Biological Assessment

Topanga Elementary Charter School
22075 Topanga School Road
Topanga, CA 90290

APN: 4445-004-903
APN: 4445-004-900
APN: 4445-005-902
APN: 4445-004-901
APN: 4438-029-900
APN: 4438-029-901

Code Enforcement #: RPCE2020002177
Application #: RPPL2020006795

Prepared for:
Los Angeles Unified School District

Prepared by:
Courtney McCammon, CJ Biomonitoring
347 Argonne Ave
Long Beach, CA 90814

Rosi Dagit and Daniel S. Cooper, Ph.D.
Resource Conservation District of the Santa Monica Mountains
540 S. Topanga Canyon Blvd.
Topanga, CA 90290

Corresponding author: rdagit@rcdsmm.org

DRAFT Report Date:
April 30, 2021
(Rev. May 18, 2023; May 7, 2025; Oct. 28, 2025)

Table of Contents

Property and Survey Description

Purpose

The purpose of this assessment is to document and analyze the natural resources at Topanga Elementary Charter School in Topanga, CA. This report provides an inventory of the natural resources and built features on the subject property in spring 2021, with updated information based on field visits in 2023. We include an analysis of the impacts (within an "impact area",

including a 200' buffer of that area) that occurred to the biological resources on the project site because of the fuel modification efforts in Spring 2020. A focused biological assessment is required under Sections 22.44.840 and 22.44.1820 of the Los Angeles County Local Implementation Plan for the Coastal Zone of the Santa Monica Mountains.

A separate Native Oak Tree Report discussing existing oak woodland conditions and impacts to that vegetation community will be submitted separately. This report as well as the oak tree report will be used in defining appropriate restoration and Best Management Practices (BMP) of the habitat on the project site.

Survey Description

A literature review was conducted and reviewed prior to the field surveys to identify the biological resources already recorded from the project site region. A discussion follows highlighting existing biological conditions including vegetation and plant communities, natural communities of concern, observed common and special-status species, observed common and special-status wildlife, and wildlife movement on and around the project site. Several maps and representative photographs of habitat conditions on the project site are provided. Lists of plant and wildlife species observed as well as a table assessing the potential for occurrence of special-status plant and wildlife species on the project site are provided as appendices to the report.

This report provides required information needed for Los Angeles Unified School District (LAUSD) to address Code Enforcement Case Number: RPCE2020002177 Notice of Violation of the Coastal Zone Provisions of Title 22 of the County Code dated 2 July 2020.

The violations noted include:

1. Development (unpermitted vegetation removal and grading) as defined in the Santa Monica Mountains Local Coastal Program has occurred on the premises without approval from the Department of Regional Planning – 22.44.800; 22.44.810; 22.44.1780; 22.44.1920(A). See **Figure 1**.

2. Development (unpermitted vegetation removal and grading) within protected H1, H2, and H3 Habitat categories (including within H1 buffer zones) has occurred on the premises without approval from the Department of Regional Planning – 22.44.1900(A), 22.44.1910(A); 22.44.1910(C).

3. Damage and/or removal of one or more protected oak trees (multiple oak trees cut and removed) has occurred on the premises without approval from the Department of Regional Planning – 22.44.950(A); 22.44.950(B). See **Figure 2**.

4. Encroachment and or endangerment of one or more protected oak trees (multiple oak trees cut and removed) has occurred on the premises without approval from the Department of Regional Planning – 22.44.950(A); 22.44.950(B)(2); 22.44.950(B)(3).

In addition to this Biological Assessment, a fuel modification plan, tree and habitat restoration plan, and a mitigation and monitoring plan are required to address these violations. These will be submitted separately within a revised "Native Tree and Coastal Sage Scrub Restoration Planting, Mitigation, Maintenance and Monitoring Plan".

A draft Biological Assessment (dated April 30, 2021) had been prepared and circulated to a limited number of reviewers in 2021; this 2023 report replaces that draft.

Figure 1. New vehicle track and cut into slope of formerly intact coastal sage scrub. Photo taken 29 May 2020.

Figure 2. View west from Backbone Trail showing understory removal, slope tilling, and damage to remaining coast live oaks. Photo taken 29 May 2020.

Project Description

Location

The subject property is the Topanga Elementary Charter School (see **Table 1** for parcel numbers), centered at approximately 34.092844, -118.604506 and is approximately 12.25 acres in size. The impact area is on the north/northwest portion of the subject property and encompasses approximately 4.75 acres. Access is along Topanga School Road in the central Santa Monica Mountains of unincorporated Los Angeles County, California (**Figure 3**). Open space surrounds the project site to the immediate north, east, and west with single family residential to the immediate south. California State Park boundary abuts the project site with a regionally significant multi-use trail, the Backbone trail, running through and adjacent to the project site.

Table 1. Assessor Parcel Numbers (APNs):

The project area APNs as follows (Topanga Charter Elementary School = "TES"; California State Parks = "CSP"):

APN: 4445-004-903	CSP	North of school
APN: 4445-004-900	TES	Northerly school property
APN: 4445-005-902	TES	Southerly school property
APN: 4445-004-901	CSP	West of school (small parcel)
APN: 4438-029-900	CSP	West of school (small parcel)
APN: 4438-029-901	CPS	West of school

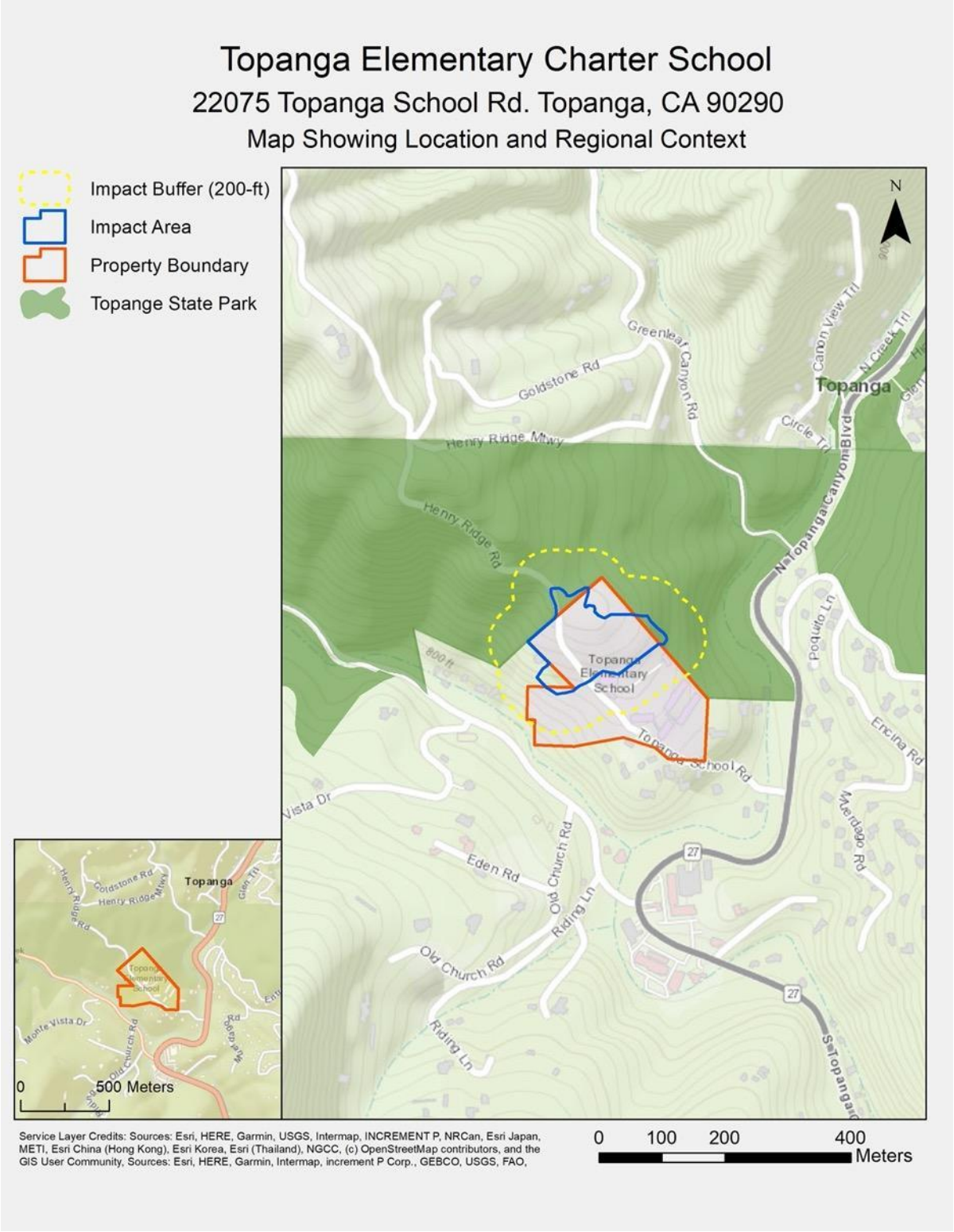

Figure 3. Map depicting project site at a local and regional scale.

Project

The applicant intends to restore and mitigate for damages done to the habitat during a fuel modification treatment in spring 2020. The "impact area" (see **Figure 3**) shows the area that was assessed as receiving damage during the extensive fuel modification clearing. The impact area was given a 200-foot buffer for which the habitat was assessed. The "impact area" and the 200-foot buffer will be referred to as the "study area" for the remainder of this report.

Topography, Microclimate and Soils

The project site ranges from 1,007 feet in the north to 794 feet above sea level in the southern corner and features a developed school covering much of the area. Beyond the developed school site, the habitat transitions into a moderately-disturbed oak woodland with the northern border of the property abutting Topanga State Park which features intact oak woodland habitat, chaparral, and valley grassland. Old Topanga Creek runs along Topanga Canyon Boulevard (Hwy 27) and is approximately 375 feet away from the southern edge of the project site.

Several distinct vegetation communities were observed, including moderately disturbed oak woodland, valley grassland, coastal sage scrub, and ruderal/non-native habitat (See **Appendix A**). No distinct rock outcrops were observed on site though the site does feature some scattered smaller rocks throughout.

Soil types have been mapped on the property as "Topanga-Mipolomol-Sapwi association", 30-75 percent slopes. The parent material is colluvium and/or residuum weathered from sandstone, shale, and slate. The soil is well draining and characteristic of mountain slopes (Beaudette and O'Green 2010).

Existing Construction

Existing buildings are on the site as part of the Topanga Elementary Charter School. In addition, several trails were constructed over the years as a part of the "Nature Area" throughout the north/northwest portion of the project site that lead to an amphitheater and beyond to the Backbone Trail (**Figure 4**).

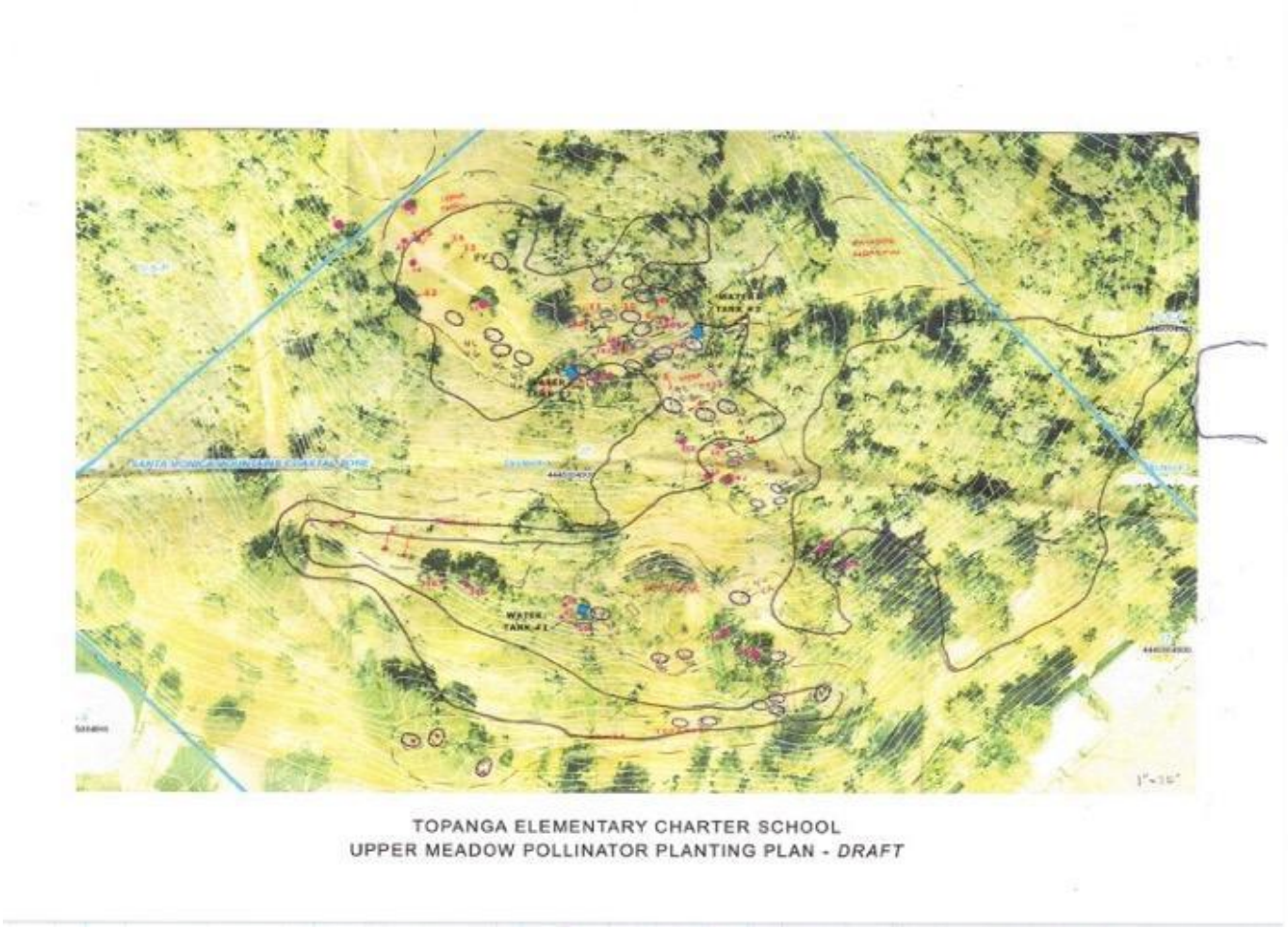

Figure 4. Map depicting the existing "Nature Area" above the school with pollinator plants and a trail system. Map courtesy of Hannah Wear.

History of Site

In Spring 2020, Los Angeles Unified School District (LAUSD) hired a contractor to do brush clearance on the approximately 4.75-acre portion of Topanga Elementary School (known as the Nature Area) located west of the upper playground, cafeteria and teaching bungalows. This Nature Area has served as an outdoor classroom for over 50 years, with students and parents implementing a variety of stewardship projects over the years, including development of a marked "Nature Trail", a tree-monitoring plot established in 2015, numerous oak sapling plantings and a 2019 installation of over 600 pollinator plants funded by a grant from the Xerces Society including 1" plugs of California aster (*Corethrogyne filaginifolia*), California goldenrod (*Solidago velutina* ssp. *californica*), black sage (*Salvia mellifera*), and western vervain (*Verbena lasiostachys*) placed in the "Upper Meadow" portion of the project site. These species are all common in the Topanga Canyon area. The Nature Area is a signature cornerstone of the Topanga Charter Elementary School program.

The 2020 brush clearance work took place while the school was closed due to the COVID-19 pandemic. During this work, numerous live and dead coast live oaks were cut down, bucked up and the trunks and branches used to line the Backbone Trail. A BOBCAT with some kind of ripper device mechanically removed all understory vegetation and hit some of the trees causing wounds. A 25.2 m-long by 2.5 m-wide area was graded and cut to provide access for heavy equipment through coastal sage scrub habitat (**Figures 5 and 6**). In addition to removal of dead oaks, living oaks and branches from living oaks were also removed. All removed trees were cut into sections and many stumps appear to have been ground up, making it impossible to accurately count the number of protected trees removed.

