Likelihood of occurrence based on species' habitat requirements, presence of required habitat onsite, and reported occurrences:
Observed [P] = Species has been observed onsite [Present];
Likely [HP] = Required habitat present onsite and the species has been reported in the vicinity [Habitat Present];
Possible [HP] = Marginal habitat onsite and/or required habitat present nearby, with no reported occurrences nearby [Habitat Present];
Unlikely [HA] = Required habitat not reported onsite, nor is it found nearby [Habitat Absent].

Scientific Name	Common Name	G Rank[43]	S Rank	Fed	CA	CNPS	Habitat Requirements	Likelihood of Occurrence[44]
Astragalus pycnostachyus var. *lanosissimus*	Ventura Marsh Milkvetch	G2T1	S1.1	E	E	1B.1	Coastal salt marsh, coastal dune scrub. Within reach of high tide or protected by barrier beaches, more rarely near seeps on sandy bluffs. Elev. 1-35 m. Nearest historic occurrence was in the Santa Monica area (Rancho Ballona).	Highly Unlikely [HA]
Astragalus tener var. *titi*	Coastal Dunes Milkvetch	G1T1	S1.1	E	E	1B.1	Coastal bluff scrub, coastal dunes. Moist, sandy depressions of bluffs or dunes along and near the Pacific Ocean; one site on a clay terrace. Elev. 1-50 m. Nearest historic occurrence was near Hyde Park.	Unlikely [HA]
Atriplex coulteri	Coulter's Saltbush	G3	S1S2	-	-	1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Ocean bluffs, ridgetops, as well as alkaline low places. Elev. 10-460 m. Nearest known [historic - 1930] occurrence is thought to be along Zuma Beach.	Unlikely [HA]
Atriplex serenana var. *davidsonii*	Davidson's Saltscale	G5T1	S1	-	-	1B.2	Coastal bluff scrub, coastal scrub; alkaline habitats. Elev. 10-200 m. Nearest known occurrence is in Malibu Canyon.	Unlikely [HA]
Baccharis malibuensis	Malibu Baccharis	G1	S1	-	-	1B.1	Coastal scrub, chaparral, cismontane woodland. In Conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat. Elev. 150-305 m. Nearest known occurrence is at Solstice Canyon [Park], S of the creek from picnic area / parking lot.	Unlikely [HA]
Baccharis plummerae ssp. *plummerae*	Plummer's Baccharis	G3T3	S3	-	-	4.3	Riparian woodland, Coast Live Oak Woodland, chaparral, coastal scrub; partial shade, typically on N-facing slopes. Elev. 5-425 m. Nearest known occurrence is at Solstice Canyon [Park], S of the creek from picnic area / parking lot.	Possible [HP]

Scientific Name	Common Name	G Rank[43]	S Rank	Fed	CA	CNPS	Habitat Requirements	Likelihood of Occurrence[44]
Calandrinia breweri	Brewer's Calandrinia	G4	S4	-	-	4.2	Chaparral, coastal scrub; in sandy or loamy soil in disturbed sites and burns. Elev. 10-1,220 m. Nearest known occurrences is NW of project site W of Castro Ridge.	Possible [HP]
Calochortus catalinae	Catalina Mariposa Lily	G3G4	S3S4	-	-	4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Elev. 15-700 m. Nearest additional known occurrences are at approximately 3,940 feet WNW and 5,790 feet ENE.	Known [HP]
Calochortus clavatus var. *clavatus*	Club-haired Mariposa Lily	G4T3	S3	-	-	4.3	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Usually clayey, rocky sites. Elev. 75-1,300 m. Nearest known occurrence is in Malibu State Park to the E.	Possible [HP]
Calochortus clavatus var. *gracilis*	Slender Mariposa Lily	G4T2T3	S2S3	-	-	1B.2	Chaparral, coastal scrub, grassland. Shaded foothill canyons; often on grassy slopes within other habitat. Elev. 320-1,000 m. Nearest known occurrence is W-Fork Trancas (Rattlesnake) Canyon about 2.36 miles WNW, 3.24 miles NNE, and 6.86 miles NE.	Possible [HP]
Calochortus plummerae	Plummer's Mariposa Lily	G4	S4	-	-	4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. Elev. 100-1,700 m. Nearest known occurrence is in Solstice Canyon to the SE. June 2023 was a banner year for this species at known populations in Little Sycamore Canyon and at the head of Arroyo Sequit and would have been detected if present onsite	Unlikely [HP]
Camissoniopsis lewisii	Lewis's Evening-primrose	G4	S4	-	-	3	Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland. Sandy or clay soils. Elev. 0-300 m. Nearest known occurrences are on Point Dume to the S.	Possible [HP]

