

**BIOLOGICAL RESOURCES ASSESSMENT, BOTANICAL SURVEY, OAK TREE SURVEY,
AND PROTOCOL COASTAL CALIFORNIA GNATCATCHER SURVEY
347 NORTH HIGHLAND PLACE
CITY OF MONROVIA, LOS ANGELES COUNTY, CALIFORNIA**

±7.8 Acre Property, ±7.8 Acres Surveyed

AIN 8503-013-004, City of Monrovia,
Township 1 North, Range 11 West, Sections 22 and 23,
USGS Mount Wilson 7.5' Topographic Quadrangle

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Report Summary:

The proposed Project is a small residential development in the City of Monrovia. There are no riparian or other sensitive vegetation communities present. Native oak trees are present and some will be impacted. Braunton's milk-vetch was not observed. No listed or special status plant species were observed, but a few have potential to occur outside of the Project impact area. California gnatcatcher was not detected during protocol surveys. No listed wildlife species were observed but a few have potential to occur, mainly outside of the Project impact area. Suitable habitat for nesting birds and special status roosting bats is present. No bat roosts were detected during the surveys. State jurisdictional waters are present, but no state wetlands or federal waters/wetlands were identified. The Project will impact 0.28 acre of state waters. The site is adjacent to conserved open space but is not located within a wildlife corridor.

Surveys Conducted By: Guy Bruyey, Leslie Irish

Surveys Conducted: July 2019, March to June 2021

Report Date: July 2021, revised December 2021, March 2023, May 2024, & October 2024

[https://d.docs.live.net/8a5f802dce599082/Documents/Bowden Development/Bio Report/October 2024 Update/B&DIX-19-R711.BA1.BS2.TS1.CAGN1.RTC4-2\(clean2\).doc](https://d.docs.live.net/8a5f802dce599082/Documents/Bowden%20Development/Bio%20Report/October%2024%20Update/B&DIX-19-R711.BA1.BS2.TS1.CAGN1.RTC4-2(clean2).doc)

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MANAGEMENT SUMMARY

L&L Environmental, Inc. (L&L) conducted biological surveys on a ± 7.8 -acre proposed residential development site in the City of Monrovia in Los Angeles County, California.

The purpose of this study was to (1) characterize the site's vegetation (2) identify the plant and wildlife species present or potentially occurring on the site, including any potential for special status species to occur and to (3) evaluate the proposed actions (construction of three residential units) in the context of the applicable local, state and federal planning regulations and policies.

This report describes the methods, observations, conclusions and recommendations and incorporates comments from the proponent, the city of Monrovia and the California Department of Fish and Wildlife.

To support this biological assessment a focused botanical survey, a protocol breeding season survey for coastal California gnatcatcher (*Poliophtila californica californica*), vegetation community mapping, a mountain lion (*Puma concolor*) habitat assessment, an oak tree survey and a jurisdictional delineation were conducted.

Proposed project related impacts include the removal of an existing single-family home, various outbuildings or structures, and a small retention basin in the south-central portion of the site. As well as the construction of three (3) pads for new residential units, a common driveway, a new flood control basin and a new access driveway.

The site is located in the southern foothills of the San Gabriel Mountains and consists mainly of steep slopes with the existing and proposed development in the canyon bottom. Conserved open space is located to the north of the site. Native vegetation present on the site is a mix of coastal scrub and chaparral vegetation with scattered oaks and oak woodland. The northern portion of the site burned in the Madison Fire in 2013. No riparian habitat and no sensitive vegetation communities are present on the site.

No state or federally listed plant species were observed on the site. Braunton's milk-vetch (*Astragalus brauntonii*), a federally listed endangered species, was not observed but has a moderate potential to occur outside of the Project impact area.

Two (2) special status plant species were observed on the site, San Gabriel oak (*Quercus durata* var. *gabrielensis*) and Southern California black walnut (*Juglans californica*). Both have a California Rare Plant Rank of 4.2 (limited distribution with moderate degree and immediacy of threat). San Gabriel oak was observed on the northern portion of the parcel outside the Project impact area and may also occur on the southern extension. One southern California black

walnut tree is present along the existing driveway and will be impacted. Impacts to this species would be less than significant.

The oak inventory found 23 coast live oak trees (*Quercus agrifolia*) within or adjacent to the Project impact area and additional oak trees are present along steep hillsides outside of the impact area. Impacts to oak trees are regulated under the Madison Specific Plan and mitigation is required. An additional 21 non-native ornamental trees are present in or adjacent to the impact area.

Habitat for the Coastal California gnatcatcher, a federally listed threatened species is present however, no California gnatcatchers were detected during the protocol breeding season survey. No other state and/or federally listed wildlife species were observed.

Habitat for the Crotch bumble bee (*Bombus crotchii*), a candidate for state listing as endangered is present within the site but not within the proposed project impact area. This species was not observed.

Habitat for the Mountain lion (*Puma concolor*), a candidate for state listing is present within and adjacent to the site. This species was not observed during any of the field surveys and denning sites are not present. Three (3) occurrences of Mountain Lion within Monrovia have been reported (iNaturalist, 2020, & 2021) and suitable moment and foraging habitat is present within the site.