Most of the impact occurred within the LAUSD property boundary, but also extended into portions of adjacent Topanga State Park, owned by California Department of Parks and Recreation (CDPR). The extent of the understory and tree disturbance exceeded the maximum required 200 ft. fuel modification requirement. The property is located in a Very High Fire Hazard Severity Zone but previous brush clearance was limited to reduction of non-native grasses and minimal limbing up of trees.

Figure 5. A 25.5 m-long by 2.5 m-wide area was graded and cut to provide access for heavy equipment. Photo taken 19 May 2021.

Figure 6. A 25.5 m-long by 2.5 m-wide area was graded and cut to provide access for heavy equipment. Photo taken 19 May 2021.

Methods

Analysis of the biological resources associated with the proposed project site began with a thorough review of relevant literature followed by field surveys. The literature review provides a baseline from which to evaluate the biological resources potentially present. We reviewed several environmental documents and databases researching topics such as topography, soils data, species occurrences, and local/regional policies. The following sources were among those reviewed in preparation for a field survey, or that were consulted during preparation of this report (for a complete list see the references section):

- Biogeographic Information and Observation System (BIOS)
- California Natural Diversity Database (CNDDB) Rarefind 5
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California
- FWS Critical Habitat Mapper for Threatened and Endangered Species
- List of Special Vascular Plants, Bryophytes, and Lichens
- List of Vegetation Alliances and Associations (Natural Communities List)
- NPS Vegetation survey, 2007, National Park Service

The field surveys were completed to document the existing conditions on the project site and to determine the potential presence of sensitive biological resources potentially present. We reviewed all historical maps available in Google Earth Pro to determine the history of vegetation change at the site, which informed our interpretation of current (2023) vegetation.

Table 2 presents the dates the site was visited, observer(s), the focus for each visit, and weather conditions while on site.

Table 2. Survey dates and primary observers, including Courtney J. McCammon (CJM) and Daniel S. Cooper (DSC).

Date/Time	Observers	Conditions	Purpose of visit
March 25, 2021 1:30 – 3:30 PM	CJM	56-58°F, 9-15 mph, sunny	Initial visit for LAUSD meeting; observations of vegetation and wildlife.
March 29, 2021 6:30AM – 2:00PM	CJM	50-65°F, 1-13 mph, sunny	Vegetation mapping.
March 30, 2021 6:30AM – 2:00PM	CJM	44-68°F, 4-8 mph, cloudy then sunny	Vegetation and wildlife observations.
March 31, 2021	CJM	51-73°F, 5-10mph, sunny	Wildlife observations and photographs of site.

7:00 – 10:30AM			
April 1, 2021 7:00AM – 3:00PM	CJM	64-71°F, 5-7 mph, sunny	Tree tagging and opportunistic wildlife observations.
April 7, 2021 6:30AM – 12:00PM	CJM	48-68°F, 1-5 mph, sunny	Tree tagging and opportunistic plant/wildlife observations.
March 30, 2023	DSC	_____	Late spring visit for wildflowers/sensitive species; vegetation transects.
April 4, 2023	DSC	_____	" "
April 13, 2023	DSC	_____	" "

Vegetation Surveys

Vegetation surveys were conducted on the project site, focusing on the impact area. Surrounding vegetation within the 200-foot buffer was also noted. During surveys, all vascular plats were recorded, examples of major vegetation types were photographed, unusual occurrences of plants were photographed and noted, wildflowers in bloom were photographed, and the boundaries of these vegetation types were transcribed onto aerial photographs. Parallel walking transects were surveyed throughout the impact area and 200-foot buffer. The distance between the transects varied (5 to 10 feet apart) depending on the vegetation and its overall diversity and structural complexity. Every effort was made to visit the site throughout the growing season given the timeframe for which the biologist was given. In the field, an iPhone app called "GPS Kit" was used to collect the boundary of various vegetation communities. From there, the data was transferred to Google Earth Pro (version 7.3.3.7786) and converted to shapefiles for mapping in a GIS framework (ArcMap 10.8.1). The maps were compared to aerial imagery to confirm accuracy. Historical vegetation was evaluated using aerial photography in Google Earth as well as NPS vegetation data from 2007 (National Park Service, 2007). Representative photographs of the major vegetation types and biological features of the impact area are found in **Appendix A**.

Wildlife Surveys

Wildlife surveys were conducted on both a focused and opportunistic level during the field visits to the project site. During focused surveys, the biologist walked the entirety of the property using 8x42 binoculars noting all bird species seen and/or heard. Nests of birds were also looked for and GPS coordinates were taken showing use of the site as opportune nesting habitat. The biologist visited the site during warmer times of the day in order to search for reptiles. In addition, the biologist looked under logs and rocks to look for reptiles. Opportunistic surveys occurred while surveying for vegetation and during the first site visit. During the opportunistic survey, bird

species were noted but the biologist was not specifically surveying for them. A list of the birds and animals seen on the project site can be found in **Appendix B**.

Biological Characteristics of Site

Flora

The project site (including the impact area and 200-foot buffer) is composed of coast live oak woodland, grassland, and chaparral/shrubland communities. Because the vegetation of the site has recovered somewhat in the two years since the vegetation assessment was first conducted (during on-going drought conditions in 2021), some of the boundaries of vegetation have shifted a bit, and certain highly-disturbed areas in 2020 now appear less disturbed now, having grown-in significantly with natives with the rains of 2023.

For example, the slope northeast of the two water towers at the northwestern corner of the property (which had been mapped as "Urban/Disturbed Coast Live Oak Forest" in 2021) is now (April 2023) strongly native-dominated, and appear to be a mix of coastal sage scrub, oak woodland and valley needlegrass grassland (**Figure 7**).

Figure 7. Slope disturbed by fuel modification in 2020, showing recovery with mix of native and non-native grasses and forbs (north of water tanks).

The vegetation of the project site had been mapped in the mid-2000s by the National Park Service (**Figure 8a**). Note: this mapping was done from aerial photographs as part of a range-wide vegetation classification and mapping program for the Santa Monica Mountains. The degree of ground-truthing involved for the project site is unknown. Therefore, this should not be considered to be an accurate depiction of vegetation from the mid-2000s (nor from today) on the site. Please see Figure 8b for a more accurate vegetation map.

We present a revised (2023) vegetation map of the site as **Figure 8b**. Note: the extent and orientation of the vegetation communities listed below, and shown in Figure 8b, are substantially the same as those present just prior to the disturbance event. So, while the violations impacted these communities, they did not shift them into some other category. Specifically, Urban/Disturbed Coast Live Oak Forest is so designated because it has been disturbed for many years by pine tree planting, understory removal, and other factors. Likewise, the tree removals that occurred within the (mapped) Coast Live Oak Forest Alliance removed trees, but (in our opinion, based on site visits) did not convert it to Urban/Disturbed Coast Live Oak Forest. The same goes for the area of Coastal Sage Scrub that was disturbed by mechanical clearing - this is mapped as Coastal Sage Scrub Alliance, and not a disturbed version of that.

The following vegetation descriptions are to be considered up-to-date (as of 2024):

Coast Live Oak Forest Alliance (a.k.a. Coast Live Oak Forest*, Quercus agrifolia* Forest Alliance; *Quercus agrifolia*/Annual Grass-Herb Woodland/Forest Association"). Rarity ranking S4/G5[1].

Coast live oak forest is situated primarily north and northwest of the project site that features coast live oak (*Quercus agrifolia*) with an understory primarily consisting of climbing bedstraw (*Galium nuttallii*), pacific sanicle (*Sanicula crassicaulis*), and poison oak (*Toxicodendron diversilobum*). Emergent shrubs, including laurel sumac (*Malosma laurina*), occur throughout.

Urban/Disturbed Coast Live Oak Forest. No rarity ranking.

Located just north of the school buildings, the areas mapped in this classification have a mix of non-native pine species (*Pinus* spp.), coast live oak (*Quercus agrifolia*), and intermittent shrubs. The understory is generally bare ground and pine needle duff with little vegetation. This category also includes an area south of the water tanks that appears to have been cleared during the 2020 fuel modification (and probably before this). Species observed include wild oat (*Avena* sp.), bromes (*Bromus* spp.), morning glory (*Calystegia macrostegia*), and mustards (Brassicaceae). These areas generally lack a continuous cover of native species, but several native shrubs and

[1] https://vegetation.cnps.org/alliance/78

trees are found scattered here in non-native grassland, including laurel sumac (*Malosma laurina*), hollyleaf redberry (*Rhamnus ilicifolia*) and toyon (*Heteromeles arbutifolia*).

***Ceanothus spinosus* Chaparral Alliance** (a.k.a. *Ceanothus spinosus* Chaparral Alliance).

Located just outside the property line and disturbed area. No rarity ranking.

Coastal Sage Scrub Alliance (a.k.a. Coastal Sage Scrub Alliance, *Artemisia californica – Salvia leucophylla* Shrubland Alliance). Rarity ranking S5/G5.

This shrubland alliance features California sagebrush (*Artemisia californica*) and purple sage (*Salvia leucophylla*) as co-dominant species. It occurs on the project site and within the impact area. The vegetation is thick and supports a high diversity of native subshrub and forb species such as deerweed (*Acmispon glaber*) and bush monkeyflower (*Diplacus aurantiacus/longifolius*) and rigid birds-beak (*Cordylanthus rigidus*).

Disturbed Scrub. No rarity ranking.

This vegetation type is essentially a result of repeated fuel modification activities within coastal sage scrub. It includes elements of coastal sage scrub, but is strongly dominated by non-native annual grasses.

Grassland (a.k.a. *Nassella pulchra – Melica imperfecta* Herbaceous Alliance). Rarity ranking: S3/G4[2]

This herbaceous alliance was not considered present (likely due to drought conditions) in 2021, but as of April 2023, it was found to occur inside and outside of the impact area, including on adjacent California State Parks property. Its vegetation cover is open and continuous generally less than one meter in height. It supports both native and non-native grassland species, including purple needlegrass *Stipa* (*Nassella*) *pulchra*, chaparral melic (*Melica imperfecta*), and various brome grasses (*Bromus* spp.), with a strong component of natives such as blue dicks (*Dichelostemma pulchellum*) and California buttercup (*Ranunculus californicus*), sharptooth sanicle (*Sanicula arguta*), popcorn-flower (*Plagiobothrys* sp.) and many others. We also noted *Stipa lepida* (elsewhere) on the site.

As Sawyer et al. (2008) note, the "*Nassella pulchra* Herbaceous Alliance"[3] is defined as having "usually >10% relative cover of the herbaceous layer", or ">5% absolute cover as a characteristic to dominant species in the herbaceous layer." Since in April 2023 many portions of the site appear

[2] https://vegetation.cnps.org/alliance/536

[3] This is the "parent group" of *Nassella pulchra-Melica imperfecta* Herbaceous Alliance, which is present locally on the project site, and equivalent to the "Valley Needlegrass Grassland" community recognized by CDFW.

to have at least 5-10% cover by *Stipa* (*Nassella*) *pulchra*, this sensitive community is arguably present, essentially wherever both grassland and coastal sage scrub vegetation has been mapped. Despite its being a perennial grass, its extent may vary from year to year depending on rainfall, and the height/vigor of surrounding grasses and shrubs (which is frequently dictated by rainfall the prior winter). It is also possible that the disturbance documented in 2020 actually improved conditions for certain local species; clearing coastal sage scrub, for example, can have the effect of opening up the vegetation and allowing for grasses – including native grasses – to invade. This appears to have been the case for the access path cut (in 2020) through coastal sage scrub (e.g., **Figure 9**). This path is discussed more thoroughly in a separate report ("Native Tree and Coastal Sage Scrub Replacement Planting Mitigation, Maintenance and Monitoring Plan").

Ruderal

Areas mapped in this classification are barren or consist primarily of sparse cover of non-native ruderal species. This habitat does not fall within a clear vegetation alliance. Within the project area, this includes an area south of the water tanks that appears to have been cleared during the 2020 fuel modification incident. Selected species observed include wild oat (*Avena* sp.), bromes, morning glory (*Calystegia macrostegia*), and Mediterranean mustard (*Hirschfeldia incana*). These areas generally lack native species, though emergent shrubs such as laurel sumac (*Malosma laurina*) occur sparsely throughout.

Scattered squareleaf goldenbush (*Hazardia squarrosa*) shrubs occur within this vegetation community sitewide, but it is not extensive enough (i.e., far less than 1 acre) to be considered "*Hazardia squarrosa* Shrubland Alliance" (Rank G3/S3).

A complete plant species list is included in **Appendix B**.

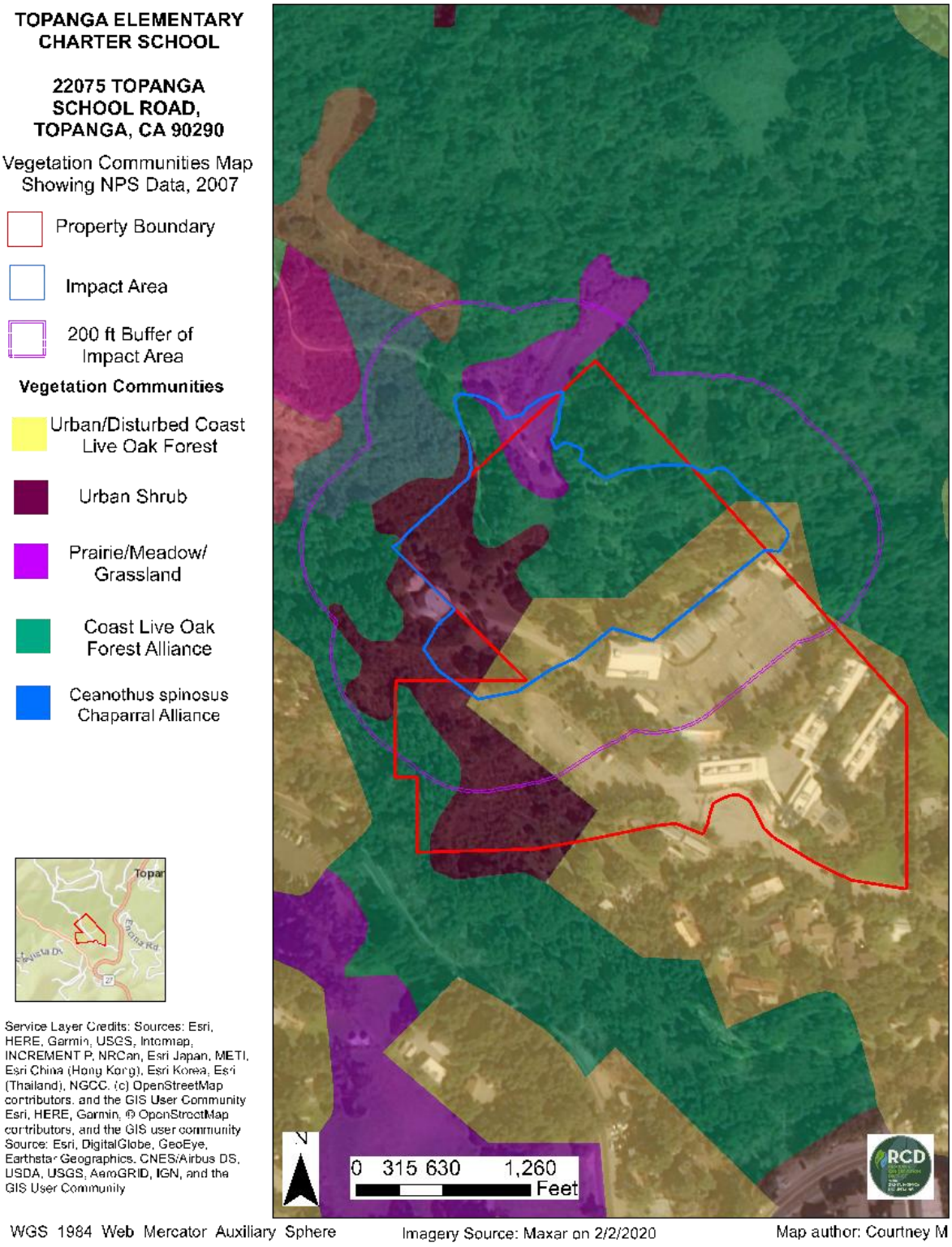

Figure 8a. Map depicting National Park Service vegetation from 2007.