Scientific Name	Common Name	G Rank[43]	S Rank	Fed	CA	CNPS	Habitat Requirements	Likelihood of Occurrence[44]
Centromadia parryi ssp. *australis*	Southern Tarplant	G3T2	S2	-	-	1B.1	Marshes and swamps (margins), valley and foothill grassland. Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with Saltgrass. Elev. 0-480 m. Nearest known occurrence is in the Santa Monica area.	Highly Unlikely [HA]
Cercocarpus betuloides var. *blanchae*	Island Mountain-mahogany	G5T4	S4	-	-	4.3	Closed-cone coniferous forest, chaparral. Elev. 30-600 m. Nearest known occurrence is on Saddle Rock Ranch to the WNW and the corner of Mulholland Highway and Little Sycamore Canyon Road to the WNW.	Possible [HP]
Chaenactis glabriuscula var. *orcuttiana*	Orcutt's Pincushion	G5T1T2	S1	-	-	1B.1	Coastal bluff scrub, coastal dunes; sandy soil. Elev. 0-100 m. Nearest known occurrence is on South Beach, Leo Carrillo State Beach.	Unlikely [HA]
Chamaebatia australis	Southern Mountain Misery	G4	S4	-	-	4.2	Chaparral, dry slopes. Elev. 300-1,230 m. Nearest known occurrence is at Rocky Oaks Park to the NW.	Possible [HP]
Chloropyron maritimum ssp. *maritimum*	Salt Marsh Bird's-Beak	G4?T1	S1	E	E	1B.2	Coastal salt marsh, coastal dunes. Limited to the higher zones of the salt marsh habitat. Elev. 0-30 m. Nearest known occurrence is at Mugu Lagoon in Ventura County.	Highly Unlikely [HA]
Chorizanthe parryi var. *fernandina*	San Fernando Valley Spineflower	G2T1	S1	C	E	1B.1	Coastal scrub. Sandy soils. Elev. 3-1,035m. Nearest known occurrence is on Lasky Mesa to the N.	Unlikely [HA]
Chorizanthe parryi var. *parryi*	Parry's Spineflower	G3T2	S2	-	-	1B.1	Coastal scrub, chaparral, Coast Live Oak Woodland. Dry slopes and flats, sometimes at interface of 2 vegetation types (e.g. chaparral and oak woodland). Dry, sandy & rocky soils. Elev. 275-1,220 m. Nearest known [historic – 1957] occurrence is on the W side of the mouth of Latigo Canyon.	Possible [HP]
Convolvulus simulans	Small-flowered Morning-glory	G4	S4	-	-	4.2	Openings in chaparral, coastal scrub, valley & foothill grassland; clayey soils, serpentinite seeps. Elev. 30-740 m. Nearest known occurrence is at the E edge of Oak Park N of Agoura Hills in the Simi Hills.	Unlikely [HA]

Scientific Name	Common Name	G Rank[43]	S Rank	Fed	CA	CNPS	Habitat Requirements	Likelihood of Occurrence[44]
Deinandra minthornii	Santa Susana Tarplant	G2	S2	-	R	1B.2	Chaparral, coastal scrub. On sandstone outcrops and crevices, in shrubland. Elev. 280-760 m. Nearest known occurrence is in Solstice Canyon at Dry Canyon SE of the project site, and in Corral Canyon on Caetho Ridge NW of the project site.	Unlikely [HA]
Dichondra occidentalis	Western Dichondra	G3G4	S3S4	-	-	4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. Elev. 50-500 m. Nearest known occurrences is along Mulholland Highway in Leo Carrillo State Beach to the W and lower Tuna Canyon to the E.	Unlikely [HA]
Didymodon norrisii	Norris' Beard Moss	G3G4	S.S4	-	-	2.2	Chaparral. Rock outcrops, known from W-facing slope of Zuma Canyon/Creek in the Santa Monica Mountains National Recreation Area.	Unlikely [HA]
Dudleya blochmaniae ssp. *blochmaniae*	Blochman's Dudleya	G3T2	S2	-	-	1B.1	Coastal scrub, coastal bluff scrub, valley and foothill grassland. Open, rocky slopes; often in shallow clays over serpentine or in rocky areas w/little soil. Elev. 5-450 m. Nearest known occurrences are at Point Dume and the mouth of Winter Canyon to the S and SE, respectively.	Unlikely [HA]
Dudleya cymosa ssp. *agourensis*	Agoura Hills Dudleya	G5T1	S1	T	-	1B.2	Chaparral, cismontane woodland. Rocky, volcanic breccia. Elev. 200-500 m. Nearest known occurrence is 1 mile upgrade from Seminole Hot Springs N of the project site.	Unlikely [HA]
Dudleya cymosa ssp. *marcescens*	Marcescent Dudleya	G5T2	S2	T	R	1B.2	Chaparral. On sheer rock surfaces and rocky volcanic cliffs. Elev. 180-520 m. The nearest known occurrences are 1 mile SW of Seminole Hot Springs, N of the project site.	Unlikely [HA]

Scientific Name	Common Name	G Rank[43]	S Rank	Fed	CA	CNPS	Habitat Requirements	Likelihood of Occurrence[44]
Dudleya cymosa ssp. *ovatifolia*	Santa Monica Mountains Dudleya	G5T1	S1	T	-	1B.1	Chaparral, coastal scrub. In canyons on sedimentary conglomerates & volcanics; primarily N-facing slopes. Elev. 150-1,675 m. Nearest known occurrence is 1 mile upgrade from Seminole Hot Springs, N of the project site.	Unlikely [HA]
Dudleya multicaulis	Many-stemmed Dudleya	G2	S2	-	-	1B.2	Chaparral, coastal scrub, valley and foothill grassland. In heavy, often clayey soils or grassy slopes. Elev. 15-790 m. Nearest known occurrence is in the Topanga Canyon area to the E.	Possible [HP]
Eriogonum crocatum	Conejo Buckwheat	G1	S1	-	R	1B.2	Chaparral, coastal scrub, valley and foothill grassland. Conejo volcanic outcrops, sandstone outcrops; rocky sites. 50-580 m. Nearest known occurrence is an historic report from the "Malibu Hills". Known extant occurrences are known from near Lake Eleanor in Ventura County.	Unlikely [HA]
Erythranthe glaucescens	Shield-bracted Monkeyflower	G3G4	S3S4	-	-	4.3	Chaparral, Coast Live Oak Woodland, lower montane coniferous forest, valley and foothill grassland; serpentinite seeps, streambanks. Elev. 30-1,240 m. Nearest known occurrence is along road near Seminole Hot Springs N of the project site.	Highly Unlikely [HA]
Galium cliftonsmithii	Santa Barbara Bedstraw	G4	S4	-	-	4.3	Coast Live Oak Woodland. Elev. 200-1,220 m. Nearest known occurrence is in Sepulveda Canyon to the E of the project site.	Possible [HP]
Heterotheca sessiliflora ssp. *sessiliflora*	Beach Goldenaster	G4T2T3	S1	-	-	1B.1	Coastal chaparral, coastal dunes, coastal scrub. Elev. 0-1,225 m. Nearest known occurrence is at SW edge of Russel Valley along SR23 in Ventura County.	Possible [HP]
Hordeum intercedens	Vernal Barley	G3G4	S3S4	-	-	3.2	Coastal dunes, Coastal scrub, vernal pools in grasslands. Elev. 5-1,000 m. Nearest known occurrence is in Leo Carrillo State Park.	Unlikely [HA]