Eight (8) special status wildlife species mostly birds have been observed on the site during field surveys including: Allen's hummingbird (USFWS Bird of Conservation Concern), Cooper's hawk (CDFW Watch List species), Costa's hummingbird (CDFW Special Animal, USFWS Bird of Conservation Concern), Northern harrier (fly over) (CDFW Species of Special Concern, USFWS Bird of Conservation Concern), Nuttall's woodpecker; (USFWS Bird of Conservation Concern), Oak titmouse; (USFWS Bird of Conservation Concern), Wrentit (USFWS Bird of Conservation Concern), Yellow warbler (CDFW Species of Special Concern).

Fourteen (14) special status wildlife species have not been observed but have potential to occur on the site including: San Gabriel chestnut snail, Coast Range newt, Southern California legless lizard, California glossy snake, Coastal whiptail, Coast horned lizard. Southern grasshopper mouse though most of the terrestrial wildlife species would be more likely to occur outside of the impact area.

Habitat for raptors protected by the California Fish and Game Code is present on and adjacent to the site as well as habitat for other nesting birds. Habitat for five (5) other special status birds is present including Black swift (foraging), Lewis's woodpecker (foraging and nesting), Rufous hummingbird (foraging), Lawrence's goldfinch (foraging and nesting), though these were not observed.

Habitat for bats is present on the site and while none were observed they may forage throughout the site and may roost in trees or structures within the impact area including: Western mastiff bat (foraging and roosting), Western red bat (foraging and roosting), Hoary bat (foraging and roosting),

The Project site is bordered on the north and east by undeveloped land, some of which is conserved open space (Hillside Wilderness Preserve) with additional conserved open space to the north (Arcadia Wilderness Park, Hillside Wilderness Preserve, Monrovia Canyon Park, and Angeles National Forest). However, the site does not provide linkage between two habitat blocks and is not within a wildlife corridor.

A jurisdictional delineation was conducted by L&L in 2019 and updated in 2024. A separate jurisdictional delineation report has been prepared. The updated delineation found one ephemeral drainage and 10 tributaries on the Project site and one additional ephemeral drainage with three tributaries on the southern extension. Jurisdictional areas on the site consist of 0.57 acre of ephemeral California Department of Fish and Wildlife (CDFW) streambeds and Regional Water Quality Control Board (RWQCB) state waters (not including the drainage on the southern extension). No areas onsite qualify as state wetlands, federal wetlands, or federal waters. There is no riparian vegetation on the site and no vernal pools.

Planned impacts to jurisdictional areas are 0.28 acre of CDFW streambeds and RWQCB state waters. No impacts are planned to the drainage on the southern extension. Permitting through CDFW and RWQCB will be required for impacts to state waters.

1.0) INTRODUCTION

This report was prepared by L&L Environmental, Inc. (L&L) for Bowden Development, Inc. It describes the results of biological surveys (including coastal California gnatcatcher surveys, botanical surveys, an oak tree inventory, and vegetation community mapping) conducted on a proposed residential development site located within the City of Monrovia in Los Angeles County, California. The Project site consists of Assessor's Identification Number (AIN) 8503-013-004 with a total area of ± 7.8 acres.

The assessment consisted of (1) a records search and literature review, conducted to determine the species of concern in the project area and proximity to documented special status species occurrences, (2) field surveys to identify plants and wildlife on the site and presence/absence of habitat for species of concern (coastal California gnatcatcher and rare plants), (3) mapping of vegetation communities, (4) an inventory of oak trees, (5) focused surveys for coastal California gnatcatcher and rare plants (6) a habitat assessment for mountain lion, (7) post field survey analysis of the southern annexation.

1.1) Project Description

The site is currently developed as a single-family home and contains a residence, a guest house, a shed, paved driveway, walkways, retaining walls, and ornamental landscaping all confined to the lower elevations on the southern portion of the parcel. A low dam and retention basin is also present near the west end of the developed area. These are surrounded by steep hillsides cut with natural drainages within native habitat.

The Project proposes to remove the existing improvements (residence, outbuildings, etc.) and in their place construct three (3) residential units with attached garages, retaining walls, a common driveway, and supporting utilities, a $\pm 52,466$ -square-foot flood control basin (Highland Desilting Basin), and access drive (see Conceptual Grading Plan in Appendix I).

1.2) Location

The site is located in the City of Monrovia (Figure 1). Specifically, the site is located at 347 Highland Place, which is north of West Hillcrest Boulevard and south of Scenic Drive. The site is situated within a portion of Sections 22 and 23, Township 1 North, Range 11 West, which is found within the USGS Mount Wilson 7.5' series quadrangle map (Figure 2).

The site is generally bounded as follows: to the west by undeveloped land with residential areas beyond; to the east by residential areas; to the north by conserved open space (Hillside Wilderness Preserve); and to the south by residential areas (Figure 3).