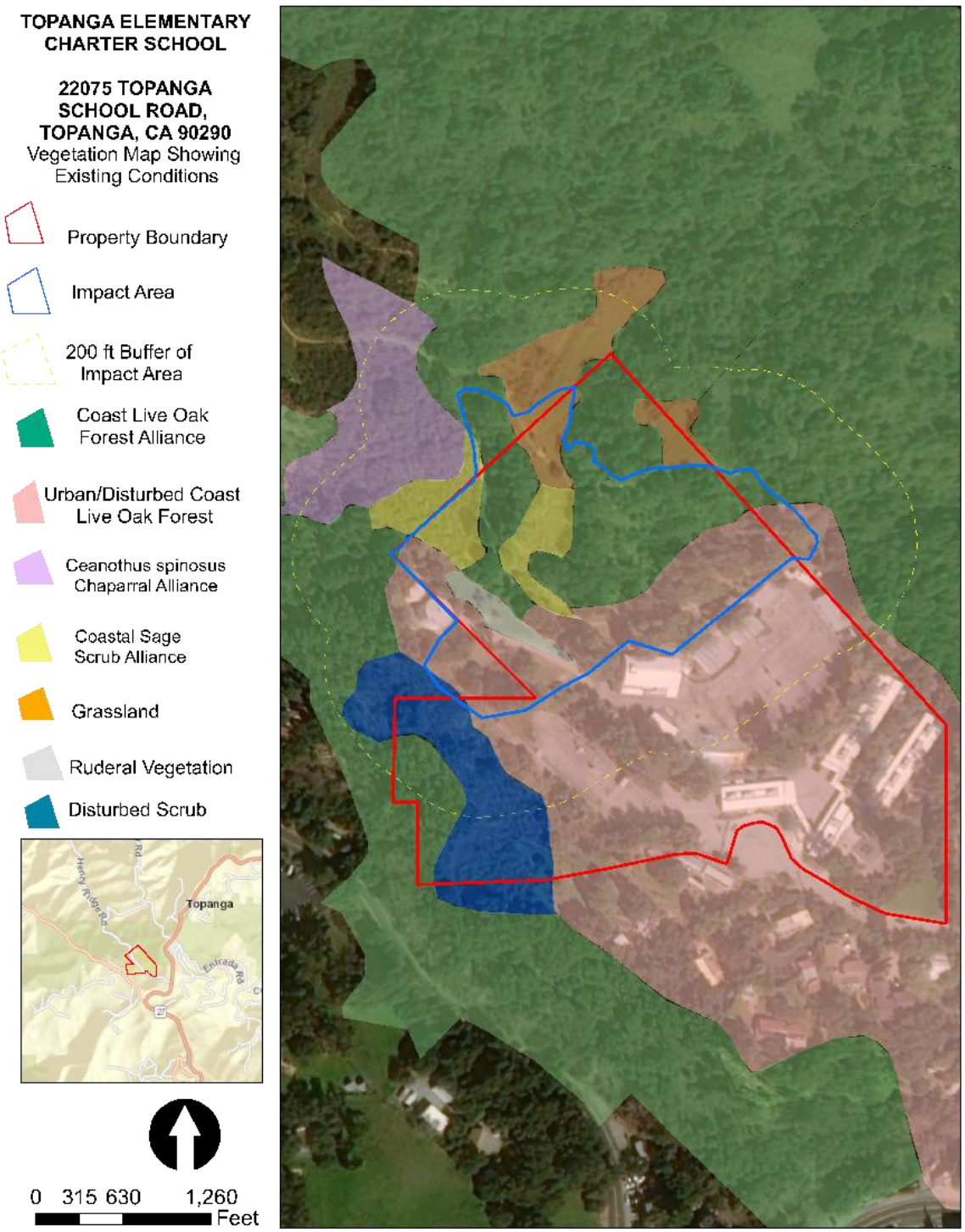

Figure 8b. Revised vegetation map (replaces Figure 8 in 2021 report), showing extent and orientation of various vegetation types prior to their disturbance treated in this report.

Figure 9. “Access path” cut for heavy machinery through coastal sage scrub during fuel modification activities in 2020. Lush regrowth, including many native forbs and grasses, was observed by March 2023.

Habitat Designations

Prior Mapping

Figure 10 reproduces the existing Los Angeles County habitat category maps (see: http://planning.lacounty.gov/smmlcpnet).

Section 22.44.1810 of the LIP defines H1 habitat thus:

> This category consists of habitats of highest biological significance, rarity, and sensitivity--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. In the Coastal Zone, alluvial scrub is dominated by scalebroom (*Lepidospartum squamatum*) and coastal bluff scrub is characterized by either giant coreopsis (*Coreopsis gigantea*) or bush sunflower (*Encelia californica*). Native grassland and scrub vegetation are those areas characterized by native grasses and native shrubs. Areas where native grasses are associated with trees or large shrubs (e.g., Toyon) are typically not considered native grasslands. An important exception is where native grasses are associated with coast live or valley oak which is indicative of oak savannah habitat. Native grassland often supports numerous native forbs and some areas of native grassland will include a large percent of non-native annual grasses. Riparian habitat includes all vegetation (canopy and understory species) associated with a creek or stream including, but not limited to, sycamore, coast live oak, black walnut, white alder, Fremont cottonwood, black cottonwood, mulefat, arroyo willow, red willow, blackberry, mugwort, and Mexican elderberry. In the Coastal Zone, where chaparral and/or coastal sage scrub occur within or adjacent to creeks or streams and function as riparian habitat, these areas are considered to be H1 riparian habitat. Wetlands, including creeks, streams, marshes, seeps and springs, are included as H1 habitat. Coast live and valley oak, sycamore, walnut, and bay woodlands are all included in H1 habitat. Rock outcrops comprised of either volcanic or sedimentary/sandstone rocks are frequently associated with a unique community of rare annual plants and lichens and are therefore H1 habitat. H1 habitat also includes populations of plant and animal species (1) listed by the State or federal government as rare, threatened or endangered, assigned a Global or State conservation status rank of 1, 2, or 3 by CDFW, per the methodology developed by NatureServe, and identified as California Species of Special Concern, and/or (2) CNPS-listed 1B and 2 plant species, normally associated with H1 habitats, where they are found within H2 or H3 habitat areas. Areas where components of H1 are found in urbanized or otherwise disturbed areas, such as oak trees within or adjacent to developed parcels, will be protected where feasible, as set forth in this LIP.

Section 22.44.1810 of the LIP defines H2 habitat thus:

H2 Habitat – This category consists of habitats of high biological significance, rarity, and sensitivity that are important for the 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. Large contiguous blocks of relatively pristine habitat facilitate natural ecosystem patterns, processes and functions such as water filtration, nutrient cycling, predator/prey relationships, plant and animal dispersal and animal migration, habitat and species diversity and abundance, and population and community dynamics (e.g., birth/death rates, food web structure, succession patterns). H2 Habitat includes large, contiguous areas of coastal sage scrub and chaparral-dominated habitats. Coastal sage scrub is dominated by soft leaved, generally low-growing aromatic shrubs such as California sagebrush (*Artemesia californica*), purple sage (*Salvia leucophylla*), and black sage (*Salvia apiana*) and chaparral is dominated by taller, deeper-rooted evergreen shrubs with hard, waxy leaves such as manzanita (*Arctostaphylos* spp.) and ceanothus (*Ceanothus* spp.). H2 habitat also contains: (1) CNDDB-identified rare natural communities; (2) plant and animal species listed by the State or federal government as rare, threatened, or endangered; assigned a Global or State conservation status rank of 1, 2, or 3 by CDFW, per the methodology developed by NatureServe, and identified as California Species of Special Concern; and/or (3) CNPS-listed 1B and 2 plant species, normally associated with H2 habitats.

Section 22.44.1810 of the LIP defines H3 habitat thus:

> "H3 Habitat – This category consists of areas that would otherwise be designated as H2 Habitat, but the native vegetation communities have been significantly disturbed or removed as part of lawfully-established development. This category also includes areas of native vegetation that are not significantly disturbed and would otherwise be categorized as H2 habitat, but have been substantially fragmented or isolated by existing, legal development and are no longer connected to large, contiguous areas of coastal sage scrub and/or chaparral-dominated habitats. This category includes lawfully developed areas and lawfully disturbed areas dominated by non-native plants such as disturbed roadside slopes, stands of non-native trees and grasses, and fuel modification areas around existing development (unless established illegally in an H2 or H1 area). This category further includes isolated and/or disturbed stands of native tree species (oak, sycamore, walnut, and bay) that do not form a larger woodland or savannah habitat. These habitat areas provide important biological functions that warrant specific development standards for the siting and design of new development."

Our Findings

As with the vegetation mapping, we generally agree with the County mapping of habitat designations over most of the project site, except we recommend that the area in the north of the developed school and mixed oak/pine forest should be considered H1. This distinction is made because of the oak woodland and coast live oak forest that remains over much of that area and is outside the 200 ft fuel modification zone for existing buildings. We present a revised habitat map

in **Figure 11**.

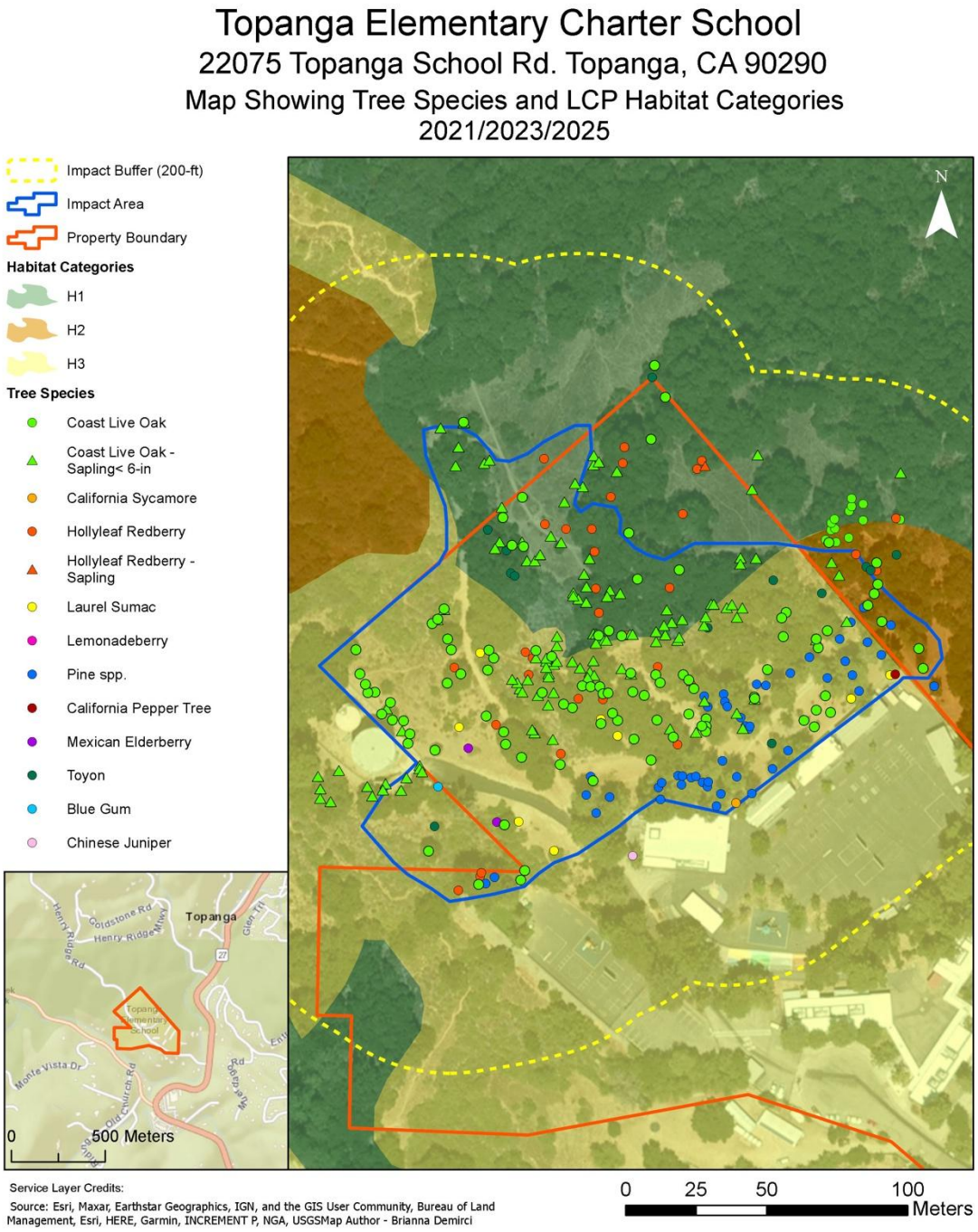

Figure 10. Map depicting LCP habitat designations (with mapped trees).

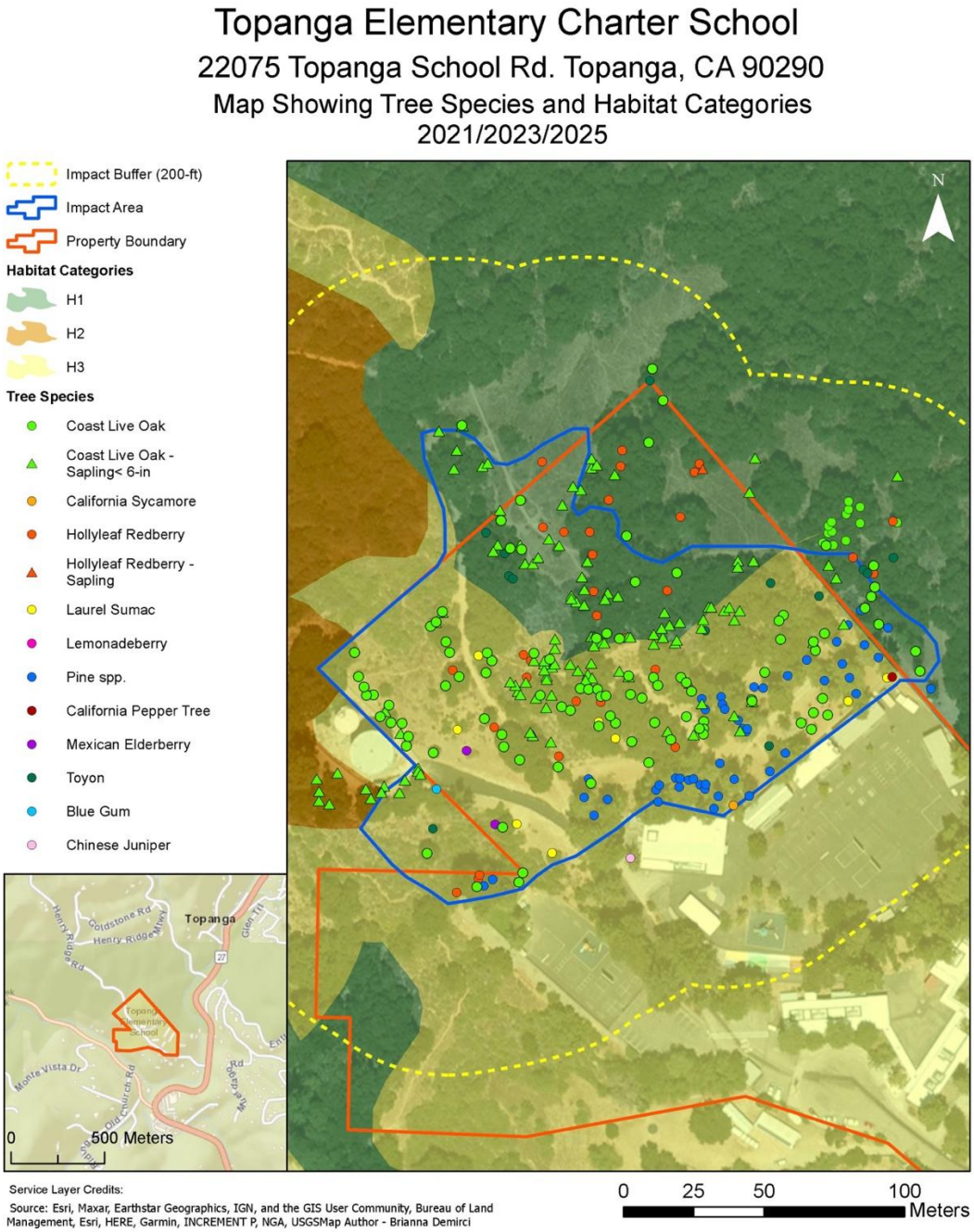

Figure 11. Map depicting habitat designations observed in April 2021 (and subsequently).