Scientific Name	Common Name	G Rank[43]	S Rank	Fed	CA	CNPS	Habitat Requirements	Likelihood of Occurrence[44]
Horkelia cuneate ssp. *puberula*	Mesa Horkelia	G4T1	S1	-	-	1B.1	Maritime chaparral, coastal scrub, Coast Live Oak Woodland; sandy or gravelly soil. Elev. 70-810 m. Nearest historic occurrence is on Point Dume and nearest known extant occurrence is in Charmlee Wilderness Park to the WSW of the project site.	Unlikely [HA]
Isocoma menziesii var. *decumbens*	Decumbent Goldenbush	G3G5T2 T3	S2	-	-	1B.2	Chaparral, coastal scrub; sandy soils. Elev. 10-135 m. Nearest reported occurrence is at Carbon Beach E of Malibu.	Unlikely [HA]
Iva hayesiana	San Diego Povertyweed	G3	S2	-	-	2B.2	Marshes and swamps, playas. Elev. 10-500 m. Nearest known occurrence is at Malibu Creek State Park NE of the project site.	Highly Unlikely [HA]
Juglans californica	Southern California Black Walnut	G4	S4	-	-	4.2	Chaparral, cismontane woodland. 50-900 m. Found south of the site along Ramirez Motorway.	Possible [HP]
Juncus acutus ssp. *leopoldii*	Southwestern Spiny Rush	G5T5	S4	-	-	4.2	Backdune swale areas of coastal dune, marshes and swamps, coastal salt marsh. Saturated to seasonally saturated soil. Elev. 3-900 m. Nearest known occurrence is in Leo Carrillo State Beach W of the project site.	Highly Unlikely [HA]
Lasthenia glabrata ssp. *coulteri*	Coulter's Goldfields	G4T2	S2	-	-	1B.1	Marshes and swamps, coastal salt marsh, playas, vernal pools. Elev. 1-1,220 m. Nearest known occurrence is at Malibu Lagoon to the SE of the project site.	Highly Unlikely [HA]
Lepechinia fragrans	Fragrant Picher Sage	G3	S3	-	-	4.2	Nearest historic [1940] occurrence was in Trancas Canyon along Decker Road. Nearest known extant occurrence is from Malibu State Park to the NE.	Possible [HP]
Lilium humboldtii ssp. *ocellatum*	Ocellated Humboldt Lily	G4T4?	S4?	-	-	4.2	Chaparral, Coast Live Oak Woodland, coastal scrub, lower montane coniferous forest, Riparian woodland; openings. Elev. 30-1,800 m. Nearest known occurrence in lower Solstice Canyon to the SE of the project site.	Unlikely [HA]

Scientific Name	Common Name	G Rank[43]	S Rank	Fed	CA	CNPS	Habitat Requirements	Likelihood of Occurrence[44]
Lycium californicum	California Boxthorn	G4	S4	-	-	4.2	Coastal bluff scrub, coastal scrub. Elev. 5-150 m. Nearest known [historic - 1936] occurrence is in Latigo Canyon near mouth, SSE of the project site.	Possible [HP]
Malacothrix saxatilis var. *saxatilis*	Cliff Aster	G5T4	S4	-	-	4.2	Coastal bluff scrub, coastal scrub. Elev. 3-200 m. Nearest known occurrences are near the N end of Latigo Canyon Road and in Leo Carrillo State Beach.	Possible [HP]
Monardella hypoleuca ssp. *hypoleuca*	Whiteleaf Coyote Mint	G4T3	S3	-	-	1B.3	Chaparral, Coast Live Oak Woodland. Elev. 50-1,525 m. Nearest historic [1898] occurrence is in Malibu Canyon E of the project site and the nearest recent [2008] occurrences is further E in Santa Ynez Canyon.	Possible [HP]
Navarretia ojaiensis	Ojai Navarretia	G2	S2	-	-	1B.1	Chaparral (openings), coastal scrub, valley and foothill grassland. Elev. 275-620 m. Nearest known occurrence is near Agoura Hills near Mulholland Highway S of Sierra Creek Road, N of the project site.	Possible [HP]
Nolina cismontana	Chaparral Nolina	G3	S3	-	-	1B.2	Chaparral, coastal scrub. Primarily on sandstone and shale substrates; also known from gabbro. Elev. 140-1,275 m. Nearest known occurrences is along Medea Creek in the Simi Hills of Ventura County.	Unlikely [HA]
Orcuttia californica	California Orcutt Grass	G1	S1	E	E	1B.1	Vernal pools. Elev. 15-660 m. Nearest known occurrence is in the Tierra Rejada Valley near Moorpark, Ventura County.	Highly Unlikely [HA]
Pentachaeta lyonii	Lyon's Pentachaeta	G1	S1	E	E	1B.1	Chaparral, valley and foothill grassland. Edges of clearings in chaparral, usually at the ecotone between grassland and chaparral or edges of firebreaks in rocky, clayey soils. Elev. 30-690 m. Nearest known occurrence is at the Cold Creek Canyon Preserve about 5 miles NNW of the project site.	Possible [HP]
Phacelia hubbyi	Hubby's Phacelia	G4	S4	-	-	4.2	Chaparral, coastal scrub, valley and foothill grassland. Gravelly or rocky or talus slopes. Elev. 0-1,000 m. Nearest known occurrence is in Corral Canyon SE of the project site.	Possible [HP]