1.3) Vegetation and Setting

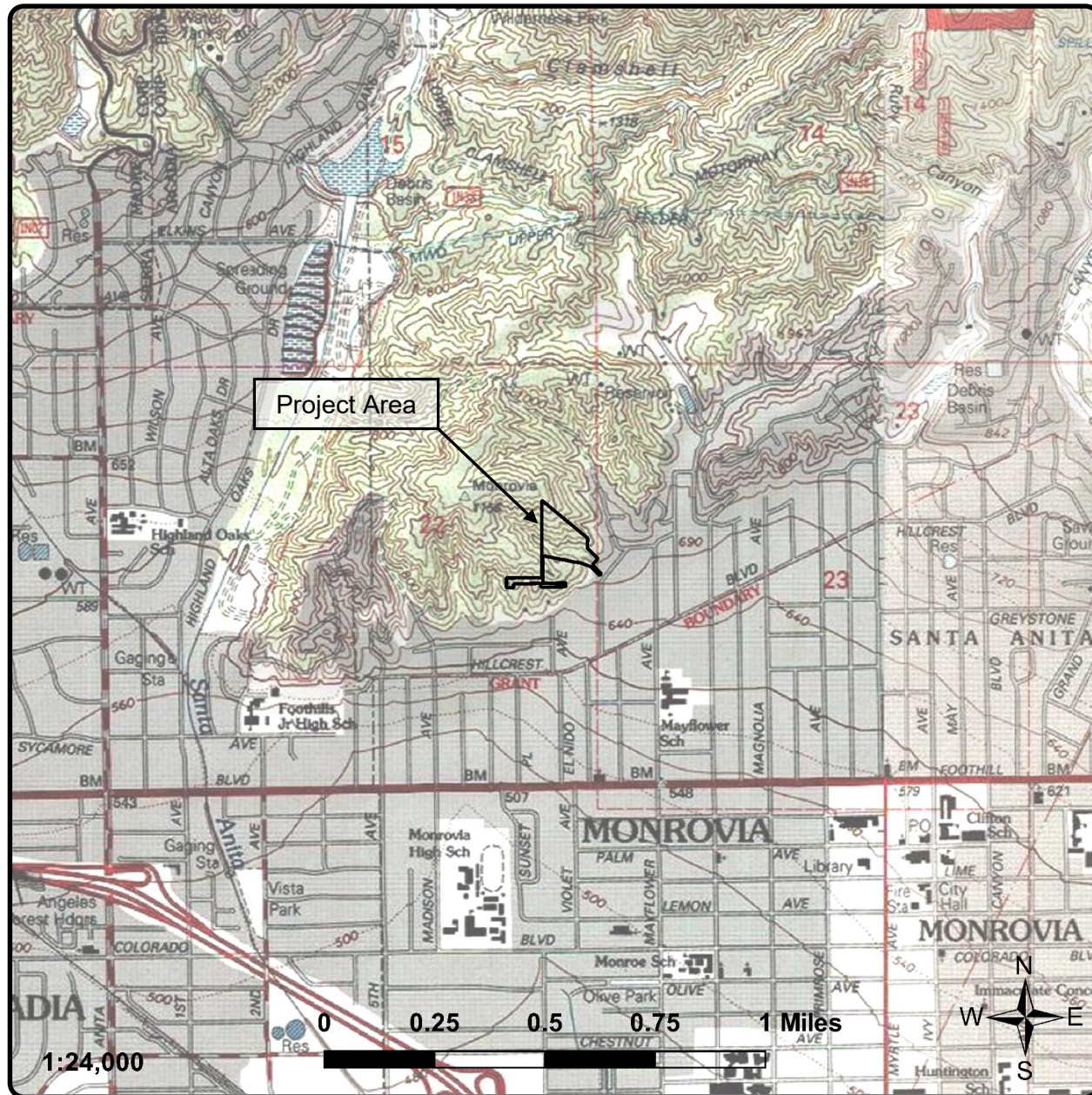
The site is located within the southern boundary of the foothills of the San Gabriel Mountains. Most of the site consists of steep south and north-facing slopes, with ridgelines present along portions of the southern and northern site boundaries. Many slopes onsite are inaccessible due to steep terrain and loose soil. The canyon bottom within the south-central portion of the site is mostly disturbed in association with an existing residence and residential uses (outbuildings, landscaping, hardscape, etc.).

Although the developed portion of the site has been disturbance ongoing disturbances typical of an occupied residence including clearing, parking, the introduction of landscape plants, invasive non-native grasses, and other exotic annuals, away from the developed area site remains relatively undisturbed. Disturbances that have occurred include a brush fire (Madison Fire) which impacted a large portion of the property in April 2013 and firefighting/fuel modification activities.

The relatively undisturbed hillsides and ridgelines of the site are inhabited by a mixture of chaparral and coastal scrub plants. Coast live oak woodland is present on the lower canyon slopes within the southern portions of the site. Non-native grasses dominate the oak understory and other open areas.

1.4) Soils and Topography

Elevations on the site range between 687 feet (209 meters) above mean sea level (AMSL) at the southeast corner and 1,034 feet (315 meters) AMSL at the staked northwest corner. The canyon slopes are very steep. Soils on most of the site are mapped as Trigo family, granitic substratum, 60 to 90 percent slopes, while the southeastern portion is mapped as Urban land-Palmview-Tujunga, gravelly complex, 2 to 9 percent slopes (NRCS 2021) (Figure 4).