Buffers

The LIP requires buffers around both structures and sensitive vegetation (e.g., Section

22.44.1900), among other features. Buffers for the H1 habitat afforded to the oak woodland, extend across a large portion of the project site, with the additional "Quiet Zone" (i.e., 200' out from H1) essentially only leaving the already developed school site outside of these buffer areas.

Wildlife/Wildlife Movement

We observed a normal and expected amount of wildlife activity during the site visits, given the time of year and day. The property is partially fenced, with the developed school site having a chain link fence around all borders. The "Nature Area" that includes the impact area, however, is completely unfenced and is contiguous with Topanga State Park allowing for free movement of wildlife into and out of the area. Several birds noted are species typical of oak woodland including Oak titmouse (*Baeolophus inornatus*), Hutton's vireo (*Vireo huttoni*), and Wrentit (*Chamaea fasciata*). Several bushtit nests were found scattered throughout the property as well as an oak titmouse nest, showing that the site supports nesting birds.

A Cooper's hawk was seen frequently using the project site as a foraging area in 2021, when it was thought to be likely nesting just northeast of the project site (Red-shouldered and Red-tailed hawks were also frequently observed in 2021, and felt to be nesting in the area, if not on the project site itself). Based on observed behavior and vocalizations of adults observed in April 2023, and the presence of a likely Cooper's Hawk nest in the pine grove north of the schoolyard (based on structure, size, height, etc.), the territory includes the entire school property (**Figure 12**).

Figure 12. Location of probably Cooper's Hawk nest. Nest coordinates: 34.093264, -118.604665°.

While few mammals were observed, obvious wildlife movement paths were noted through the project site, including the impact area and 200-foot buffer. Mule deer (*Odocoileus hemionus*)

were documented by scat and tracks of mule deer as observed in 2021 (DSC observed the same in 2023). Bobcat (*Felis rufus*), coyote (*Canis latrans*), California ground squirrel (*Otospermophilus beecheyi*) as well as mountain lions (*Puma concolor*) have been observed regularly in the area. Several intact woodrat (*Neotoma* sp.) middens are present throughout the property. Several southern pacific rattlesnakes (*Crotalus oreganus helleri*) were observed on the project site on multiple days (2021) as well as western fence lizard (*Sceloporus occidentalis*) and common side-blotched lizard (*Uta stansburiana*) (both years). See **Appendix B** for species list.

Wildfire

The project site was not within the path of the 2018 Woolsey Fire and there was no evidence of recent fire observed during the site visits. The last documented fire of this area was in September 2020 when approximately 10-acres burned at North Topanga Canyon Boulevard and Entrado Drive in Topanga. As of 2010-2012, the mean fire interval (1925-2010) in the vicinity of the subject property is 22-42 years. This is a relatively long fire frequency for the Santa Monica Mountains region overall.

Sensitive Biological Resources

Special-Status Species

Plants

Table 3 lists the special-status plant species recorded as occurring in the Topanga quadrangle (USGS) and the 6 surrounding quads (Canoga Park, Calabasas, Van Nuys, Malibu Beach, Beverly Hills, Venice), according to CNDDB (search conducted March 24, 2021, updated April 26, 2025). The habitat requirements for each species listed was assessed with respect to the vicinity of the subject property, and the likelihood of occurrence is presented in the table.

Table 3. Potentially Occurring Special-Status Plant Species (SMM = Santa Monica Mountains).

	Latin name	Common name	Federal status	State status	Local range and habitat	Potential for occurrence
APIACEAE						
	Eryngium aristulatum var. parishii	San Diego button-celery	Endangered	Endangered	Coastal scrub, valley and foothill grassland, vernal pools.	Not expected; out of range
	Spermolepis lateriflora	western bristly scaleseed	None	2A	Sonoran desert scrub; rocky or sandy soils.	Not expected; habitat and preferred soils not on site.
ASTERACEAE						
	Baccharis malibuensis	Malibu baccharis	None	1B.1	Rocky/gravelly patches within chaparral and adjacent oak woodland.	Low; far from known range, and not observed during site visits.
	Baccharis plummerae	Plummer's baccharis	None	4.3	Shaded areas beneath oak woodland and mature chaparral, occasionally found in more open coastal sage scrub in mesic exposures.	Moderate; not observed during site visits, but habitat is suitable.
	Centromadia parryi ssp. australis	Southern tarplant	None	1B.1	Somewhat alkaline vernal pools	Not expected; out of range/no habitat.
	Chaenactis glabriuscula var. orcuttiana	Orcutt's pincushion	None	1B.1	Coastal dunes.	Not expected; out of range/no habitat.
	Deinandra minthornii	Santa Susana tarplant	None	Rare, 1B.2	Chaparral, coastal scrub/ rocky.	Low; occurs on sandstone outcrops, which are not found in the vicinity of the project site. Not observed during site visits.
	Deinandra paniculata	paniculate tarplant	None	4.2	Coastal scrub, valley and foothill grassland, vernal pools. Usually found in vernally mesic habitat but sometimes in sandy soils.	Low; out of range; occurs in the Santa Clarita area, but unknown from the Santa Monica Mtns./Simi Hills.
	Isocoma menziesii var. decumbens	Decumbent goldenbush	None	1B.2	Coastal bluffs along immediate coast.	Not expected; out of range/no habitat
	Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None	1B.1	Mesic grassland and alkali sink habitat along coastal plain.	Not expected; out of range/no habitat

	Latin name	Common name	Federal status	State status	Local range and habitat	Potential for occurrence
	Pentachaeta lyonii	Lyon's pentachaeta	Endangered	Endangered	Patches of thin, rocky/gravelly soil, volcanic formations.	Low; bulk of population lies several km northwest of site; little habitat (thin, rocky soil) preferred by species
	Symphyotrichum greatae	Greata's aster	None	1B.3	Mesic areas within chaparral and woodland of mountains	Not expected; out of range
BRASSICACEAE						
	Dithyrea maritime	Beach spectaclepod	None	Threatened	Coastal strand.	Not expected; out of range/no habitat
	Erysimum insulare	island wallflower	None	1B.3	Coastal strand and coastal sage scrub.	Not expected; no habitat (coastal strand) on site.
	Erysimum suffrutescens	suffrutescent wallflower	None	4.2	Coastal bluff scrub, chaparral (maritime), coastal dunes, coastal scrub.	Not expected; no habitat (coastal dunes) on site.
CHENOPODIACEAE						
	Atriplex coulteri	Coulter's saltbush	None	1B.2	Coastal bluffs	Not expected; out of range/no habitat.
	Atriplex pacifica	South Coast saltbush	None	1B.2	Coastal bluffs	Not expected; out of range/no habitat.
	Atriplex parishii	Parish's saltbush	None	1B.1	Coastal bluffs	Not expected; out of range/no habitat.
	Atriplex serenana var. davidsonii	Davidson's saltscale	None	1B.2	Scattered populations in coastal saltmarsh.	Not expected; no habitat (alkali grassland); not observed in cleared areas.
	Chenopodium littoreum	Coastal goosefoot	None	1B.2	Coastal strand	Not expected; out of range/no habitat.
	Suaeda esteroa	estuary seablite	None	1B.2	Coastal marshes and swamps.	Not expected; out of range/no habitat.
	Suaeda taxifolia	Woolly seablight	None	4.2	Saltmarsh and adjacent habitats	Not expected; out of range/no habitat.
CONVOLVULACEAE						
	Convolvulus simulans	Small-flowered morning-glory	None	4.2	Heavy clay soil, often rich in other native annuals and usually within grassland or open coastal sage scrub.	Low; clay-soil habitat present, but not observed during site visit in spring 2019.
	Dichondra occidentalis	Western dichondra	None	4.2	Northern coastal scrub, coastal sage scrub, foothill woodland, chaparral, valley grassland.	Low; limited habitat on site, and not observed during site visit in spring 2019.

	Latin name	Common name	Federal status	State status	Local range and habitat	Potential for occurrence
CRASSULACEAE						
	Dudleya blochmaniae ssp. blochmaniae	Blochman's dudleya	None	1B.1	Coastal sage scrub and valley grassland.	Low; rare species possible on local rock outcrops; not observed during site visits.
	Dudleya cymosa ssp. agourensis	Agoura Hills dudleya	None	1B.2	Rocky and volcanic soils in chaparral or cismontane woodland habitats.	Low; rare species possible on local rock outcrops; not observed during site visits.
	Dudleya cymosa ssp. marcescens	marcescent dudleya	Threatened	Rare, 1B.2	Chaparral and in shaded, rocky, volcanic outcrops and slopes.	Not expected; out of range.
	Dudleya cymosa ssp. ovatifolia	Santa Monica dudleya	Threatened	1B.1	Coastal sage scrub and chaparral.	Low; rare species possible on local rock outcrops; not observed during site visits.
	Dudleya multicaulis	many-stemmed dudleya	None	1B.2	No extant or historical occurrences in SMM.	Not expected; out of range
FABACEAE						
	Astragalus brauntonii	Braunton's milk-vetch	Endangered	Endangered	Chaparral, coastal scrub valley and foothill grassland/ recent burns or disturbed areas, usually sandstone with carbonate layers.	Low; extant in central SMM, but no calcareous soil observed, and species not observed during site visits.
	Astragalus pycnostachyus var. lanosissimus	Ventura marsh milk-vetch	Endangered	Endangered	Coastal saltmarsh	Not expected; out of range/no habitat
	Astragalus tener var. titi	Coastal dunes milk-vetch	Endangered	Endangered	Coastal strand	Not expected; out of range/no habitat

FAGACEAE						
	Quercus dumosa	Nuttall's scrub-oak	None	1B.1	Single plant known from Los Angeles Co. (Baldwin Hills)	Not expected; out of range/no habitat
HYDROPHYLLACEAE						
	Phacelia hubbyi	Hubby's phacelia	None	4.2	Gravelly or rocky soil in chaparral, coastal scrub, valley and foothill grassland habitats.	Low; suitable scrub and grassland habitat occurs on site but preferred soil type is not present.
	Phacelia ramosissima var. austrolitoralis	south coast branching phacelia	None	3.2	Sandy soil in chaparral, coastal dunes, coastal scrub, coastal marshes and swamps.	Low; limited suitable habitat found on the project site and not observed during springtime survey.
	Phacelia stellaris	Brand's star phacelia	None	1B.1	Coastal dunes, coastal scrub	Low; limited suitable habitat found on the project site and not observed during springtime survey.
JUGLANDACEAE						
	Juglans californica	southern California black walnut	None	4.2	Chaparral, cismontane woodland, coastal scrub/ alluvial.	High; not encountered on project site, but likely occurs nearby.
JUNCACEAE						
	Juncus acutus ssp. leopoldii	Southwestern spiny rush	None	4.2	Brackish wetland and wetland edge habitat, particularly in coastal plain habitat.	Not expected; suitable habitat not on site.
LAMIACEAE						
	Lepechinia fragrans	Fragrant pitcher sage	None	4.2	Shady areas of high chaparral and oak woodland.	Low; not observed during site visits, but could occur in the intact chaparral nearby.
	Monardella hypoleuca ssp. hypoleuca	White-veined monardella	None	1B.3	Localized in handful of sites along permanent streams along deep, shady canyons of central SMM.	Low; not observed during site visits but could occur closer to stream habitat adjacent to site.
LILIACEAE (expanded)						
	Calochortus catalinae	Catalina mariposa-lily	None	4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland.	Present; found in the impact area.

LILIACEAE (expanded)						
	Calochortus clavatus var. gracilis	slender mariposa-lily	None	4.3/1B.2	Chaparral, coastal scrub, valley and foothill grassland.	Moderate; not observed during site visits, when likely to have been in flower, but fairly common in Topanga area.
	Calochortus plummerae	Plummer's mariposa-lily	None	4.2	Chaparral, cismontane woodlands, coastal scrub, Lower montane coniferous forests, valley and foothill grassland/ granitic, rocky.	Moderate; not observed during site visits, when likely to have been in flower, but fairly common in Topanga area.
	Lilium humboldtii ssp. ocellatum	Ocellated Humboldt lily	None	4.2	Chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest.	Moderate; not observed during site visits, when likely to have been in flower, but fairly common in Topanga area.

Latin name	Common name	Federal status	State status	Local range and habitat	Potential for occurrence
MALVACEAE					
Malacothamnus davidsonii	Davidson's bush-mallow	None	1B.2	Arid chaparral north of San Fernando Valley	Not expected; out of range and no suitable habitat on site.
Sidalcea neomexicana	Salt spring checkerbloom	None	2B.2	Locally extinct	Not expected; out of range
MONTIACEAE					
Calandrinia breweri	Brewer's calandrinia	None	4.2	Infrequently found on recent burns; few modern records.	Low; possible in rocky/open soil, but very rare in area.
NAMACEAE					
Nama stenocarpa	mud nama	None	2B.2	Marshes and swamps (lake margins, riverbanks)	Not expected; no suitable habitat (marsh/swamp) on site.
NYCTAGINACEAE					
Abronia maritima	red sand-verbena	None	4.2	Coastal dunes.	Not expected; no suitable habitat (coastal dunes/flats) on site.
ONAGRACEAE					
Camissoniopsis lewisii	Lewis' evening-primrose	None	3	Restricted to sandy coastal flats.	Not expected; no suitable habitat (coastal dunes/flats) on site.
OROBANCHACEAE					
Chloropyron maritimum ssp. maritimum	salt marsh bird's-beak	Endangered	Endangered; 1B.2	Saltmarsh along coast	Not expected; no suitable habitat on site.
PAPAVERACEAE					
Romneya coulteri	Coulter's matilija poppy	None	4.2	Coastal sage scrub and chaparral.	Low; prefers dry wash and canyon habitat which is not found on site. Not observed in scrub or chaparral habitats during site visits.
POACEAE					
Hordeum intercedens	Vernal barley		3.2	seasonally-wet grassland on extensive, heavy clay soils	Low; soil is present near the top of the site, but does not seem wet enough to support this species, which requires seasonal inundation.
POLEMONACEAE					
Navarretia ojaiensis	Ojai navarretia		1B.1	Localized in central/eastern Santa Monica Mtns. but found at edge of chaparral and	Medium; Habitat seems ideal, and while it was searched for, we could not locate it.

					oak woodland at grassland ecotones, which is present at site.	
	Navarretia prostrata	Spreading navarretia		1B.2	Vernal pools	None; no habitat.
POLYGALACEAE						
	Polygala cornuta var. fishiae	Fish's milkwort		4.3	Oak woodland	PRESENT
POLYGONACEAE						
	Chorizanthe parryi var. fernandina	San Fernando spineflower		1B.1	Shallow depressions in chalky soil on flat, grassy mesas	None; no habitat
	Dodecahema leptoceras	Slender-horned spineflower	Endangered	1B.1	Extensive alluvial fan scrub	None; no habitat
ROSACEAE						
	Cercocarpus betuloides var. blancheae	Island mountain-mahogany		4.3		n/a – dubiously present on mainland
	Horkelia cuneata var. puberula	Mesa horkelia		1B.1	Coastal sage scrub along the immediate coast	None; Out of range/no habitat
	Potentilla multijuga	Ballona cinquefoil		1A		n/a - extinct
RUBIACEAE						
	Galium cliftonsmithii	Santa Barbara bedstraw		4.3		n/a – dubiously present in SMM.
RUSCACEAE						
	Nolina cismontana	Chaparral nolina		1B.2	Calcareous and other mineral-rich soils in Simi Hills	None; Out of range/no habitat
FERNS						
	Thelypteris puberula var. sonorensis	Sonoran maiden-fern		2B.2	Moist, shady oak woodland with rock outcrops	Low; no outcrop habitat suitable for this species.

We documented two special-status plants. Our April 2023 visits found multiple mature individuals of Fish's milkwort (*Polygala/Rhinotropis cornuta* var. *fishiae*) in oak woodland in the northwest portion of the site (see **Figure 13**). It may have been impacted by the brush clearing in 2020, and simply grown back since 2021, as it was found within the mapped impact area.