Scientific Name	Common Name	G Rank[43]	S Rank	Fed	CA	CNPS	Habitat Requirements	Likelihood of Occurrence[44]
Phacelia ramosissima var. *austrolitoralis*	South Coast Branching Phacelia	G5?T3Q	S3	-	-	3.2	Sand dunes, salt marshes, coastal bluff scrub. Elev. 0-300 m. The nearest known occurrence is at the mouth of Carbon Canyon to the SE of the project site.	Possible [HP]
Piperia cooperi	Chaparral Rein Orchid	G3G4	S3S4	-	-	4.2	Chaparral, Coast Live Oak Woodland, valley and foothill grassland. Elev. 15-1,585 m. Nearest known occurrence is in the headwaters of the W Fork Trancas Creek NW of the project site.	Possible [HP]
Quercus dumosa	Nuttall's Scrub Oak	G3	S3	-	-	1B.1	Chaparral, coastal scrub, closed-cone coniferous forest; in sandy, clay loam soils. Elev. 15-400 m. Nearest known occurrence near the top of Topanga Canyon 11.8 miles ENE of the project site (DMEC 2022).	Possible [HP]
Romneya coulteri	Coulter's Matilija Poppy	G4	S4	-	-	4.2	Chaparral, coastal scrub; often in burn areas. Elev. 20-1,200 m. Nearest known occurrence is in Malibu Creek State Park to the NE of the project site.	Possible [HP]
Rhinotropis [*Polygala*] *cornuta* var. *fishiae*	Fish's Milkwort	G4T4	S4	-	-	4.3	Chaparral, Coast Live Oak Woodland, Riparian woodland. Elev. 100-1,000 m. Nearest reported occurrences are at Craggs Club to the NE of the project site and in Malibu Canyon to the E.	Possible [HP]
Senecio aphanactis	California Groundsel	G3	S2	-	-	2B.2	Chaparral, Coast Live Oak Woodland, coastal scrub; sometimes in alkaline habitats. Elev. 15-800 m. Nearest known occurrences in on the Ventura County line on ridge E of Lake Eleanor to the W of the project site.	Possible [HP]
Thelypteris puberula var. *sonorensis*	Sonoran Maiden Fern	G5T3	S2	-	-	2B.2	Meadows and seeps; along streams, seepage areas. Elev. 50-550 m. Nearest known occurrence is in Encinal Canyon W of the project site.	Highly Unlikely [HA]
Thysanocarpus conchuliferus	Santa Cruz Island Lacepod	G2?	S2?	E	-	1B.2	Chaparral, Coast Live Oak Woodland; rocky sites. Elev. 45-655 m. Nearest known occurrence is in Malibu Creek State Park NE of the project site.	Possible [HP]

Scientific Name	Common Name	G Rank[43]	S Rank	Fed	CA	CNPS	Habitat Requirements	Likelihood of Occurrence[44]
Tortula californica	California Screw Moss	G2G3	S2?	-	-	1B.2	Chenopod scrub, valley and foothill grassland; sandy soils. Elev. 10-1,460 m. Nearest known occurrence is near the mouth of Newton Canyon W of Kanan Dume Road WNW of the project site.	Unlikely [HA]

Table 9. Special-status Wildlife Potentially Occurring Onsite

Scientific Name	Common Name	G Rank[45]	S Rank	Fed	CA	CDFW[46]	Habitat Requirements	Likelihood of Occurrence[47]
Amphibians								
Bufo californicus	Arroyo Toad	G2G3	S2S3	E	-	SC	Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range.	Unlikely [HA]

[45] See Tables 2 through 5 in Section 2.6 above for descriptions of rank and status categories. Federal (Fed or F) and State (CA or S) status listings: E = Endangered; T = Threatened; R = Rare; C = Candidate; SC = Species of Special Concern.

[46] CDFW = California Department of Fish and Wildlife, formerly known as California Department of Fish and Game.

[47] Likelihood of occurrence based on species' habitat requirements, presence of required habitat onsite, and reported occurrences:
Observed [P] = Species has been observed onsite [Present];
Likely [HP] = Required habitat present onsite and the species has been reported in the vicinity [Habitat Present];
Possible [HP] = Marginal habitat onsite and/or required habitat present nearby, with no reported occurrences nearby [Habitat Present];
Unlikely [HA] = Required habitat not reported onsite, nor is it found nearby [Habitat Absent].

Scientific Name	Common Name	G Rank[45]	S Rank	Fed	CA	CDFW[46]	Habitat Requirements	Likelihood of Occurrence[47]
Rana aurora ssp. *draytonii*	California Red-legged Frog	G4T2T3	S2S3	T	-	SC	Lowlands & 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 aestivation habitat.	Unlikely [HA]
Reptiles								
Actinemys marmorata ssp. *pallida*	Southwestern Pond Turtle	G3G4T2T3Q	S2	-	-	SC	Inhabits permanent or nearly permanent bodies of water in many habitat types; below 1,829 m elev. Require basking sites such as partially submerged logs, vegetation mats, or open mud banks. Need suitable nesting sites.	Highly Unlikely [HA]
Aspidoscelis tigris ssp. *stejnegeri*	Coastal Western Whiptail	G5T3T4	S2S3	-	-	-	Found in deserts & semiarid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Ground may be firm soil, sandy, or rocky.	Likely [HP]
Diadophis punctatus ssp. *modestus*	San Bernardino Ringneck Snake	G5T2T3	S2?	-	-	-	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 vegetation.	Possible [HP]
Lampropeltis zonata (pulchra)	California Mountain Kingsnake (San Diego Population)	G4G5	S1S2	-	-	SC	Restricted to the San Gabriel and San Jacinto Mtns. of Southern California. Inhabits a variety of habitats, including valley-foothill hardwood, coniferous, chaparral, riparian, and wet meadows. Reported in vicinity at Stunts Ranch and Cold Creek Preserve.	Possible [HP]
Phrynosoma coronatum (blainvillii population*)*	Coast (San Diego) Horned Lizard	G4G5	S3S4	-	-	SC	Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions. Prefers friable, rocky, or shallow sandy soils.	Likely [HP]