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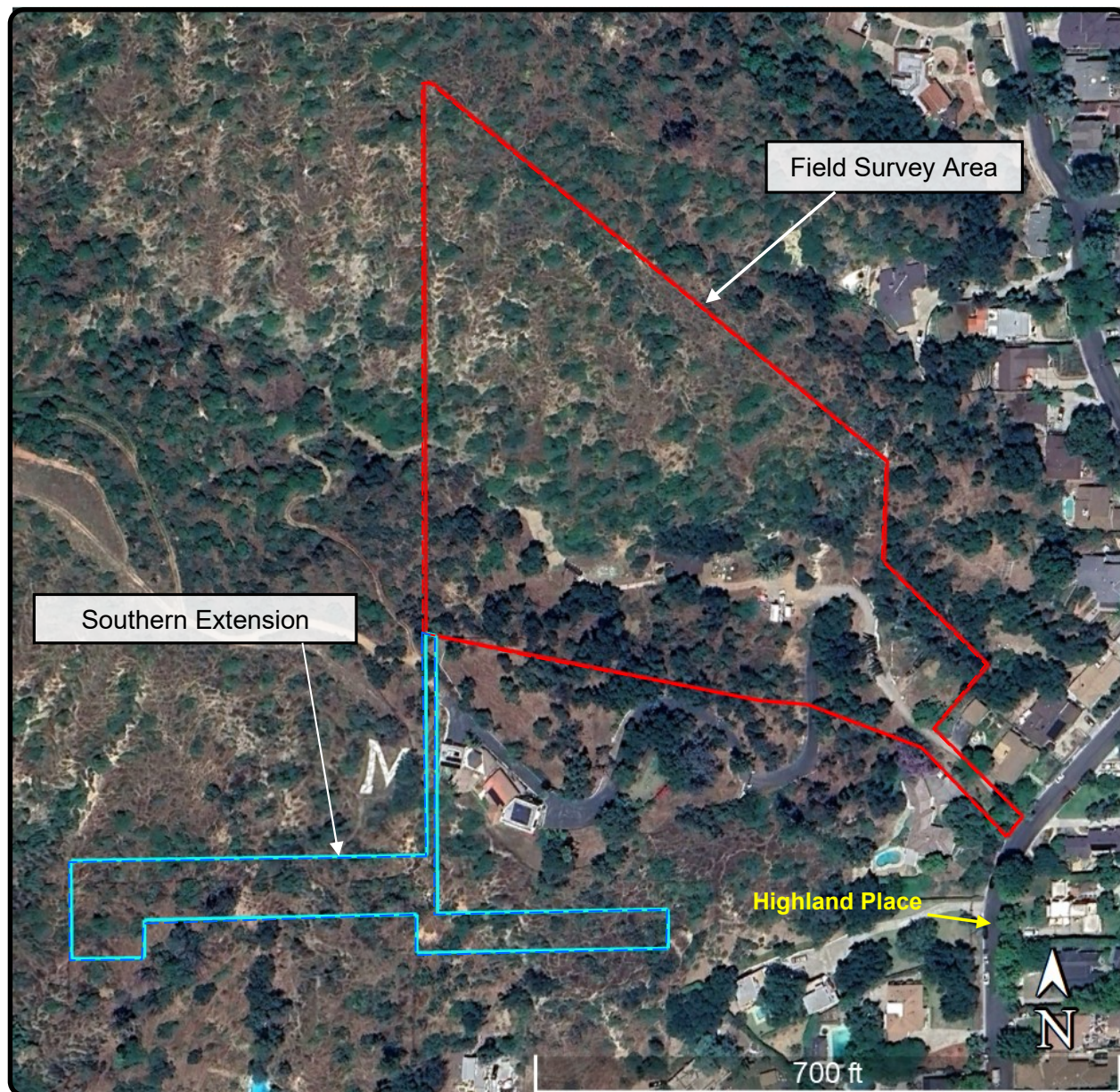
BDIX-19-711

Figure 2

Project Location Map

(USGS Mount Wilson [1994] quadrangle,
Sections 22 & 23, Township 1 North, Range 11 West)