Figure 13. Fish's milkwort (*Polygala cornuta* var. *fishiae*), found scattered through the oak woodland of the property. Coordinates: 34.094164, -118.605882; 34.093477, -118.605731; 34.093754, -118.604883.

We also found Catalina mariposa lily (*Calochortus catalinae*) at the subject property during our site visits (2021 and 2023). Visits in April 2023 documented a more widespread distribution of Catalina mariposa lilies: A single plant was in grassy coastal scrub just north of the water tanks, and up to 10 plants were along the grassy edge of Henry Ridge Motorway, under oaks (**Figure 14**). In addition, a photo showing this species was uploaded to iNaturalist (https://www.inaturalist.org/observations/75516082) from a third area, the eastern edge of the school property, along the Backbone Trail. It is likely this species is somewhat more widespread on the site; it favors grassy areas in clay soil (within various vegetation/habitat types).

These locations, and those of Fish's milkwort and the likely Cooper's Hawk nest, are mapped in **Figure 15**.

We searched for, but did not find, Ojai navarretia, which we consider as having a "medium" likelihood of occurrence.

Figure 14. Catalina mariposa lily, along edge of Henry Ridge Mtwy. (within project area), 13 April 2023. Coordinates: 34.093793, -118.604598; 34.093909, -118.605823; 34.093586, -118.606219.

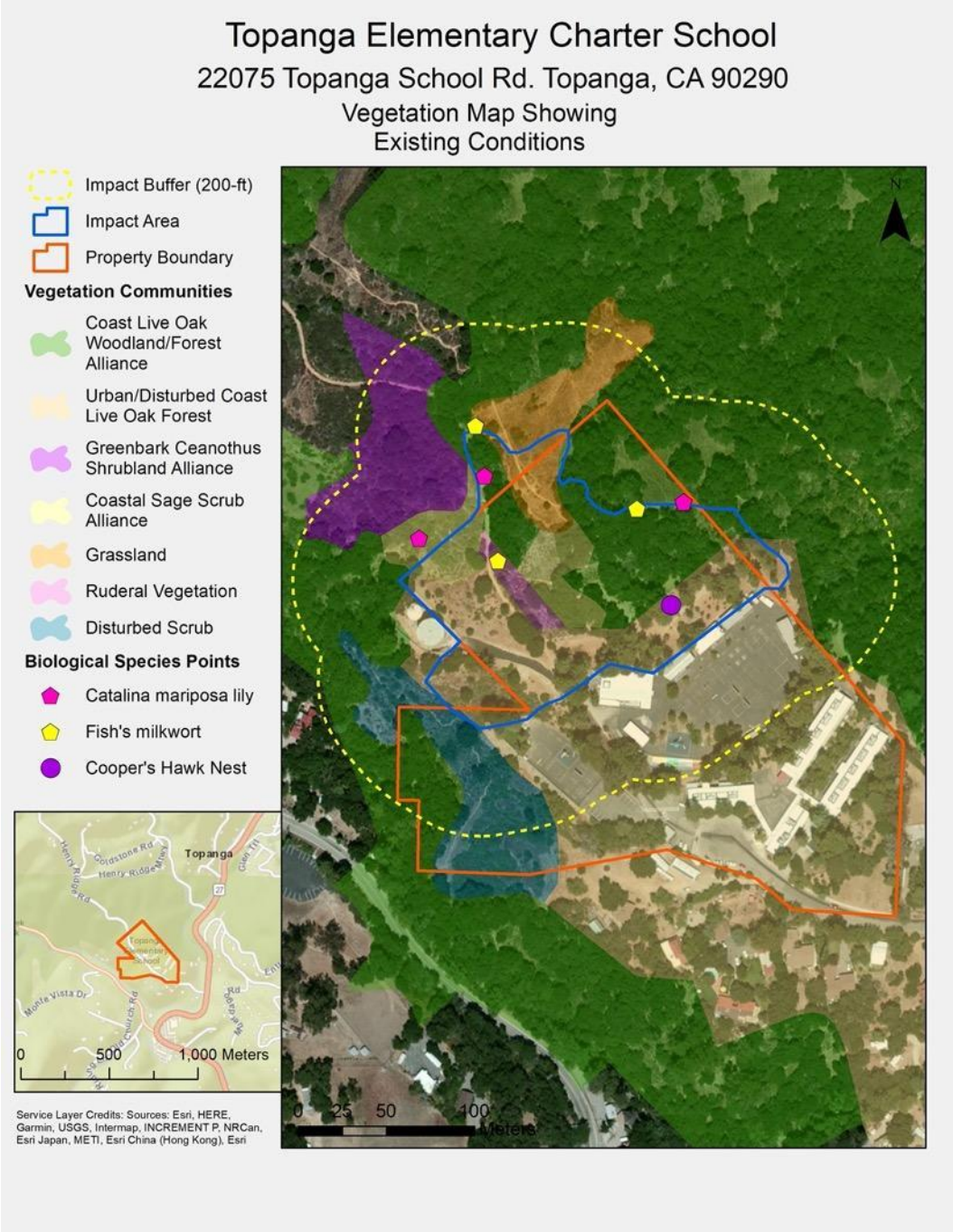

Figure 15. Revised (2023) sensitive species map.

Plant Communities

Several special-status plant communities have been recorded as occurring in the six USGS quads surrounding the Topanga quad, according to CNDDB (search conducted March 24, 2021,

updated April 26, 2025):

- Southern California Coastal Lagoon
- Southern California Steelhead Stream
- California Walnut Woodland
- Riversidian Alluvial Fan Sage Scrub
- Southern Coast Live Oak Riparian Forest
- Southern Coastal Salt Marsh
- Southern Dune Scrub
- Southern Sycamore Alder Woodland
- Valley Needlegrass Grassland
- Valley Oak Woodland

We consider Valley Needlegrass Grassland present at the site, in the far northern area, and along the northeastern property line (see discussion of "Grassland" under "Biological Characteristics of Site: Flora", above).

The oak woodland at the site is not strongly associated with a waterway, and therefore is not an oak riparian system. The grassland on site is not characterized as the 'Valley Needlegrass Grassland' due to the heavy invasion from non-native plant species that has occurred.

Wildlife

Table 4 lists the special-status wildlife species recorded as occurring in the Topanga quadrangle (USGS) and the 6 surrounding quads, according to CNDDB (search conducted March 24, 2021). The habitat requirements for each species listed was assessed with respect to the vicinity of the subject property, and the likelihood of occurrence is presented in the table.

Table 4. Potentially Occurring Special-Status Wildlife Species.

	Latin name	Common name	Fed. Status	State Status	Local habitat and range	Potential for occurrence
BIRDS						
	Accipiter cooperii	Cooper's hawk	-	WL	Historically, dense stands of live oaks and riparian woodlands. Can also be highly urban species nesting in non-native trees.	High; observed on site and likely breeding resident in vicinity.
	Accipiter gentilis	Northern goshawk	-	SSC	Coniferous, deciduous, and mixed forest types. In addition to forested areas, they may also use shrublands and open areas while foraging, migrating, or overwintering.	Not expected; listed in error.
	Accipiter striatus	Sharp-shinned hawk	-	WL	Woodlands and forages over dense chaparral and scrublands.	Low; possible in winter as a transient.
	Agelaius tricolor	tricolored blackbird	Threatened	SSC	Freshwater marshes and riparian scrub.	Not expected; no suitable habitat on site.
	Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	-	WL	Common breeding resident in coastal sage scrub.	Moderate; prefers more open/grassy habitat but could occur in openings in limited scrub habitat on site.
	Ammodramus savannarum	grasshopper sparrow	-	SSC	Tall grasslands.	Not expected; suitable habitat not on site.
	Antigone canadensis canadensis	lesser sandhill crane	-	SSC	Breed and forage in open prairies, grasslands, and wetlands.	Not expected; suitable habitat not on site.
	Antigone canadensis tabida	greater sandhill crane	-	Threatened, FP	Breed and forage in open prairies, grasslands, and wetlands.	Not expected; suitable habitat not on site.
	Aquila chrysaetos	Golden eagle	-	FP , WL	Mountains, deserts, and open country.	Not expected; no modern records in area

	Latin name	Common name	Fed. Status	State Status	Local habitat and range	Potential for occurrence
	Ardea alba	Great egret	-	-	Shallow water and along shores of estuaries, lakes, ditches, and slow-moving streams, in salt ponds and mudflats, and in irrigated croplands and pastures; requires groves of trees that are relatively isolated from human activities for nesting and roosting	Low; possible as a transient,
	Ardea herodias	Great blue heron	-	-	Shallow, open water and open fields; nests in secluded groves of tall trees.	Low; possible as a transient
	Artemisiospiza belli belli	Bell's sage sparrow	-	WL	Coastal sage scrub and chamise chaparral.	Not expected; prefers lowland and sagebrush flats habitat.
	Athene cunicularia	Burrowing owl	-	SSC	Grasslands and open scrub.	Low; no modern records in area, and no habitat
	Aythya americana	redhead	-	SSC	Lakes and ponds.	Not expected; suitable habitat not on site.
	Branta bernicla	brant	-	SSC	Wintering areas on Pacific Coast in salt bays or estuaries.	Not expected; suitable habitat not on site.
	Buteo regalis	ferruginous hawk	-	WL	Found in prairies, deserts, and open grasslands. Nests in trees using the old nests of other raptor species.	Possible as a transient.
	Buteo swainsoni	Swainson's hawk	-	Threatened	Open riparian habitat, in scattered trees or small groves in sparsely vegetated flatlands; typical habitat is grassland or cropland.	Possible as a transient.
	Cardinalis cardinalis	northern cardinal	-	WL	Woodland edges and grassland landscapes with thickets and shrubs to nest in.	Possible as a transient.
	Chaetura vauxi	Vaux's swift	-	SSC	Redwood and Douglas fir forests with old snags or tall, burned-out stubs.	Not expected; suitable habitat not on site. May occur overhead.

	Latin name	Common name	Fed. Status	State Status	Local habitat and range	Potential for occurrence
	Charadrius nivosus nivosus	western snowy plover	Threatened	SSC	Sandy coastal beaches and shallow alkaline lakes.	Not expected; suitable habitat not on site.
	Childonias niger	black tern	-	SSC	Marshes, rivers, lakeshores; typically, in sites with a mixture of emergent vegetation and open water.	Not expected; suitable habitat not on site.
	Circus hudsonius	northern harrier	-	SSC	Coastal salt marsh, freshwater marsh, grasslands, and agricultural fields.	Not expected; suitable habitat not on site.
	Cistothorus palustris clarkae	Clark's marsh wren	-	SSC	Marshes and wetlands	Not expected; suitable habitat not on site.
	Coturnicops noveboracensis	yellow rail	-	SSC	Marshes and wetlands.	Not expected; suitable habitat not on site.
	Elanus leucurus	White-tailed kite	-	-	Open vegetation and uses dense woodlands for cover.	Possible in years when present. Nests historically documented nearby.
	Empidonax traillii extimus	Southwestern willow flycatcher	Endangered	Endangered	Riparian woodlands that contain water and low willow thickets.	Possible as a transient.
	Eremophila alpestris actia	California horned lark	-	WL	Grasslands, disturbed areas, agriculture fields, and beach areas.	Possible as a transient.
	Falco columbarius	merlin	-	WL	Coastlines, wetlands, woodlands, agricultural fields, and grasslands.	Possible as a transient.
	Falco mexicanus	Prairie falcon	-	WL	Grasslands, savannas, rangeland, agricultural fields, and desert scrub; requires sheltered cliff faces for shelter.	Low; rare in area (possible overhead).
	Falco peregrinus anatum	American peregrine falcon	-	FP	Occurs most frequently along the coast and over other large bodies of water.	Likely as a transient, or foraging overhead from breeding areas.
	Gavia immer	common loon	-	SSC	Nests around forested lakes and rivers.	Not expected; suitable habitat not on site.

	Latin name	Common name	Fed. Status	State Status	Local habitat and range	Potential for occurrence
	Gymnogyps californianus	California condor	E	E, FP	Requires vast expanses of open savanna, grasslands, and foothill chaparral in mountain ranges of moderate altitude. Deep canyons containing clefts in the rocky walls provide nesting sites. Forages up to 100 miles from roost/nest.	Low; may occur as a rare transient. Nesting habitat not on site.
	Haliaeetus leucocephalus	bald eagle	Delisted	Endangered, FP	Lakes, reservoirs, rivers, offshore islands, and some rangelands and coastal wetlands in southern California.	Low; may occur as a rare transient. Nesting habitat not on site.
	Icteria virens	yellow-breasted chat	-	SSC	Riparian thickets and riparian woodlands with a dense understory.	Not expected; suitable habitat not on site.
	Ixobrychus exillis	least bittern	-	SSC	Mostly in freshwater and brackish marshes with tall stands of cattails or other vegetation.	Not expected; suitable habitat not on site.
	Lanius ludovicianus	loggerhead shrike	-	SSC	Grasslands with scattered shrubs, trees, fences or other perches.	Possible as a transient, but rare and declining in region.
	Larus californicus	California gull	-	WL	Alkali and freshwater lacustrine, riverine, and cropland areas inland; along coast prefers sandy beaches, mudflats, rocky intertidal, and pelagic areas; also fresh and salt water emergent wetlands.	Not expected; suitable habitat not on site.
	Laterallus jamaicensis coturniculus	California black rail	-	Threatened, FP	Tidal salt marshes.	Not expected; suitable habitat not on site.
	Mycteria americana	wood stork	-	SSC	Freshwater and estuarine wetlands.	Not expected; suitable habitat not on site.

	Latin name	Common name	Fed. Status	State Status	Local habitat and range	Potential for occurrence
	Numenius americanus	long-billed curlew	-	WL	Winters in wetlands, tidal estuaries, mudflats, flooded fields, and beaches.	Not expected; suitable habitat not on site.
	Pandion haliaetus	osprey	-	WL	Can be found near oceans, rivers, lakes, mangroves, coastal wetlands, lagoons, reefs, estuaries and marshes.	Possible as a transient.
	Passerculus sandwichensis beldingi	Belding's savannah sparrow	-	Endangered	Marshes and wetlands.	Not expected; suitable habitat not on site.
	Passerculus sandwichensis rostratus	large-billed savannah sparrow	-	SSC	Limited to open, low salt marsh vegetation, including grasses, pickleweed, and iodine bush.	Not expected; suitable habitat not on site.
	Pelecanus occidentalis californicus	California brown pelican	Delisted	FP	Marine species.	None; no habitat (aquatic/marine)
	Phalacrocorax auritus	double-crested cormorant	-	WL	Inland lakes, fresh, salt and estuarine waters. Overnight roosts on humanly inaccessible areas without vegetation.	Not expected; suitable habitat not on site.
	Piranga rubra	summer tanager	-	SSC	Cottonwood-willow riparian habitats, especially older, dense stands along rivers and streams.	Low; possible as a winter species.
	Plegadis chihi	white-faced ibis	-	WL	Feeds in freshwater emergent wetlands, wet meadows, and irrigated or flooded pastures. Requires large marsh areas for nesting in that are near foraging areas.	Not expected; suitable habitat not on site.
	Polioptila californica californica	Coastal California gnatcatcher	Threatened	SSC	Coastal sage scrub in areas of flat or gently sloping terrain.	Not expected; no local records and limited scrub habitat.