Scientific Name	Common Name	G Rank[45]	S Rank	Fed	CA	CDFW[46]	Habitat Requirements	Likelihood of Occurrence[47]
Phrynosoma coronatum (frontale population*)*	Coast (California) Horned Lizard	G4G5	S3S4	-	-	SC	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, & abundant supply of ants & other insects.	Possible [HP]
Thamnophis hammondii	Two-Striped Garter Snake	G3	S2	-	-	SC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 2,134 m elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Unlikely [HA]
Birds								
Accipiter cooperii	Cooper's Hawk	G5	S3	-	-	SC	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river floodplains; also, live oaks.	Possible [HP]
Agelaius tricolor	Tricolored Blackbird	G2G3	S2	-	-	SC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony. Colonies often associated with Giant Stinging Nettle-dominated springs and streams.	Highly Unlikely [HA]
Aimophila ruficeps ssp. *canescens*	Southern California Rufous-crowned Sparrow	G5T2T4	S2S3	-	-	SC	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass & forb patches.	Possible [HP]
Aquila chrysaetos	Golden Eagle	G5	S3	-	-	SC, Fully Protected	Rolling foothills, mountain areas, sage-juniper flats, & desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Unlikely [HA]

Scientific Name	Common Name	G Rank[45]	S Rank	Fed	CA	CDFW[46]	Habitat Requirements	Likelihood of Occurrence[47]
Athene cunicularia	Burrowing Owl	G4	S2	-	-	SC	Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California Ground Squirrel.	Unlikely [HA]
Polioptila californica ssp. *californica*	Coastal California Gnatcatcher	G3T2	S2	T	-	SC	Obligate, permanent resident of coastal sage scrub below 762 m in Southern California. Low, coastal sage scrub in arid washes, on mesas & slopes. Not all areas classified as coastal sage scrub are occupied.	Unlikely [HA]
Riparia riparia	Bank Swallow	G5	S2S3	-	T	-	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Highly Unlikely [HA]
Mammals								
Antrozous pallidus	Pallid Bat	G5	S3	-	-	SC	Deserts, grasslands, shrublands, woodlands & forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites. Nesting is colonial with 30-70 bats, forming in March-May. Forage on large arthropods on ground on gleaned from vegetation. No reports in Santa Monica Mountains since 1978.	Possible [HP]
Euderma maculatum	Spotted Bat	G4	S2S3	-	-	SC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting. Not known from Santa Monica Mountains (Bolster 1998).	Unlikely [HA]

Scientific Name	Common Name	G Rank[45]	S Rank	Fed	CA	CDFW[46]	Habitat Requirements	Likelihood of Occurrence[47]
Eumops perotis ssp. *californicus*	Western Mastiff Bat	G5T4	S3?	-	-	SC	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 & tunnels.	Possible [HP]
Lasiurus blossevillii	Western Red Bat	G5	S3?	-	-	-	Roosts primarily in trees, 0.6-12.2 m above ground, from sea level up through mixed conifer forests. Prefers habitat edges & mosaics with trees that are protected from above & open below with open areas for foraging. The nearest reported occurrences are in the Simi Hills (2004) and Encino Park (1951).	Possible [HP]
Lasiurus cinereus	Hoary Bat	G5	S4?	-	-	SC	Prefers open habitats or habitat mosaics, with access to trees for cover & open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Possible [HP]
Macrotus californicus	California Leaf-nosed Bat	G3G4	S3	-	-	SC	Desert riparian, desert wash, desert scrub, desert succulent scrub, alkali scrub and palm oasis habitats. Needs rocky, rugged terrain with mines or caves for roosting. Colonial nesting of typically 100-200 bats.	Unlikely [HA]
Myotis ciliolabrum	Western Small-Footed Myotis	G5	S2S3	-	-	-	Wide range of habitats mostly arid wooded & brushy uplands near water. Seeks cover in caves, buildings, mines & crevices. Prefers open stands in forests and woodlands. Requires drinking water. Feeds on a wide variety of small flying insects.	Possible [HP]
Myotis yumanensis	Yuma Myotis	G5	S4?	-	-	-	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.	Unlikely [HA]
Lepus californicus ssp. *bennettii*	San Diego Black-tailed Jackrabbit	G5T3T4	S3S4	-	-	SC	Open to semi-open dry scrub habitats of the Los Angeles Basin and surrounding hills.	Possible [HP]

Scientific Name	Common Name	G Rank[45]	S Rank	Fed	CA	CDFW[46]	Habitat Requirements	Likelihood of Occurrence[47]
Neotoma lepida ssp. *intermedia*	San Diego Desert Woodrat	G5T3T4	S3S4	-	-	SC	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 & slopes.	Possible [HP]
Microtus californicus stephensi	South Coast Marsh Vole	G5T2T3	S1S2	-	-	SC	Coastal Sage Scrub, chaparral, Coast Live Oak Woodland, grasslands, coastal salt marsh habitats.	Possible [HP]
Taxidea taxus	American Badger	G5	S4	-	-	SC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Need sufficient food, friable soils, and open, uncultivated ground. Prey on burrowing rodents. Dig burrows.	Possible [HP]
Fish								
Eucyclogobius newberryi	Tidewater Goby	G3	S2S3	E	-	SC	Brackish water habitats along the Calif. coast from Agua Hedionda Lagoon, San Diego Co., to the mouth of the Smith River. Found in shallow lagoons and lower stream reaches, they need fairly still but not stagnant water & high oxygen levels.	Highly Unlikely [HA]
Gila orcuttii	Arroyo Chub	G2	S2	-	-	SC	Los Angeles basin south coastal streams. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation & associated invertebrates.	Highly Unlikely [HA]
Oncorhynchus mykiss ssp. *irideus*	Southern Steelhead - Southern California ESU	G5T2Q	S2	E	-	SC	Fed listing refers to populations from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego Co.). Southern Steelhead likely have greater physiological tolerances to warmer water & more variable conditions.	Highly Unlikely [HA]