AIN 850-301-3004, City of Monrovia
County of Los Angeles, California



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BIOLOGICAL AND CULTURAL
INVESTIGATIONS AND MONITORING

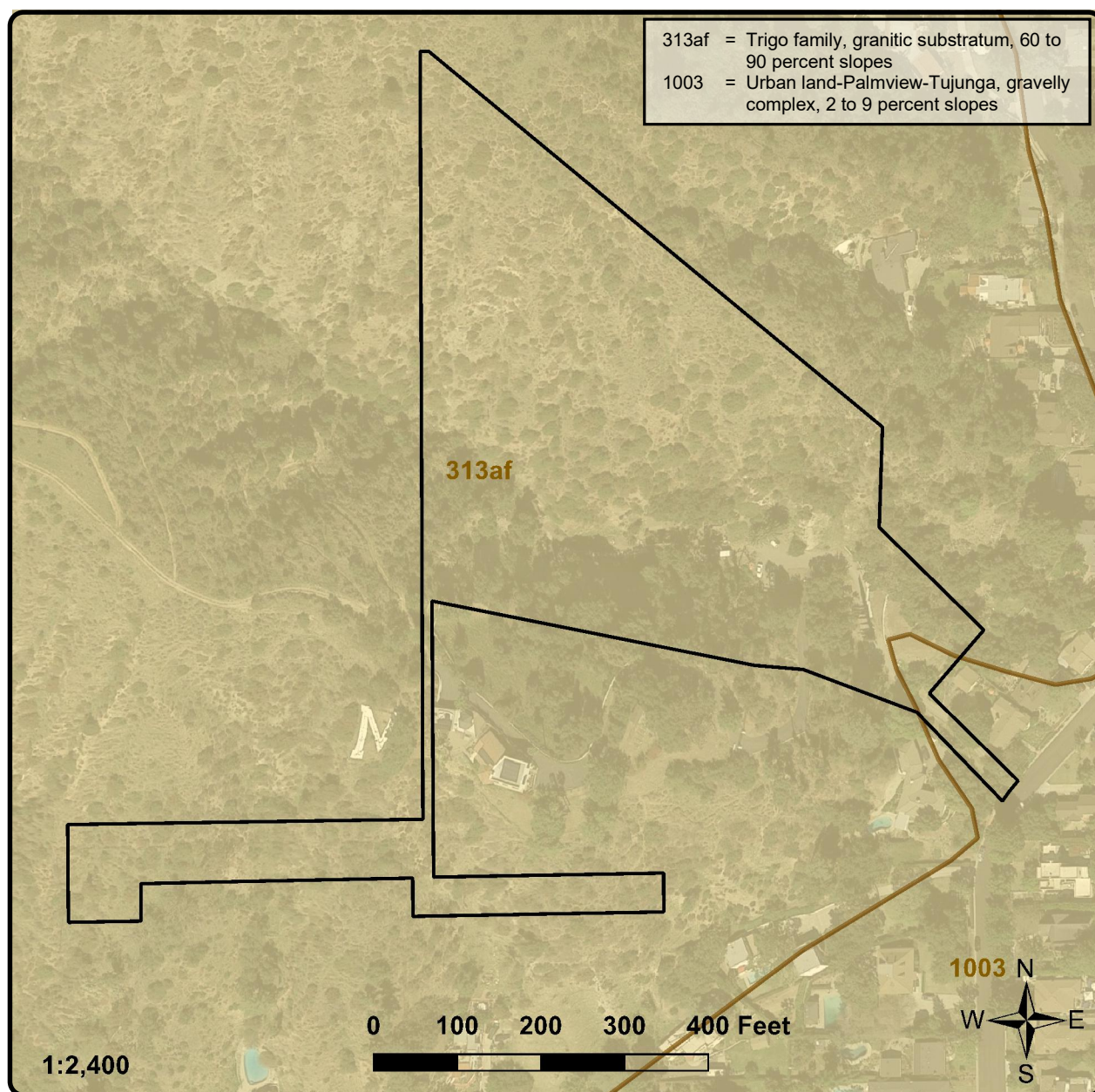
BDIX-19-711

Figure 3

Survey Area

(Aerial obtained from Google Earth, June 2023)

AIN 850-301-3004, City of Monrovia
County of Los Angeles, California



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INVESTIGATIONS AND MONITORING

BDIX-19-711

Figure 4

Soils Map

(Aerial obtained from Google Earth, 5/2/2019
USDA Nat. Res. Cons. Serv. SSURGO Data)

AIN 850-301-3004, City of Monrovia
County of Los Angeles, California

2.0) REGULATORY ENVIRONMENT

The following summary of the regulatory environment is provided for information purposes and is not intended for review or comment by the lead or wildlife agencies.

2.1) Federal Endangered Species Act

Section 9 of the federal Endangered Species Act (FESA), 1973 (as amended) prohibits “take” of federally listed threatened and endangered species. Candidate species receive no protection under FESA, but the USFWS encourages conservation of these species. “Take” is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. “Harm” is further defined to include habitat modification or degradation when it actually kills or injures wildlife by impairing essential behavioral patterns including breeding, feeding, or sheltering.

Incidental take is take that results from, but is not the purpose of, carrying out an otherwise lawful activity. Incidental take of federally listed species may be authorized under Section 7 of FESA for federal properties or where federal actions (i.e., federal permitting or federal funding) are involved or under Section 10 of FESA for non-federal actions.

Section 7 requires all Federal agencies, in "consultation" with the USFWS, to ensure that their actions are not likely to jeopardize the continued existence of listed species or result in destruction or adverse modification of critical habitat. The Section 7 process requires preparation of a federal Biological Assessment to determine whether a proposed major construction activity under the authority of a Federal action agency is likely to adversely affect listed species, proposed species, or designated critical habitat. After formal consultation, the USFWS will issue a Biological Opinion stating whether or not a Federal action is likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of critical habitat.

Section 10 lays out the guidelines under which a permit may be issued to authorize take of endangered or threatened species (in the absence of any federal nexus). Application for an incidental take permit under Section 10 is subject to certain requirements, including preparation by the permit applicant of a conservation plan, generally known as a "Habitat Conservation Plan" or "HCP." An HCP is a plan that outlines ways of maintaining, enhancing, and protecting a given habitat type needed to protect species. The plan usually includes measures to minimize impacts, such as provisions for permanently protecting land, restoring habitat, and relocating plants or animals to another area.

2.2) Jurisdictional Waters and Wetlands

Three agencies generally regulate activities within streams, wetlands, and riparian areas in California: (1) the U.S. Army Corps of Engineers (USACE) regulates activities under Section 404 of the federal Clean Water Act; (2) the Regional Water Quality Control Board (RWQCB) regulates activities under Section 401 of the federal Clean Water Act and the State Porter-Cologne Water Quality Control Act; and (3) the California Department of Fish and Wildlife (CDFW) regulates activities under California Fish and Game Code Sections 1600-1616.

2.2.1) Federal Clean Water Act, Section 404

Section 404 of the federal Clean Water Act (CWA) applies to "Waters of the United States" (WoUS). By definition these include waterways that could be used for interstate commerce and their tributaries, including any waters that flow into traditional navigable waters. In non-tidal waters, the limits of jurisdiction are "ordinary high water marks" (OHWM) such as stream banks. There have been recent changes to the definition of WoUS as the result of a Supreme Court decision.