	Latin name	Common name	Fed. Status	State Status	Local habitat and range	Potential for occurrence
	Rallus obsoletus levipes	light-footed Ridgway's rail	Endangered	Endangered, FP	Uses southern California salt marshes, lagoons, and marine habitat.	Not expected; suitable habitat not on site.
	Rallus obsoletus obsoletus	California Ridgway's rail	Endangered	Endangered, FP	Salty and brackish water marshes with pickleweed and cordgrass.	Not expected; suitable habitat not on site.
	Riparia riparia	bank swallow	-	Threatened	Found near water including riverbanks, creeks, lakes.	Transient only
	Setophaga petechia	yellow warbler	-	SSC	Common nester in riparian woodland (where extensive).	Should occur as a transient
	Sternula antillarum browni	California least tern	Endangered	Endangered, FP	Prefers broad, level expanses of open sandy or gravelly beach, dredge spoil or other open shoreline areas, and broad river valley sandbars.	Not expected; suitable habitat not on site.
	Thalasseus elegans	elegant tern	-	WL	Strictly coastal; commonly found on beaches and estuaries.	Not expected; suitable habitat not on site.
	Vireo bellii pusillus	least Bell's vireo	Endangered	Endangered	Riparian vegetation with extensive willows below 2,000 ft.	Low; no willow riparian habitat
	Xanthocephalus xanthocephalus	yellow-headed blackbird	-	SSC	In wetlands and marshes. Nests in reeds directly over the water.	Not expected; suitable habitat not on site.
CRUSTACEANS						
	Streptocephalus woottoni	Riverside fairy shrimp	Endangered	SSC	Vernal pools with clear to tea-colored water in grass or mud-bottomed swales.	Not expected; no habitat (vernal pools).
FISH						
	Eucylogobius newberryi	tidewater goby	Endangered	SSC	Marine/aquatic species.	Not expected; no habitat (aquatic/marine).
	Gila orcuttii	arroyo chub	-	SSC	Slow-moving or backwater sections of warm to cool streams with mud or sand substrates.	Not expected; no habitat (aquatic/marine)
	Oncorhynchus mykiss irideus	steelhead – southern California DPS	-	-	Cold fresh water draining to ocean.	Not expected; no habitat (aquatic/marine)

	Latin name	Common name	Fed. Status	State Status	Local habitat and range	Potential for occurrence
INVERTEBRATES						
	Bombus crotchii	Crotch bumble bee	-	Candidate Endangered	Grassland and scrub.	Unknown mostly but grassland habitat occurs on site.
	Danaus plexippus pop. 1	monarch - California overwintering population	Candidate	-	Winter roost sites located in wind-protected tree groves (gum trees, Monterey pine, and cypress trees), with nectar and water sources nearby.	Eucalyptus is limited and other arboreal habitat probably too limited. Pollinator plants installed by students removed during 2020 episode.
	Euphilotes battoides allyni	El Segundo blue butterfly	Endangered	-	Sand dunes with the host plant *Eriogonum parvifolium*.	Not expected; suitable habitat not on site.
	Euphydryas editha quino	Quino checkerspot butterfly	Endangered	-	Open sage scrub & grasslands containing the host plant species *Plantago erecta*.	Extirpated; no modern records.
	Socalchemmis gertschi	Gertsch's socalchemis spider	-	-	Unk.	Unk.
	Trimerotropis occidentiloides	Santa Monica grasshopper	-	-	Unk.	Unk.
MAMMALS						
	Antrozous pallidus	pallid bat	-	SSC	Arid habitats, including grasslands, shrublands, woodlands, and forests; prefers rocky outcrops, cliffs, and crevices with access to open habitats for foraging.	High; foraging only
	Euderma maculatum	spotted bat	-	SSC	Deserts, scrublands, chaparral, and coniferous woodlands.	High; foraging overhead only
	Eumops perotis californicus	western mastiff bat	-	SSC	Primarily arid lowlands and coastal basins with rugged, rocky terrain, along with suitable crevices for day-roosts.	High; foraging overhead only
	Lasiurus blossevillii	western red bat	-	SSC	Likely favors tall trees for roosting.	High; roosting in trees and foraging overhead,
	Latin name	**Common name**	**Fed. Status**	**State Status**	**Local habitat and range**	**Potential for occurrence**

	Lepus californicus bennettii	San Diego black-tailed jackrabbit	-	SSC	Chaparral and coastal sage scrub.	Low; not known from the region and large expanses or habitat are required.
	Macrotus californicus	California leaf-nosed bat	-	SSC	Desert riparian, desert wash, desert scrub, desert succulent scrub, alkali desert scrub, and palm oasis.	High; foraging overhead only
	Microtus californicus stephensi	south coast marsh vole	-	SSC	Coastal marshes.	Not expected; preferred habitat not found on site.
	Neotoma lepida intermedia	San Diego desert woodrat	-	SSC	Chaparral and coastal sage scrub.	Low; requires cactus.
	Perognathus longimembris brevinasus	Los Angeles pocket mouse	-	SSC	Lower elevation grassland, alluvial sage scrub, and coastal sage scrub.	Low; preferred grassland occurs in small patches on site.
	Perognathus longimembris pacificus	Pacific pocket mouse	Endangered	SSC	Shrublands with firm, sandy soil. Fine-grain, sandy substrates in the immediate vicinity of the ocean.	Not expected; preferred habitat not found on site.
	Sorex ornatus salicornicus	southern California saltmarsh shrew	-	SSC	Coastal marshes.	Not expected; preferred habitat not found on site.
	Taxidea taxus	American badger	-	SSC	Drier open stages of shrub, forest, and herbaceous habitats with friable soils.	Low; no burrows noted.
REPTILES						
	Anniella sp.	legless lizard	-	SSC	Stabilized dunes, beaches, dry washes, pine, oak, and riparian woodlands, and chaparral; associated with sparse vegetation with sandy or loose, loamy soils.	Moderate; requires sandy soil and/or deep layer of leaf litter, but locally rare.
	Aspidoscelis tigris stejnegeri	coastal whiptail	-	SSC	Open areas in semiarid grasslands, scrublands, and woodlands.	High; occurs widely in various habitats in the Santa Monica Mountains.
	Diadophis punctatus modestus	San Bernardino ringneck snake	-	-	Woodlands, grassland, chaparral, and scrub habitats; often found in mesic areas under rocks, logs, and debris.	High; resident in area

	Latin name	Common name	Fed. Status	State Status	Local habitat and range	Potential for occurrence
	Emys marmorata	western pond turtle	-	SSC	Streams, ponds, freshwater marshes, and lakes with growth of aquatic vegetation.	Not expected; no riparian/aquatic habitat with permanent freshwater or pools.
	Phrynosoma blainvillii	coast horned lizard	-	SSC	Relatively open grasslands, scrublands, and woodlands with fine, loose soil.	Low; resident in area, but no open/sandy scrub habitat.
	Salvadora hexalepis virgultea	coast patch-nose snake	-	SSC	Large tracts of undisturbed coastal sage scrub and chaparral, typically with loose soil.	Moderate; rare species, but habitat appears ideal though soil type on site is not preferred.
	Thamnophis hammondii	Two-striped gartersnake	-	SSC	Perennial and intermittent streams having rocky or sandy beds and artificially-created aquatic habitats (man-made lakes and stock ponds); requires dense riparian vegetation.	Not expected; no habitat present on site.
	Thamnophis sirtalis ssp.	South coast gartersnake	-	SSC	Restricted to marsh and upland habitats near permanent water that support riparian vegetation.	Not expected; out of range and no habitat on site.
AMPHIBIANS						
	Anaxyrus californicus	arroyo toad	Endangered	SSC	Restricted to rivers that have shallow, gravely pools adjacent to sandy terraces that have a nearly complete closure of cottonwoods, oaks, or willows.	Not expected; no records and out of range
	Rana draytonii	California red-legged frog	Threatened	SSC	Extirpated, now being re-introduced locally in sites around SMM.	Not expected; extirpated; not near any relocation areas.
	Spea hammondii	western spadefoot	-	SSC	Open areas in lowland grasslands, chaparral, and pine-oak woodlands; require temporary rain pools that last approximately three weeks and lack exotic predators.	Not expected; no records and out of range

	Latin name	Common name	Fed. Status	State Status	Local habitat and range	Potential for occurrence
	Taricha torosa	Coast Range newt	-	SSC	Rocky, permanent creeks, typically under shade of oaks.	Not expected; no habitat present on site, though it is expected in the Topanga Canyon watershed

SSC = Species of Special Concern (State of California); FP = Fully-protected (State of California; WL = WatchList (State of California)

No special-status wildlife was noted during our visit, and from the above table and other information, the subject property provides suitable habitat for legless lizard, San Bernardino ringneck snake and San Diego mountain kingsnake. Oak woodland is marginally suitable habitat for coast horned lizard and coast patchnose snake, which do not occur normally in dense oak woodland (without another habitat feature present). Sensitive mammals that could occur include several bats.

Designated Critical Habitat

The project site is not located within or adjacent to USFWS-designated Critical Habitat for any species. The nearest critical habitat is for Braunton's milk-vetch at approximately 2.36 miles away.

Jurisdictional Resources

Topanga Creek lies south of the project site, which flows into the Pacific Ocean. This creek is approximately 375 feet from the southern edge of the project site. A culvert bisects the Impact Area running east to west eventually going underneath Henry Ridge Motorway and the outfall to an area west of the project site.

Oaks/Native Trees

A discussion of the oak trees and oak woodland habitat on the project site is in the supplemental Native Tree Report. **Figure 16** depicts the most recent map of native trees on the project site.

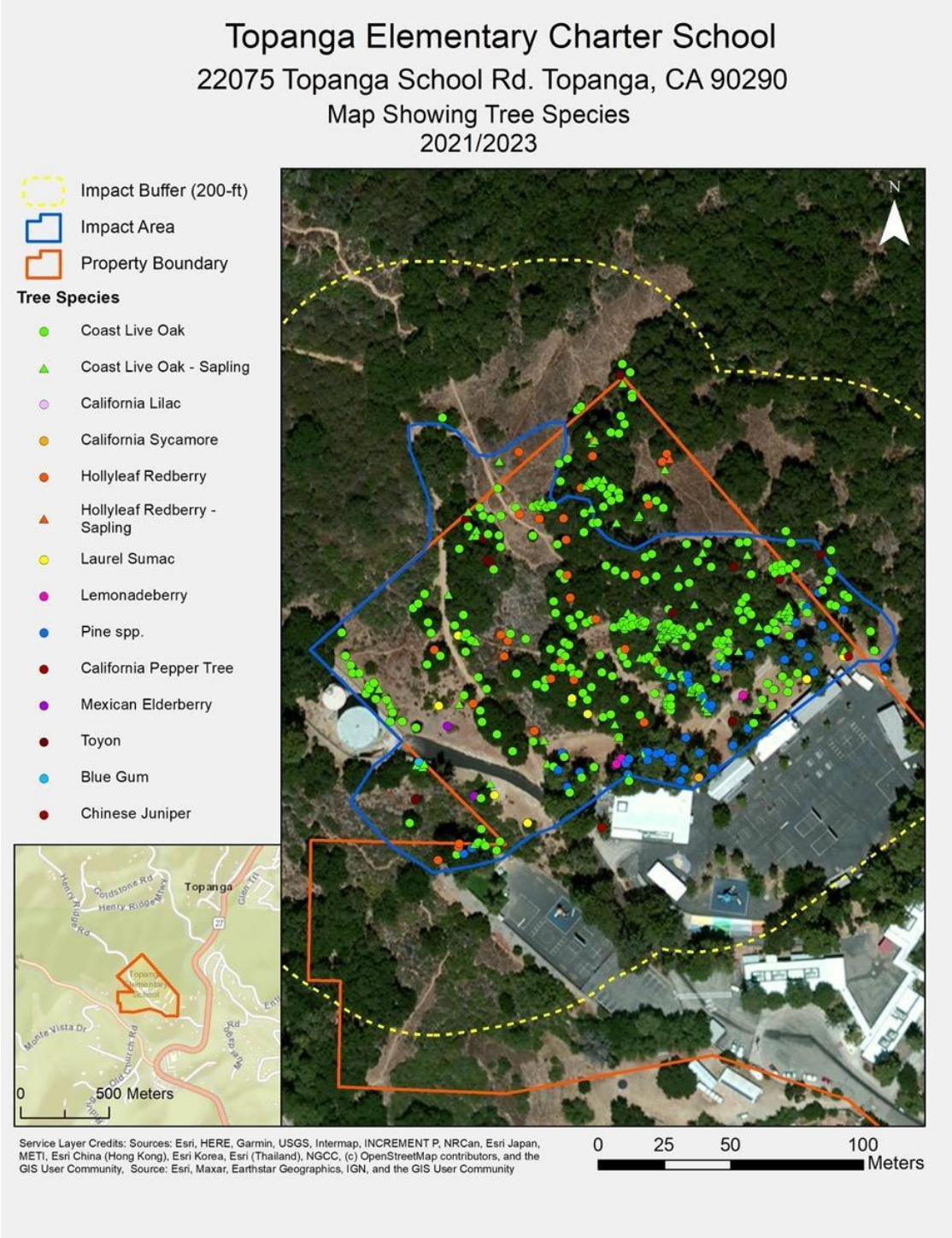

Figure 16. Map showing existing native trees on the project site in April 2021.

Impact Analysis

Summary of Impacts

Table 5 presents a breakdown of impacts by habitat category (e.g., H1, H2, etc.), vegetation communities, and ownership.

Special-status Plant Species

This evaluation of impacts to special-status plants considers those species that require mandatory special consideration and/or protection pursuant to the Federal Endangered Species Act, the State Endangered Species Act, and/or CEQA.

The brush-clearing in 2020 almost certainly impacted both Catalina mariposa lily and Fish's milkwort to some extent. Both species are still present on the site, however, and we found them in more locations than were observed in 2021. Therefore, it is not clear the extent to which the 2020 work impacted each. Fish's milkwort were observed vigorously putting on new leaves during our 2023 visit (it was not observed in 2021), and more Catalina mariposa lilies were observed in 2023 than 2021 (with more potentially yet-to-emerge later in 2023).

Sensitive Plant Communities

Because mapped areas the grassland on the project site are best considered "Valley Needlegrass Grassland" (considered Sensitive by CDFW), and some of this was within the impact area, we consider it having been impacted in 2020. Areas of impact include the far northern and eastern boundaries.

However, we observed "needlegrass" [including purple needlegrass *Stipa* (*Nassella*) *pulchra* and *Stipa* (*Nassella*) *lepida*] to be rather common on the site following the rains in 2023. While they likely were also present in 2020 to some extent when the impacts occurred, without "before" data, it is not possible to determine how these were impacted, if at all.

Special-status Wildlife Species

We consider Cooper's Hawk to be present and nesting in 2023, and its nest is almost certainly located in (non-native) pine trees (*Pinus* sp.). While it may not have been present here in 2020 when the impact occurred, or in the 2021 assessment, the pines were not impacted at any point during this period (though some understory removal occurred here in 2020, too). While the species does nest in oaks, it readily uses many native and non-native trees such as pines, ash, and others. Therefore, we cannot conclude that the loss of oaks at the project site would necessarily represent a negative impact to the species – particularly because the dense pine grove adjacent to the school buildings was left largely undisturbed. The Cooper's Hawk is now a strongly urban species in the region, so human-caused impacts to it are difficult to demonstrate, as it takes advantage of many aspects of human activity.

Nesting Birds

There were obvious nesting birds on the project site in April 2021. The project site likely supports a host of species that use the vegetation to nest on a yearly basis. Due to the amount of vegetation that was trimmed and removed, it is likely that the fuel modification efforts significantly impacted nesting birds on the project site. In addition, there were no nesting bird surveys conducted prior to the work being completed nor was there a biological monitor. Impacts were likely significant though it is impossible to know.

Wildlife Movement

Wildlife movement did not seem to be dramatically affected by the fuel modification efforts. Individual impacts to wildlife are unknown as the fuel modification efforts were not monitored by a biologist or otherwise.

Jurisdictional Resources

No permanent or temporary impacts to the drainage features near the project site were observed.

Oak/Native Trees

The significant impact to the native tree canopy cover as well as individual tree damage is discussed at length in the Native Tree Report under separate cover.

Table 5. Summary of Impacts to vegetation and habitat (units in acres unless specified)

Habitat categories affected within Impact Area and 200-foot buffer	
H1	5.81
H2	1.79
H3	7.15
Habitat categories affected within Impact Area	
H1	1.40
H2	0.00
H3	3.17
Vegetation communities affected within Impact Area and 200-foot buffer	
Grassland	0.91
Ruderal	0.17
Coastal sage scrub	0.77
Q. agrifolia forest	6.08
Urban forest	4.28
Disturbed scrub	0.81
Ceanothus shrubland	0.98
Vegetation communities affected within Impact Area	
Grassland	0.24
Ruderal	0.17
Coastal sage scrub	0.54
Q. agrifolia forest	1.85
Urban forest	1.89
State Parks Property Affected	
Impact Area	0.43
Impact Area and 200-ft Buffer	5.69
Vegetation Communities in State Parks Property Affected – Impact Area	
Grassland	0.06
Urban forest	0.12
Coastal sage scrub	0.01
Q. agrifolia forest	0.24
Vegetation Communities in State Parks Property Affected – Impact Area & 200-ft Buffer	
Grassland	0.59
Urban forest	0.38
Coastal sage scrub	0.25
Q. agrifolia forest	3.37
Ceanothus shrubland	0.98

Recommendations

Note: The following recommendations apply to fuel modification activities at the project site going forward; they would not apply to activities undertaken as part of approved restoration.