Scientific Name	Common Name	G Rank[45]	S Rank	Fed	CA	CDFW[46]	Habitat Requirements	Likelihood of Occurrence[47]
Invertebrates								
Aglaothorax [*Nebula*] *longipennis*	Santa Monica Shieldback Katydid	G1G2	S1S2	-	-	-	Occur nocturnally in chaparral and canyon stream bottom vegetation, in the Santa Monica Mountains, of Southern California. Inhabit introduced iceplant and native chaparral plants.	Possible [HP]
Cicindela hirticollis ssp. *gravida*	Sandy Beach Tiger Beetle	G5T2	S1	-	-	-	Inhabits areas adjacent to non-brackish water along the coast of California from San Francisco Bay to northern Mexico. Clean, dry, light-colored sand in the upper zone. Subterranean larvae prefer moist sand not affected by wave action.	Highly Unlikely [HA]
Coelus globosus	Globose Dune Beetle	G1	S1	-	-	-	Inhabitant of coastal sand dune habitat, from Bodega Head in Sonoma County south to Ensenada, Mexico. Inhabits foredunes and sand hummocks; it burrows beneath the sand surface and is most common beneath dune vegetation.	Highly Unlikely [HA]
Danaus plexippus	Monarch Butterfly	G5	S3	-	-	-	Winter roost sites extend along the coast from northern Mendocino to Baja California, Mexico. Roosts located in wind-protected tree groves (Eucalyptus, Monterey Pine, Monterey Cypress), with nectar and water sources nearby.	Unlikely [HA]
Socalchemmis gertschi	Gertsch's Socalchemmis Spider	G1	S1	-	-	-	Known from only 2 localities in Los Angeles County: Brentwood (type locality) and Topanga Canyon.	Possible [HP]
Trimerotropis occidentiloides	Santa Monica Grasshopper	G1G2	S1S2	-	-	-	Known only from the Santa Monica Mountains. Found on bare hillsides and along dirt trails in chaparral. Nearest known occurrence is on ridgetop N of Mulholland Highway/SR 23 at head of a tributary canyon to Carlisle Canyon (DMEC 2021).	Possible [HP]

Table 10. CNDDB Special Animal List and Locally Rare Species Potentially Occurring Onsite

Scientific Name	Common Name	G Rank	S Rank	Fed	CA	CDFW	Habitat Requirements	Likelihood of Occurrence
CNDDB SPECIAL ANIMALS LIST SPECIES								
Birds								
Contopus cooperi	Olive-sided Flycatcher	G4	S4	-	-	-	May winter in Southern California coastal areas. Known in Santa Monica Mountains National Recreation Area.	Possible [HP]
Picoides nuttalli	Nuttall's Woodpecker	G5	-	-	-	-	Chaparral and oak woodland in canyons. Known in Santa Monica Mountains National Recreation Area. Nest sites are of concern to CDFW.	Possible [HP]
Selasphorus sasin	Allen's Hummingbird	G5	-	-	-	-	Feed on nectar from flowers. Known in Santa Monica Mountains National Recreation Area.	Possible [HP]
Invertebrates								
Helminthoglypta traskii ssp. *traskii*	Peninsular or Trask Shoulderband Snail	G1G2T2	S1	-	-	SC	Chaparral and Coastal Scrub habitats of coastal southern California. Known from Ventura, Los Angeles, Orange, and San Diego Counties, and Baja California del Norte (Roth & Sadeghain 2003, Magney 2010). Observed in upper Carbon Canyon in 2008 (DMEC 2008). The nearest known locations are 4.06 miles southwest at just west of Trancas and 10.36 miles northwest at the western end of the Simi Hills.	Likely [HP]
LOCALLY RARE SPECIES								
Mammals								
Puma concolor	Mountain Lion	-	-	-	-	-	Scrub and woodland habitats. Only a few left in Santa Monica Mountains.	Possible [HP]

Scientific Name	Common Name	G Rank	S Rank	Fed	CA	CDFW	Habitat Requirements	Likelihood of Occurrence
Invertebrates								
Haplotrema caelatum	Slotted Lancetooth Snail	G1N1[48]	-	-	-	-	Riparian areas. Endemic to coastal Southern California. Known from Santa Barbara, Ventura, Los Angeles, and San Diego Counties.	Unlikely [HA]
Tinema monikensis	Santa Monica Mountains Walking Stick	-	-	-	-	-	Chaparral. Endemic to Santa Monica Mountains.	Possible [HP]

[48] G-Rank "N1" represents a national rank devised by NatureServe, with N1 defined as "critically imperiled nationally".

Sensitive Habitats

There are two primary categories of sensitive habitats in the Santa Monica Mountains, those considered as Sensitive Habitats by the CDFW and tracked by the CNDDB, and those habitat categories identified in the Los Angeles County LIP. Table 11, CNDDB Sensitive Habitats Potentially Occurring Onsite, summarizes the CNDDB search for sensitive habitat types reported for the six quads surrounding and including the project site.