Final determination and delineation of federal jurisdiction is made by the USACE and not by the project biologists. Therefore, fieldwork and documentation of the site conditions are done as a preliminary delineation until the USACE reviews and concurs with the results.

2.2.2) Federal Clean Water Act, Section 401

The RWQCB has jurisdiction over wetlands, WoUS, and Waters of the State under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act (Porter-Cologne) under the California Water Code (§ 13000, et seq.) Permitting is required for activities that will result in a discharge of soils, nutrients, chemicals, detrital materials, or other pollutants into WoUS, Waters of the State, or adjacent wetlands that will affect the water quality of those bodies and the watershed.

2.2.3) California Fish and Game Code, Section 1600

The CDFW, through provisions of the California Fish and Game Code (Sections 1600-1616), is empowered to issue agreements ("Lake and Streambed Alteration Agreements") for projects that will adversely affect wildlife habitat associated with any river, stream, or lake edges. The Lake and Streambed Alteration Agreement will typically include required measures to mitigate impacts.

2.3) California Environmental Quality Act

The California Environmental Quality Act (CEQA) and CEQA Guidelines (§ 15000 et seq.) require identification of environmental effects from discretionary projects. Significant effects are to be mitigated by avoidance, minimization, rectification, or compensation whenever possible.

Effects to all state and federal listed species are considered significant under CEQA. In addition to formally listed species, CEQA considers effects to species that are demonstrably endangered or rare as important or significant. These definitions can include state designated species of special concern, federal candidate and proposed species, California Natural Diversity Database (CNDDB) tracked species, and California Rare Plant Rank (CRPR) 1B and 2 plants.

Appendix G of the CEQA Guidelines specifically addresses biological resources and encompasses a broad range of resources to be considered.

2.4) California Endangered Species Act

California Endangered Species Act (CESA) definitions of endangered and threatened species parallel those defined in the FESA. The CESA defines an endangered species as “. . . a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes including loss of habitat, change in habitat, overexploitation, predation, competition or disease.” Endangered species are in serious danger of becoming extinct and threatened species are likely to become endangered species in the foreseeable future (according to Sections 2062 and 2067, respectively, of the California Fish and Game Code). Candidate species are those under formal review by the CDFW for listing as endangered or threatened (Section 2067) and are given the same protections as listed species. Prior to being considered for protected status, the CDFW designates a species as being of special concern. Species of Special Concern are wildlife species for which the CDFW has information indicating population decline. Plant species of concern are designated by California Rare Plant Ranks, described below.

2.5) California Natural Diversity Database

The California Natural Diversity Database (CNDDB) includes documented occurrences of special status species that have been reported to the CDFW. It also includes ranks of overall condition of sensitive species and vegetation communities on global (throughout its range) and state (within California) levels. State ranking is numerical, ranging from one to five (S1 to S5), with one indicating very few remaining individuals or little remaining habitat and five indicating a demonstrably secure to ineradicable population condition.

2.6) California Rare Plant Rank

The California Native Plant Society (CNPS) Inventory of Rare and Endangered Species includes documented occurrences of special status plant species that are available through the Consortium of California Herbaria and other sources. The CNPS, in coordination with CDFW, has cataloged California's rare and endangered plants into lists according to population distributions and viability. These lists are numbered and indicate the following California Rare

Plant Ranks (CRPR): (1A) presumed extinct in California; (1B) rare, threatened, or endangered throughout their range; (2A) presumed extirpated in California, but more common in other states; (2B) threatened or endangered in California, but more common in other states; (3) more information is needed to establish rarity; and (4) plants of limited distribution in California (i.e., naturally rare in the wild), but whose populations do not appear to be susceptible to threat. A CRPR may also have an extension (e.g., 1B.x) that indicates current level of threat: seriously threatened (x.1), moderately threatened (x.2), or not very threatened (x.3).

2.7) Migratory Bird Treaty Act

The federal Migratory Bird Treaty Act (MBTA) of 1918 (16 USC 703-711) is an international treaty that made it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed in 50 CFR Part 10, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). Executive Order 13186 ensures that environmental analyses of federal actions required by the National Environmental Policy Act (NEPA) or other established environmental review processes evaluate the effects of actions on migratory birds, with emphasis on species of concern. Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young) or loss of habitat upon which the birds depend could be considered “take.”

2.8) Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (BGEPA) provides for the protection of the bald eagle and the golden eagle by prohibiting the take, possession, sale, purchase, barter, offer to sell, purchase or barter, transport, export or import, of any bald or golden eagle, alive or dead, including any part, nest, or egg, unless allowed by permit (16 U.S.C. 668(a); 50 CFR 22). “Take” includes to pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb. “Disturb” means to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause injury to an eagle, a decrease in its productivity by substantially interfering with normal breeding, feeding, or sheltering behavior, or nest abandonment.

2.9) California Fish and Game Code, Sections 3503 and 3513

California Fish and Game Code Section 3503 prohibits take, possession, or needless destruction of bird nests or eggs except as otherwise provided by the Code; Section 3503.5 prohibits take or possession of birds of prey or their eggs except as otherwise provided by the Code; and Section 3513 provides for the adoption of the provisions of the federal Migratory Bird Treaty Act, described above.