Nesting Birds

Should the fuel modification activities start work within the nesting season, nesting bird surveys will be conducted. No earlier than 14 days prior to ground or vegetation disturbing activities, a qualified biologist shall perform a field survey to determine if active nests of any bird species protected by the state or federal Endangered Species Acts, Migratory Bird Treaty Act, and/or the California Fish and Game Code Sections 3503, 3503.5, or 3511 are present in the disturbance zone or within 100 feet of the disturbance zone for songbirds or within 500 feet of the disturbance zone for raptors and special-status bird species. A second nesting bird survey shall be conducted within three (3) days of the start of ground or vegetation disturbing activities. A letter report summarizing the methods and results of the surveys shall be submitted to the County prior to commencement of project activities. If active nests are identified during pre-fuel modification surveys or discovered after construction has started, they will be protected with spatial buffers. The buffer will be determined on a case-by-case basis by a qualified biologist. If a state or federally protected species is involved, the biologist shall coordinate with the CDFW and/or USFWS to determine an appropriate buffer or need for a take permit. The size of the buffer will be determined based on-site conditions, the species' life history and disturbance tolerance, the nest's distance to construction activities, and the type of construction ongoing in the vicinity of the nest. Buffers will be clearly delineated (e.g., using rope, flagging, signage); or may be defined by natural or manmade features that are deemed sufficient to prohibit access (e.g., tree rows, fences). Buffers will remain in place and will be monitored and maintained regularly during the nesting season or until the biological monitor determines that the young have fledged, or the nest failed. Fuel modification personnel shall be instructed on the sensitivity of the area. Upon completion of the nesting bird surveys and any nest monitoring, a letter report shall be prepared and submitted to the County documenting compliance with this measure.

Marking of fuel modification work area

Prior to fuel modification activities, the designated work areas will be clearly marked, and no vegetation shall be removed outside of this marked area. Project personnel should stay within the designated work areas to the extent feasible. Work areas shall be marked for the entire duration of the project. The outer boundaries of identified fuel modification zones are presented in **Figure 17**.

Biological Monitor

During fuel modification activities, there will be a qualified biological monitor on site to ensure compliance with all recommendations. The biological monitor will ensure the project site is clearly marked, that the fuel modification efforts remain within the pre-defined area, bird nests are avoided, and bird nest buffers are in place prior to clearing. The biological monitor shall also clearly mark (with flagging) any woodrat middens found on the project site and they shall be avoided by the crew during all fuel modification efforts by a buffer of at least 25 feet. No vegetation will be cleared around the woodrat midden.

Sensitive Plant Surveys

Prior to any fuel modification efforts, a qualified biologist or botanist will survey the site for sensitive plant species. Any sensitive plants found on the project site will be clearly marked with flagging and avoided during any construction activities.

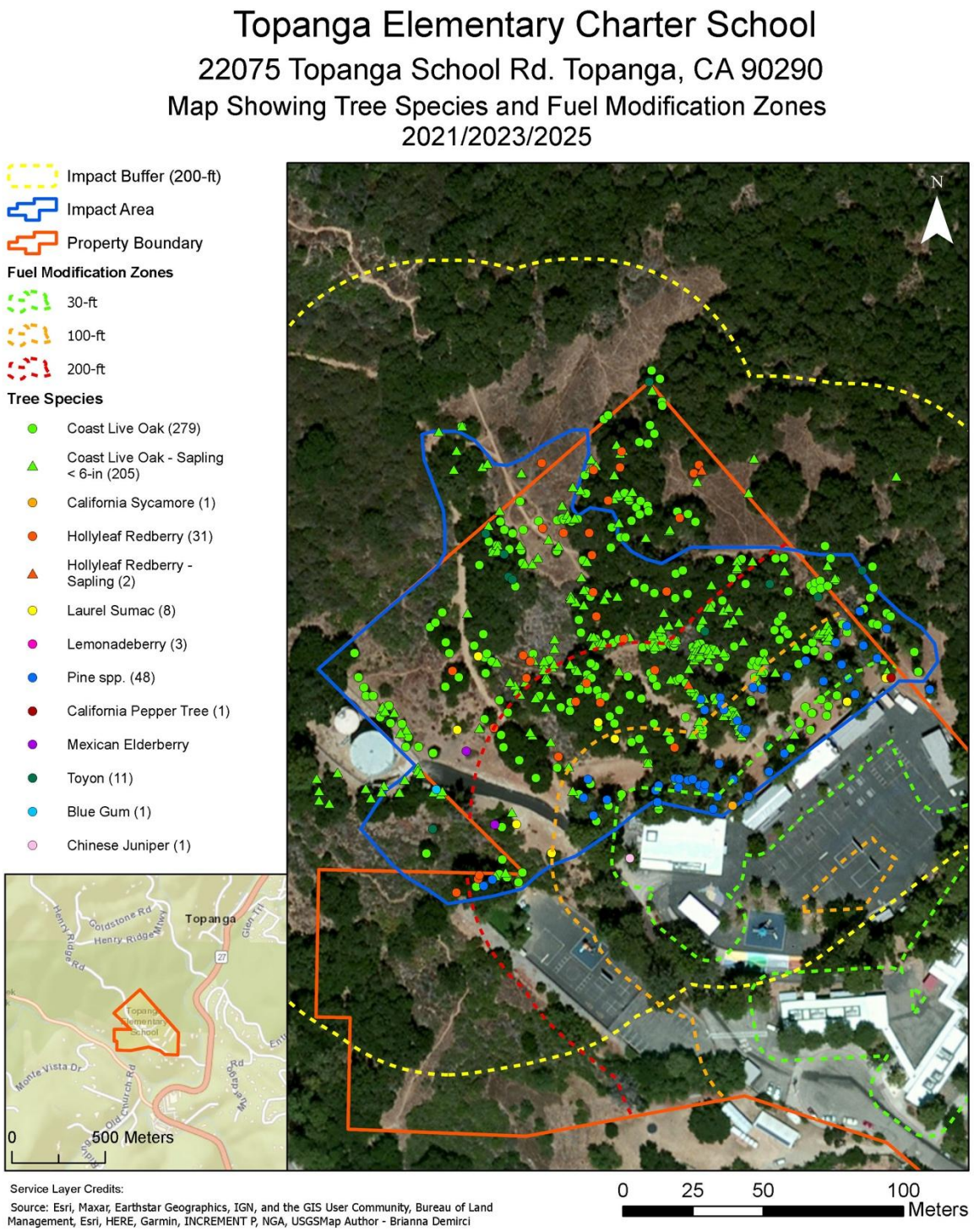

Figure 17. Map showing updated fuel modification zones for the project site (rev. May 2025).

References

AIS and ESRI 2007. USGS-NPS Vegetation mapping program. Santa Monica Mountains National Recreation Area, Photo Interpretation Report (Final). May 23, 2007. Prepared for Santa Monica Mountains NRA, Thousand Oaks, CA, by Aerial Information Systems, Inc. and Environmental Systems Research Institute, Redlands, CA.

Beaudette, D.E. and A.T. O'Geen. 2010. Online Soil Survey. California Soil Resources Lab, Univ. of California, Davis. Available online at: http://casoilresource.lawr.ucdavis.edu/drupal/node/27

California Department of Fish and Wildlife (CDFW). 2014. *BIOS viewer v.5.23.06a*. California Natural Diversity Database. CDFW. Sacramento, CA.

California Department of Fish and Wildlife (CDFW), Natural Diversity Database (CNDDB). 2014a. Special Animals List. September 2014. Periodic publication. 52 pp.

California Department of Fish and Wildlife (CDFW), Natural Diversity Database (CNDDB). 2014b. Special Vascular Plants, Bryophytes, and Lichens List. October 2014. Quarterly publication. 125 pp.

California Department of Fish and Wildlife (CDFW). March 20, 2018. Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities. Available online at: https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=18959&inline

California Department of Fish and Game (CDFG). 2018. Natural Communities List. January 2018. Available at: https://www.wildlife.ca.gov/Data/VegCAMP/Natural-Communities

California Native Plant Society (CNPS). CNPS, Rare Plant Program. 2015. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society, Sacramento, CA. Available at: http://www.rareplants.cnps.org

California, State of. *Fish and Game Code*. Sacramento, CA. http://www.leginfo.ca.gov/.html/fgc_table_of_contents.html

Consortium of California Herbaria. Available online at: *http://ucjeps.berkeley.edu/consortium/*

Donohue, K., R. Gilpin, C. Bassett. 2018. Tree Care for Birds and Other Wildlife.

http://www.nps.gov/samo/learn/management/loader.cfm?csModule=security/getfile&pageID=624275

https://en.wikipedia.org/wiki/Corral_Fire

Prigge, B.A. and A.C. Gibson. 2013. A Naturalist's Flora of the Santa Monica Mountains and Simi Hills, California. Mobile application.

Sawyer, J.O., T. Keeler-Wolf, J.M. Evens. 2008. A Manual of California Vegetation, 2nd Ed. California Native Plant Society Press, Sacramento.

Southern California Topo Maps and Topographic Map Data for Southern California. Electronic database. Available online at: http://www.trails.com/topo.aspx?state=CS

U.S. Fish and Wildlife Service 1997.
National Wetlands Inventory, October 1997. U.S. Fish and Wildlife Service.

Appendices

Appendix A. Site photographs (2021).

Photo 1A – View looking west at the obvious cut through coastal sage scrub habitat in the middle of the photo.

Photo 1B – View looking northwest at the coastal sage scrub on the right and the clearing of vegetation that occurred on the left of the photo.

Photo 1C – View looking east showing the grassland habitat on the project site and Topanga State Park, oak woodland habitat in the background.

Photo 1D – View looking south at the coastal sage scrub on the project site with oak woodland habitat surrounding it to the east, south, and west.

Photo 2A – View to the north showing a cut coast live oak tree in the northern section of the impact area.

Photo 2B – View to the northeast showing cut stumps of coast live oak trees.

Photo 2C – View to the northwest showing the cut coastal sage scrub habitat with the culvert in the foreground.

Photo 2D – View to the south showing cut stumps of coast live oak trees. These are located on Topanga State Park property.

Appendix B. Species Lists

Plant list for Topanga Elementary School
Based on site visits to the property by Courtney McCammon on March 29-31, 2021, and Daniel S. Cooper on 30 March 2023, and on 4 and 13 April 2023. We also include sightings uploaded to iNaturalist (www.inaturalist.org) categorized as "Research Grade" that we feel are credible. Taxa with yellow highlight were *not* observed in April 2023 (but were on the 2021 plant list). They may be present and simply overlooked, mis-identified (in 2021), or were present in 2021 but have since been extirpated/absent.

Species with notes indicate those added in 2023 (Cooper).
This list excludes ornamental/non-naturalized species obviously planted, including pines, peppers, plants in flowerbeds, etc. Asterisks denote non-native/non-naturally-occurring species.

DICOTS

ADOXACEAE

Sambucus nigra ssp. *caerulea* blue elderberry

ANACARDIACEAE

Malosma laurina laurel sumac
Rhus integrifolia lemonade berry
Toxicodendron diversilobum poison-oak

APIACEAE

Sanicula arguta sharptooth sanicle; uncommon within grassland, part of low-growing spring forb community.
Sanicula crassicaulis Pacific sanicle
**Torilis nodosa* hedge parsley; weed found throughout, esp. in oak woodland.

APOCYNACEAE

Asclepias fascicularis narrowleaf milkweed; photographed July 2020: https://www.inaturalist.org/observations/54948878
**Vinca major* greater periwinkle

ASTERACEAE

Artemisia californica California sagebrush
Artemisia douglasiana California mugwort
Baccharis pilularis coyotebush
**Bidens pilosa* beggar-ticks; single plant at trailside.
**Carduus pynocephalus* Italian thistle; abundant weed throughout, esp. along trail edges.

**Centaurea melitensis* tocalote
**Centaurea solstitialis* yellow star thistle
**Dimorphotheca sinuata* Cape marigold; single plant
**Erigeron bonariensis* flax-leaved horseweed
Erigeron foliosus leafy fleabane; common perennial in grassy openings.
Hazardia squarrosa square-leaf goldenbush; common at edge of grassland and coastal scrub, often associated with *Stipa pulchra*. Apparently misidentified (2021) as *Isocoma menziesii*.
**Hedypnois rhagadioloides* cretanweed; rare; fuel modification zone.
**Hypochaeris glabra* annual cat's-ear
Isocoma menziesii coast goldenbush
Malacothrix saxatilis var. *tenuifolia* cliff-aster
Pseudognaphalium biolettii two-toned everlasting; uncommon in oak woodland understory.
Pseudognaphalium californicum California everlasting
Pseudognaphalium microcephalum Wright's cudweed
Rafinesquia californica California chicory; uncommon in coastal scrub.
**Silybum marianum* milk thistle; uncommon weed in oak woodland understory.
Solidago velutina ssp. *californica* California goldenrod; scattered patches throughout; variation in leaf appearance suggests several stands may have been introduced deliberately as part of "restoration".
**Sonchus oleraceus* common sow-thistle
Uropappus lindleyi silverpuffs
Venegasia carpesioides canyon sunflower

BORAGINACEAE

Amsinckia menziesii common fiddleneck
Eucrypta chrysanthemifolia common eucrypta
Phacelia cicutaria caterpillar phacelia; common in coastal sage scrub.

Plagiobothrys tenellus popcorn flower

BRASSICACEAE

**Hirschfeldia incana* Mediterranean mustard
Lepidium nitidum shining pepper grass
**Lepidium didymum* lesser swinecress; uncommon weed.
**Sisymbrium officinale* hedge mustard; uncommon, along trails.

CAPRIFOLIACEAE

Lonicera subspicata chaparral honeysuckle
Symphoricarpos mollis snowberry; scarce in understory of oak woodland.

CARYOPHYLLACEAE

**Silene gallica* windmill pink

**Stellaria media* chickweed; common throughout.

CONVOLVULACEAE

Calystegia macrostegia coast morning-glory

CUCURBITACEAE

Marah macrocarpa wild cucumber

EUPHORBIACEAE

**Euphorbia terracina* Geraldton carnation weed

FABACEAE

Acmispon americanus Spanish clover; fairly common in grassy/disturbed sites, including understory of pine grove.

Acmispon glaber deerweed

Lathyrus vestitus canyon sweet pea

Lupinus albifrons silver bush lupine

Lupinus bicolor miniature lupine

Lupinus excubitus grape lupine

Lupinus longifolius longleaf bush lupine; several plants emerging in ruderal area of fuel modification zone between school buildings and water tanks, and a mature plant along Henry Ridge Mtwy. Apparently misidentified 2021 as both *L. albifrons* and *L. excubitus*.

Lupinus succulentus arroyo lupine; common along road edges in full sun.

**Medicago polymorpha* bur clover

**Spartium junceum* Spanish broom

Trifolium ciliolatum tree clover; small patch adjacent to amphitheater.

**Vicia sativa* common vetch; common in ruderal/grassy areas of fuel modification zone, and also sparingly within mapped areas of grassland.

FAGACEAE

Quercus agrifolia coast live oak

Quercus berberidifolia scrub oak

Quercus lobata valley oak

GERANIACEAE

**Erodium* sp. filaree

Geranium carolinianum Carolina geranium; fairly common at chaparral edge, mesic sites.

**Geranium dissectum/molle* geranium sp.; fairly common weed, mainly trailside.

GROSSULARIACEAE

Ribes speciosum fuchsiaflower gooseberry

LAMIACEAE

**Marrubium vulgare* horehound
Salvia apiana white sage
Salvia leucophylla purple sage
Salvia mellifera black sage
Salvia spathacea hummingbird sage
Stachys rigida rough hedgenettle; uncommon perennial, oak woodland.

LAURACEAE

Umbellularia californica California bay

MALVACEAE

Malacothamnus fasciculatus chaparral bush mallow

MONTIACEAE

Claytonia perfoliata miner's lettuce
Calandrinia menziesii red maids; a few emerging in forb community of upper grassland area.