Table 11. CNDDB Sensitive Habitats Potentially Occurring Onsite

CNDDB Sensitive Habitats (Holland 1986, CDFG 2003)	**G Rank**[49]	**S Rank**	**Fed**	**CA**	**Presence Onsite**[50]
California Walnut Woodland	G2	S2.1	-	-	Not observed
Southern California Coastal Lagoon	G?	SNR	-	-	Not observed
Southern California Steelhead Stream	G?	SNR	-	-	Not observed
Southern Coast Live Oak Riparian Forest	G4	S4	-	-	Not observed
Southern Coastal Salt Marsh	G2	S2.1	-	-	Not observed
Southern Sycamore Alder Riparian Woodland	G4	S4	-	-	Not observed
Valley Needlegrass Grassland	G1	S3.1	-	-	Not observed
Valley Oak Woodland	G3	S2.1	-	-	Not observed

The California Coastal Commission has determined that intact chaparral and Coastal Sage Scrub vegetation in the Santa Monica Mountains Coastal Zone qualify as ESHA when they are part of large contiguous areas. The Coastal Sage Scrub and chaparral in Ramirez and Escondido Canyons to the south and east, respectively, of the Carter parcel are part of such areas and are treated here as meeting the definition of ESHA. Neither of the large intact Chaparral or Coastal Sage Scrub areas mapped as ESHA habitat occupies on the Carter parcel/project site, or immediately adjacent to the project site. See Figure 5 above for a map of ESHA occurring in the region of the project site.

The Los Angeles County LIP for the Santa Monica Mountains maps H1, H2, and H3 habitats as present on or in the immediate vicinity of the Carter project site. The site was burned in the Woolsey Fire but the natural vegetation is regrowing onsite.

Table 12 in the next section provides the habitat's name, status, and whether it was observed onsite. There were three special-status habitats observed on the Carter property site. Coastal Sage Scrub, Coast Live Oak Woodland, and Ceanothus Chaparral all meet the definition as SERA H2 Habitats.

[49] See Tables 4 through 7 above for descriptions of rank and status categories. Federal (Fed or F) and State (CA or S) status listings: E = Endangered; T = Threatened; R = Rare; C = Candidate; SC = Species of Concern.

[50] Observed [P] = Habitat present onsite [Present]; Not Observed = Habitat not present onsite though some constituents of the habitat may be present as noted; [CH] = Project footprint is within a Critical Habitat unit.

SECTION IV. IMPACTS ANALYSIS

The proposed development of the Carter parcel will result in impacts to biological resources. The total area graded will be approximately 0.452 acre. Preliminary development plans have been drawn with the approximately locations of the house, attached garage, and driveway. Natural vegetation will be impacted by grading the building pad and a driveway at the eastern end of the parcel, all of which have been graded in the past by a previous property owner. Additional impacts to natural vegetation will occur as a result of fuel modification within 100 feet of the proposed structures. The total direct impacts from these activities are summarized in Table 12, Existing Habitats and Land Cover on the Carter Property and Expected Impacts.

Table 12. Existing Habitats and Land Cover on the Carter Property and Expected Impacts

Existing Habitats and Land Cover Observed	Total Onsite Acres	Onsite ESHA or SERA Acres	Onsite Impact Acres	Onsite ESHA or SERA Impact Acres	Offsite Impact Acres (No ESHA)	Total Impact Acres
Disturbed Coastal Scrub	0.408	0.408	0.0408	0.408	0.0	0.408
Coast Live Oak Woodland	0.010	0.010	0.000	0.000	0.0	0.000
Ceanothus Chaparral	1.711	1.711	0.681	0.681	0.0	0.681
Chamise Chaparral	0.097	0.097	0.097	0.097	0.0	0.097
Cliff Face	0.014	0.00	0.00	0.00	0.0	0.00
Ruderal Herbaceous	0.030	0.00	0.015	0.0	0.0	0.015
Road/Paved	0.028	0.00	0.028	0.00	0.0	0.028
Acreage Totals	2.298	2.226	1.214	1.186	0.0	1.214

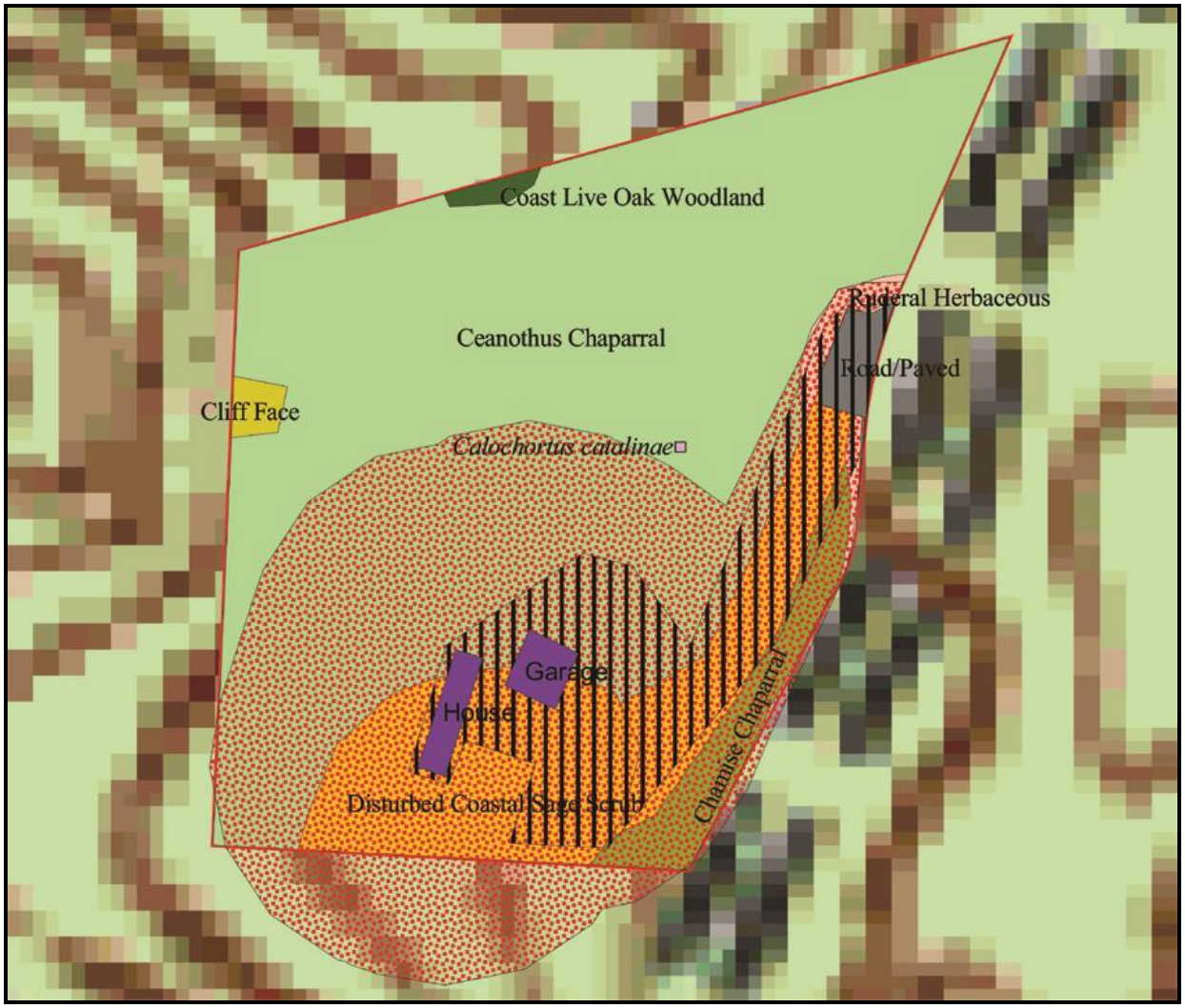
Note: this table is a duplicate of Table 3.