2.10) City of Monrovia Oak Tree Preservation Ordinance

The City of Monrovia Oak Tree Preservation Ordinance (Section 17.20.040 of the Monrovia Municipal Code¹) identifies the trees that are subject to the ordinance and the circumstances under which a permit for tree removal or trimming is required. Note that the Resource Management section of the Madison Specific Plan includes specific standards regarding biological resources and supersedes the City's Oak Tree Preservation Ordinance (see Section 2.11 below).

2.11) Madison Specific Plan

The Resource Management section of the Madison Specific Plan includes specific standards regarding biological resources and supersedes the City's Oak Tree Preservation Ordinance.

Applicable requirements of the Madison Specific Plan² are:

- Tree Preservation, Removal, and Transplantation
 - No coast live oak may be disturbed except as permitted by an approved Landscape and Revegetation Plan. Prior to the removal of any tree, each oak tree shall be evaluated by a qualified arborist. The arborist shall prepare a detailed assessment of all trees located in proposed development areas. The assessment shall document all trees with a trunk diameter of six inches or vertical height over 25 feet.
 - All trees removed shall be replaced by the same species at 4:1 replacement ratio. If the number of replacement trees required exceeds the density recommended by the arborist, an off-site location shall be designated for planting of the extra trees.
- Habitat Enhancement and Monitoring Components
 - Restoration and landscape plans shall address habitat enhancement and monitoring components as described in this section.
- Oak Tree Mitigation Program for Southern Coast Live Oak Woodland
 - This section provides details of the requirements of oak woodland restoration.
- Southern Sycamore/Alder Riparian Woodland Program
 - This section provides details of the requirements of sycamore/alder riparian woodland restoration.
- Coastal Sage Scrub and Chaparral Program
 - This section provides details of the requirements of coastal sage scrub and chaparral restoration.

¹ <https://www.cityofmonrovia.org/your-government/community-development/planning/oak-trees>
<https://www.cityofmonrovia.org/home/showdocument?id=1358>

² See the Madison Specific Plan for all requirements. This section includes a brief summary of the requirements that apply to biological resource surveys only. It does not include all mitigation requirements in the Madison Specific Plan that may apply to this Project.

3.0) METHODS AND PERSONNEL

3.1) Literature Review

Certain plants and animals have been listed as threatened or endangered under state or federal Endangered Species Acts. Other species have not been formally listed, but declining populations or habitat availability are reasons for concern regarding their long-term viability. These species are included in lists compiled by resource management agencies or private conservation organizations. In this report, the term “listed species” refers to all species that are listed or candidates for listing under the state or federal Endangered Species Acts. “Special status species” refers to all species that are not listed under either state or federal Endangered Species Acts but are included in one or more compendia or formal lists of rare species.

For the purposes of this report, the ‘Project site’ or ‘site’ refers to the entire ±7.8-acre property, which consists of AIN 8503-013-004 (Figure 3). The Project impact area is defined as the area that will be directly impacted by implementation of the Project (i.e., grading, demolition, and vegetation removal) and is shown on the Conceptual Grading Plan in Appendix I. The Project impact area is ±1.56 acres.

A lot line adjustment was provided to L&L in July 2021 after the surveys were completed. Portions of the adjusted lot were not within the field survey area (Figure 3). These areas were addressed through a visual inspection and/or a desktop review (see Section 3.3 below). The lot line adjustment is provided in Appendix J.

Pertinent literature was reviewed to identify local occurrences and habitat requirements of special status species and communities occurring in the region. Literature reviewed included compendia provided by resource agencies (CDFW 2021a, 2021b) and a search of the California Natural Diversity Database (CNDDDB; CDFW 2021c) and the California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2021) for the Mt. Wilson quad and adjacent quads (Condor Peak, Chilao Flat, Waterman Mountain, Pasadena, Azusa Los Angeles, El Monte, and Baldwin Park). A search of the Information for Planning and Consultation database (IPAC; USFWS 2021a) was also conducted for the Project site.

Potential for occurrence of plant and wildlife species were evaluated and classified as either absent, not expected, low, moderate, high, or occurs. These classifications are based on the presence and quality of habitat, geographic and elevation range of species, proximity to a known occurrence of a species obtained from CNDDDB or other reliable data, and field observations. Classifications for individual species may be modified based on biologists’ experience and expert opinion.

Scientific names of plants follow Baldwin et al. (2012) with updates from the online Jepson eFlora (Jepson 2021). Scientific names of animals follow Stebbins (1985), Jameson and Peeters (1988), BNA (2021), Sibley (2000), and Arnett (2000) with updates from academic sources. Current conservation status of plant and wildlife species determined from CDFW (2021a, 2021b). Vegetation community classifications follow Sawyer et al. (2009) with updates from CDFW (2020a). State ranks (S ranks) for vegetation communities are from CDFW (2020a).

3.2) Biological Survey Methods

A habitat assessment survey and reconnaissance level botanical evaluation were conducted on July 20, 2019, from 0745 to 1050; weather was clear with temperatures between 67 and 76° F and winds of 1 to 4 mph. This survey included only AIN 8503-013-004 (prior to lot line adjustment, ±6.45 acres). The results of the 2019 survey are included in this report as appropriate.