NYCTAGINACEAE

Mirabilis laevis wishbone bush

OXALIDACEAE

Oxalis californica California wood sorrel
**Oxalis pes-caprae* Bermuda buttercup

PHRYMACEAE

Mimulus longiflorus sticky monkey-flower

PLANTAGINACEAE

Castilleja exserta purple owl's-clover; small patches in forb community of upper grassland.
Collinsia heterophylla purple Chinese houses; single patch in forb community of upper grassland.
Cordylanthus rigidus rigid bird's-beak; small area within coastal sage scrub, along cleared path (est. 2020), where likely encouraged by disturbance (favors trail edges and other open microhabitats).
Keckiella cordifolia heartleaf penstemon; scattered around site.

**Plantago lanceolata* lanceleaf plantain; single individual, fuel modification zone.

PLATANACEAE

Platanus racemosa California sycamore

POLYGALACEAE

Polygala cornuta var. *fishiae* Fish's milkwort; scarce understory shrub, oak woodland. CNPS 4.3.

POLYGONACEAE

Eriogonum fasciculatum California buckwheat

PRIMULACEAE

**Anagallis arvensis* scarlet pimpernel; scattered throughout.

RANUNCULACEAE

Ranunculus californicus California buttercup

RHAMNACEAE

Ceanothus spinosus greenbark ceanothus
Rhamnus ilicifolia holly-leaf redberry

ROSACEAE

Adenostoma fasciculatum chamise
Cercocarpus betuloides birch-leaf mountain-mahogany
Drymocallis glandulosa sticky cinquefoil; uncommon in understory of oak woodland.
Heteromeles arbutifolia toyon
Prunus ilicifolia holly-leaf cherry
Rubus ursinus California blackberry

RUBIACEAE

Galium angustifolium narrow-leaved bedstraw; uncommon shrub.
Galium aparine cleavers; patches throughout, particularly in ruderal areas not occupied by *G. nuttallii*.
Galium nuttallii climbing bedstraw

SOLANACEAE

Solanum xanti purple nightshade

URTICACEAE

Hesperocnide tenella annual stinging nettle

VERBENACEAE

Verbena lasiostachys western vervain; scattered stands, but also reported as deliberately introduced to the site (see above).

MONOCOTS

AGAVACEAE

Hesperoyucca whipplei chaparral yucca

IRIDACEAE

Sisyrinchium bellum blue eyed grass

LILIACEAE (expanded)

Calochortus catalinae Catalina mariposa lily
Chlorogalum pomeridianum soap lily
Dichelostemma pulchellum blue dicks

POACEAE

**Avena* sp. wild oat
**Bromus diandrus* ripgut brome
**Bromus hordeaceus* soft chess; uncommon, in grassland.
**Bromus madritensis* foxtail brome
**Cynodon dactylon* Bermuda grass
**Ehrharta longiflora* long-flowered veldtgrass
**Festuca myuros* rattail fescue; locally common in grassland.
**Hordeum* sp. foxtail
Leymus condensatus giant wildrye
Melica imperfecta chaparral melic
Stipa lepida foothill needlegrass; at least one patch, in eroding area of coastal sage scrub.
**Stipa miliacea* smilo grass
Stipa pulchra purple needle grass

THEMIDACEAE

Bloomeria crocea common goldenstar

Wildlife list (non-avian)

CLASS INSECTA – INSECTS

Nymphalidae – Brush-footed Butterflies

Euphydryas chalcedona, Variable checkerspot

Vanessa cardui, Painted lady

Papilionidae - Parnassians and Swallowtails

Papilio rutulus, Western tiger swallowtail *Papilio eurymedon*

Pale swallowtail

Pieridae – Whites and Sulphurs

Anthocharis sara, Sara orange-tip

Pieris rapae, Cabbage white

Satyridae – Satyrs

Coenonympha tuilla california, California ringlet

CLASS MAMMALIA – MAMMALS

Canidae – Dogs

Canis latrans, Coyote, tracks and scat

Cervidae – Deer

Odocoileus hemionus californicus, California mule deer, tracks and scat

Felidae – Cats

Lynx rufus, Bobcat, tracks and scat

Leporidae – Hares and rabbits

Sylvilagus audubonii, desert cottontail

Sciuridae – Squirrels

Spermophilus beecheyi, California ground squirrel

CLASS REPTILIA – REPTILES

Phrynosomatidae – North American Spiny Lizards

Sceloporus occidentalis, Western fence lizard

Uta stansburiana, Side-blotched lizard

Viperidae – Vipers

Crotalus oreganus helleri, southern pacific rattlesnake

Bird list for Topanga Elementary School

Based on site visits to the property by Courtney McCammon on March 29 – 31, 2021.

Cooper's Hawk (Accipiter cooperii)
Red-shouldered Hawk (Buteo lineatus)
Hutton's Vireo (Vireo huttoni)
Bushtit (Psaltriparus minimus)
Red-tailed hawk (Buteo jamaicensis)
Acorn woodpecker (Melanerpes formicivorus)
Anna's hummingbird (Calypte anna)
Northern mockingbird (Mimus polyglottos)
Hooded Oriole (Icterus cucullatus)
Northern rough-winged swallow (Stelgidopteryx serripennis)
White-breasted nuthatch (Sitta carolinensis)
Dark-eyed junco (Junco hyemalis)
Mourning Dove (Zenaida macroura)
House finch (Haemorhous mexicanus)
Black phoebe (Sayornis nigricans)
Lilac-crowned parrot (Amazona finschi)
Golden-crowned sparrow (Zonotrichia atricapilla)
California towhee (Melozone crissalis)
Spotted Towhee (Pipilo maculatus)
Yellow-rumped Warbler (Audubon's) (Setophaga coronata auduboni)
Black-headed Grosbeak (Pheucticus melanocephalus)
California Scrub-Jay (Aphelocoma californica)
Common Raven (Corvus corax)
Oak Titmouse (Baeolophus inornatus)
Bewick's Wren (Thryomanes bewickii)
Wrentit (Chamaea fasciata)
California Thrasher (Toxostoma redivivum)
Western bluebird (Sialia mexicana)
Blue-gray gnatcatcher (Polioptila caerulea)
Lesser goldfinch (Spinus psaltria)
Eurasian collared-dove (Streptopelia decaocto)
House wren (Troglodytes aedon)
Allen's hummingbird (Selasphorus sasin)
Turkey vulture (Cathartes aura)
Western kingbird (Tyrannus verticalis)

Appendix C. Curricula vitae

CV for Courtney McCammon

EDUCATION

B.S., Biology,
Loyola Marymount University, 2012

M.S., Urban Ecology,
Loyola Marymount University, 2014

CERTIFICATIONS/ REGISTRATIONS

Scientific Collector's Permit #SC-13977 (exp. 1/22/22)

Certified Wildlife Tracker, CyberTracker, 2016 & 2017

CNDDB & BIOS training, CDFW, Aug, 2017

Introductory GIS class, Pace University, Fall 2017

Southwest Desert Bat Workshop, Oct. 2017

San Joaquin Kit Fox Workshop, Oct. 2017

Desert Tortoise Introductory Training, Nov. 2017

Southwestern Willow Flycatcher Workshop, May 2018

Jurisdictional Delineation Training, October 2019

EXPERIENCE

CJ Biomonitoring LLC (Nov 2017 – present)

City of Malibu (June 2019 – present)

Compliance Biology (Nov 2017 – present)

Woodstar Biological (Nov 2017 – present)

Courtney McCammon, B.S., M.S

WILDLIFE BIOLOGIST/OWNER – CJ BIOMONITORING, LLC

DETAILED PROJECT EXPERIENCE

City of Santa Clarita – Multi-Use Trail and Bridge Project, (October 2020)
Ms. McCammon conducted a biological assessment including a plant inventory and jurisdictional delineation for a multi-use trail and bridge construction project. She wrote a biological assessment report and jurisdictional delineation report for CEQA analysis.

City of Calabasas – Las Virgenes Creek Restoration Project (2018 – 2019)
Ms. McCammon was approved by the USFWS to monitor for California Red-legged Frog during a creek restoration project during the breeding season. Project activities included surveying for red-legged frogs and eggs in a creek known to have adults frogs.

Friends of Griffith Park – Raptor Survey, Los Angeles, CA (2017 – 2020)
Ms. McCammon has co-managed the citizen science Griffith Park Nesting Raptor Survey for four years. Courtney made the volunteer training modules and performed the training. She co-managed all aspects of the survey including data management, volunteer management, and report writing. The results of the survey were reported and sent to the City of Los Angeles Recreation and Parks Department. Several presentations were given at the Los Angeles Zoo and the Los Angeles Public Library.

Hollywood Bowl – Mammal Survey at Hollywood Bowl, Los Angeles, CA (2015)
Ms. McCammon completed a mammal survey for the Hollywood Bowl utilizing camera traps placed on the property. She was involved in all aspects including budget costs, maintaining data and equipment, and writing a final report. The survey found coyote, bobcat, and mule deer use of the site on a frequent basis.

PROJECT EXPERIENCE

SUBCATEGORY FOR PROJECTS - GENERAL BIOLOGICAL ASSESSMENTS

- City of Malibu – Assistant Contract Biologist (June 2020 - present)
  Acting assistant to the Biologist for the City of Malibu conducting on-site inspections, reviewing permit applications, and holding ERB meetings.
- Biological Assessment and CAGN Surveys – Private Client (Aug – present)
  Conducted a biological assessment and protocol-level coastal California gnatcatcher surveys for a private client in the Santa Clarita area.
- On-site Biological Monitoring – City of Laguna Beach (May 2020 – present)
  Acted as an on-site biological monitor during the demolition, grading, and construction of a new pedestrian bridge over the Laguna Canyon Creek.
- Vasquez Biological Assessment – Watershed Council Authority (May – Oct 2020)
  Sub-contracted for Cooper Ecological, Inc performing bird, vegetation, and camera trapping surveys on an acquired parcel in the San Gabriel foothills.
- Restoration Plans – Various Private Residents (2018 - present)
  Prepare detailed habitat restoration plans for various clients within LA County Regional Planning jurisdiction meeting all requirements including SMM plant species, irrigation, a monitoring plan, etc.

CV for Rosi Dagit

RESOURCE CONSERVATION DISTRICT OF THE SANTA MONICA MOUNTAINS

818.597.8627
818.597.8630
info@rcdsmm.org

4505 Las Virgenes Road, Suite 215
Calabasas, California 91302

BOARD OF DIRECTORS

Richard C. Brody
President

Laurie Price
Vice President

Nancy Helsley
Treasurer

Beth Burnam
Director

Riki Clark
Director

Rosi Dagit
Principal Conservation Biologist
Certified Arborist WS-1084
September 2023

QUALIFICATIONS

Certified Arborist #WE-1084A (1991- present)

Principal Conservation Biologist (1989 - present)

Coordinator, Los Angeles County Oak Woodlands Habitat Conservation Strategic Alliance (2008- 2011)

Los Angeles County Environmental Review Board (2003- 2022)

City Arborist, City of Calabasas (1991 - 1998)

Arborist/Consultant, City of Calabasas Tree Advisory Board (1996- 2002)

Technical Advisor, CA Wildlife/Oak Foundation (1993 - present)

EXPERIENCE

Since 1988, Ms. Dagit has been involved in various aspects of ecology and resource management in the Santa Monica Mountains. Her interest in woodlands as a major influence on watershed stability led to an in-depth study of the effectiveness of oak protection ordinances in preserving oak woodlands in LA County. From here, she became interested in the oak transplantation process and conducted a long-term study of oak transplant survival that looked at physiological responses of the trees, in addition to the usual visual assessments. Between 2008 and 2011, Ms. Dagit coordinated the development and adoption by the Los Angeles County Board of Supervisors of the *Los Angeles County Oak Woodlands Conservation Management Plan*.

Her role as a Principal Conservation Biologist and Certified Arborist provides opportunities to work with a variety of local, state and federal park agencies, environmental non-profits and landowners to protect and preserve trees and woodlands. She coordinated several studies of the impacts of invasive shot hole borers, drought and development on oak woodlands, and was lead author on the *Early Detection Rapid Response Plan* (2019) and *Priority Planting Plan for the*

Santa Monica Mountains (2019). As a member of the Los Angeles County Environmental Review Board (2003-2022), she had the opportunity to provide input throughout the planning process regarding tree and watershed protection.

Ms. Dagit has produced numerous oak tree reports for both public and private construction projects. She is an active member of the California Native Plant Society, the International Society of Arboriculture, numerous docent groups and is a Technical Advisor for the California Oak Foundation. In addition to her technical work, Rosi is the author of a children's book, GRANDMOTHER OAK (Roberts Rineheart Press 1996), which provides funding for planting oaks in Topanga State Park, Topanga, CA. She has managed numerous grants to restore oak woodlands and riparian areas throughout the Santa Monica Mountains since 1993 resulting in growth of hundreds of native trees.

CERTIFICATION
Certified Arborist #1084 - International Society of Arboriculture, Western Chapter (1990-present)

Completed the American Society of Consulting Arborists Academy, February 2005.

CV for Daniel S. Cooper

Daniel Steven Cooper, Ph.D.
255 Satinwood Ave.
Oak Park, CA 91377
(323) 397-3562 / dan@cooperecological.com

EDUCATION

University of California, Los Angeles, Ph.D. 2020 (Biology)
University of California, Riverside, M.Sc. 1999 (Biogeography)
Harvard University, A.B. 1995 (Biology)

EXPERIENCE

Resource Conservation District – Santa Monica Mountains. Topanga, CA. 2022 - present
Senior Conservation Biologist. Continuing and developing the long-term research program of the RCD, focused on sensitive species and habitat protection in the Los Angeles area.

Cooper Ecological Monitoring, Inc. Los Angeles, CA. 2005 - present
President. An independent ecological consulting firm specializing in land use, wildlife and biodiversity issues, we provide expertise in study design & analysis, ecological assessment, and management recommendations.

- ∀ Manage projects in the $1,000 - $100,000 range for up to 20 clients per year in the Los Angeles area.
- ∀ Past clients include municipalities (Los Angeles, Torrance), non-profit groups (The Nature Conservancy, Trust for Public Land), agencies (U.S. Fish and Wildlife Service, California Coastal Conservancy), and various private firms and individuals.
- ∀ Hire and supervise up to five subcontractors per year.

National Audubon Society Los Angeles, CA. 2001 - 2005
Director of Bird Conservation, Audubon California.
Member of senior management team for Audubon California, worked with national staff and partner organizations to shape bird conservation agenda in California; organized donor cultivation activities, and assisted development staff in grant writing; wrote and published a landmark reference guide (Important Bird Areas of California; findings later incorporated into state legislation); helped draft Audubon California's strategic plan; visited and evaluated sites for new Audubon nature centers; wrote staff training manuals for existing centers and programs.

Biologist, Audubon Center at Debs Park. 1999 - 2001
Member of core team charged with developing an urban nature education center at a large city park in urban Los Angeles (Debs Park); drafted and implemented habitat management plan; organized neighborhood focus groups for parents and teachers in northeast Los Angeles to assess public perception of nature and conservation organizations; initiated baseline natural history research in surrounding region for development of educational materials and programs for new Audubon Center.

APPOINTMENTS/BOARDS

Research Associate, Dept. of Ornithology, Natural History Museum of Los Angeles County, 2020 – present
IUCN World Protected Areas, 2017 – present
Associate Editor, Western Birds 2014 – present
Oak Park – Park and Recreation Planning Committee (Elected member, 2020-present)
Southern California Academy of Sciences 2013 – 2015
SEATAC (Los Angeles Co. Dept. of Regional Planning) 2009 – 2013
Los Angeles Dept. of Recreation and Parks - Griffith Park Postfire Recovery Team, 2007 – 2008
California Dept. of Water Resources - Salton Sea Restoration Advisory Committee 2003 – 2005
Central Valley Habitat Joint Venture – Management Board 2002 – 2005
California Partners-in-Flight - Executive Steering Committee 2003 – 2005
Los Angeles and San Gabriel Rivers and Mountains Conservancy - Technical Advisory Board 2002 – 2005
Friends of the Los Angeles River - Technical Advisory Board 1989 – 2001