The natural vegetation impacted by the proposed development is shown on Figure 8, Map of Project Impacts to Natural Vegetation.

Required fuel modification, 100 feet distance from habitable buildings plus 15 feet outward along the driveway, will result in clearing of approximately 1.432 acres. The 100-foot area represents zones A and B, with Zone C of the fuel modification zone extending another 100 feet out. The county also requires clearing of flammable vegetation in Zones A and B with the landscaping irrigated in those zone, and selective thinning of natural vegetation another 100 feet beyond the first 100-foot fuel modification zone. Natural vegetation beyond the Carter parcel is not included.

The total impacts to Ceanothus Chaparral, Chamise Chaparral, and Coastal Sage Scrub ESHA is approximately 1.186 acres. Since fuel modification clearing allows for thinning of vegetation only for the outer 50 feet, some of the habitat value of the ESHA may be retained.

Figure 8. Map of Project Impacts to Natural Vegetation



The stippled pattern is the fuel modification zone. The vertical bar pattern is the expected grading footprint.

Special-status species known to occur on the project site, Catalina Mariposa Lily (*Calochortus catalinae*), would be avoided. Only one plant was observed during the April 2023 field survey. No direct or indirect impacts to this bulb species will result if grading for the new house and fuel modification in the areas proposed for development, and the fuel modification will not impact it either.

All grading and fuel modification will occur in Ruderal, Deerweed Scrub, Coastal Sage Scrub, and Ceanothus Chaparral.

Sensitive habitat expected to be impacted includes coastal scrub/chaparral SERA, impacted as a result of fuel modification, with an impact to approximately 1.186 acres of SERA H2 habitats (Coastal Sage Scrub and Ceanothus Chaparral).

No regulated native trees or Coast Live Oak Woodland habitat would be directly impacted by the proposed development.

SECTION V. CONCLUSIONS

The proposed single-family residential development and associated driveway would result in the disturbance, temporary and permanent, impact to 1.186 acres of natural vegetation. The various project elements are summarized in Table 12 above.

A small area of ESHA/SERA would be impacted by grading and fire hazard fuel modification, totaling approximately 1.186 acres. See Table 12 and Figure 8. Basically the woody natural vegetation west and north of the building site meets the definitions for SERA H2 Habitats.

Vegetation removal would impact approximately 1.186 acre of suitable habitat for the Peninsular Shoulderband Snail. The vegetation only thinned for fuel hazard modification (Zone C) would not eliminate this species habitat, but possibly degrade it.

Significant impacts to natural vegetation, ESHA/SERA will be mitigated through payment to the Coastal Commission's in-lieu mitigation fund.

Landscaping around the residence will utilize native plants indigenous to the Ramirez-Latigo Canyons area/Santa Monica Mountains. No invasive exotic plants will be used in any landscaping.

The proposed building pad and driveway will total approximately 0.452 acre.

Total impact to natural vegetation is approximately 1.214 acres, of which 1.186 acres is SERA. To mitigate for the impacts to SERA, the applicant shall control the invasive exotics within the areas remaining and either allow or actively replace them with native plant species. Target species to be removed include:

- *Avena barbata*
- *Bromus diandrus* ssp. *diandrus*
- *Bromus madritensis* ssp. *rubens*
- *Centaurea melitensis*
- *Foeniculum vulgare*
- *Hirschfeldia incana.*

Through minimizing clearing within the fuel modification zone (thinning only) in Zones B and C, planting local native shrubs and herbs in the landscaping, controlling invasive exotic species, and planting native species in their place onsite should provide sufficient mitigation to direct and indirect impacts to sensitive species and habitats impacted by the proposed project.

DMEC

SECTION VI. ACKNOWLEDGEMENTS

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SECTION VII. CITATIONS

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PERSONAL COMMUNICATIONS

Franchino, Nick, GIS Manager, Los Angeles Regional Planning, Nfranchino@planning.lacounty.gov, dated 30 January 2008, regarding ESHA maps of Malibu Coastal Zone and David Gray parcel (in Carbon Canyon).