Biological surveys conducted in 2021 consisted of general surveys for plant and wildlife species, vegetation community mapping, focused surveys for special status plants, in particular Braunton's milk-vetch (*Astragalus brauntonii*), an inventory of oak trees, and protocol breeding season surveys for coastal California gnatcatcher (*Polioptila californica californica*). These surveys included AIN 8503-013-004 (prior to lot line adjustment, ±6.45 acres). The survey area is shown on Figure 3. Areas that were added to AIN 8503-013-004 through a lot line adjustment after the surveys were completed were addressed through a desktop review (Figure 3).

3.2.1) Botanical Survey and Vegetation Community Mapping Methods

L&L biologist Guy Bruyea conducted botanical surveys of the site in March, April, May, and June of 2021. Table 1 lists the survey dates, times, and weather conditions. Approximately 32.5 person-hours were spent conducting botanical surveys for the Project, including time spent at reference site locations.

All habitat types onsite were visited on foot. The site was surveyed by conducting a series of meandering transects across the property where possible, stopping periodically for observations and notations. A general habitat map and field notes were completed at the time of the survey. The field survey was conducted during daylight hours. Digital photographs were taken to record the condition of the site during the survey. Surveys included the entire Project site except for areas that could not be safely accessed due to steep terrain and loose soils (Figure 5). These areas were surveyed from adjacent areas using binoculars.

All plant and wildlife species observed during surveys were recorded. All plant species observed were identified in the field or collected for later identification or confirmation. All species were recorded in field notes and the locations of special status plants and wildlife were

documented using GPS. However, it was noted that GPS often proved inaccurate within the canyon and locations were mapped by hand for verification. Plants of uncertain identity were collected and subsequently identified from keys, descriptions, and illustrations in Abrams (1923, 1944, 1951, 1960), Abrams and Ferris (1960), Baldwin (2012), Munz (1974), and Parker (1999). The methodology used is consistent with recommendations by the California Native Plant Society (CNPS 2001), CDFW (2018, 2000), and USFWS (2000).

Vegetation community mapping of the site was also conducted in 2021. Initial vegetation mapping from aerial images was refined through field observations. Vegetation communities correspond to the California Natural Community List (CDFW 2020) and Sawyer et al. (2009).

Table 1. Botanical Survey Dates, Times, and Weather Conditions

Date	Time	Weather (start/end)	Wind (mph)
03.16.2021	1030-1330	Clear, 55-65° F	0-3
03.24.2021	0900-1230	Clear, 63-74° F	1-10
03.31.2021	0845-1300	Clear, 70-86° F	2-12
04.13.2021	0915-1245	Marine layer/cloudy, 62-70° F	0-1
04.21.2021	0945-1300	Cloudy, 59-74° F	0-4
05.03.2021	1030-1430	Clear, 69-81° F	0-2
05.14.2021	1000-1430	Marine layer/Clear, 74-83° F	0-5
05.19.2021	0945-1245	Overcast, 58-66° F	1-4
06.03.2021	0830-1100	Hazy/Clear, 68-79° F	1-8

3.2.2) Tree Survey Methods

The tree inventory was conducted by Leslie Irish and intern Joshua Ball on June 22 and 24, 2021. The inventory included only the Project impact area and immediately adjacent areas.

Trees were mapped and measured, and each individual photographed. Trees were identified by number according to tree tags that were affixed to each tree (tag numbers start at 45). Data collected consisted of species, estimated height, trunk diameter at two (2) feet above the ground (per the Monrovia Oak Tree Preservation Ordinance, see Section 2.10), GPS coordinates, approximate base elevation, and a health assessment (Table 2). Base elevation was derived from Google Earth.

Table 2. Tree Health Assessment Ratings

Rating	Criteria
5	Tree in excellent health with abundant foliage, new leaf growth, and shoot elongation; no signs of herbivory, insect infestation, disease, fungus growth, or limb/trunk damage.
4	Tree in very good health with ample green foliage and new leaf growth; minor signs of drought stress, herbivory, insect infestation, decreased shoot growth, or loss of vigor.
3	Tree in moderate health with limited or uneven new leaf growth; moderate signs of drought stress; noticeable insect activity; decay on branches; noticeable herbivory damage.
2	Tree in poor health with existing leaves yellowing; limited/stunted new leaf growth; decreased shoot growth from previous year; dark-colored cracks or abnormalities on trunk; presence of fungus; observable decay on trunk or major limbs; sap bleeding from trunk; significant insect infestation; extensive herbivory; thinning canopy.
1	Tree in obvious decline with existing leaves yellowing and no new leaf growth; extensive limb or trunk damage; large cracks or other decay on trunk; bleeding sap; dieback of more than 30% of the canopy; a general lack of vigor.
0	Tree dead or apparently dead.

3.2.3) California Gnatcatcher Survey Methods

Presence-absence surveys for coastal California gnatcatcher may be conducted year-round, but U.S. Fish and Wildlife Service (USFWS) recommended guidelines vary depending on when the survey is conducted. During the breeding season, which extends from March 15 to June 30, a minimum of six (6) surveys should be conducted no less than one (1) week apart. Outside of the breeding season, USFWS guidelines stipulate a minimum of nine (9) surveys, not less than two (2) weeks apart. Guidelines also recommend that surveys be conducted between the hours of 0600 and 1200 and during weather conditions suitable for avian activity. Focused surveys will not be considered valid if conducted during a focused survey visit where one (1) or more of the following weather conditions occur: fog, drizzle, rain, excessive heat, or wind. All focused survey visits on the subject property were conducted during suitable times and weather conditions for avian activity as stipulated in the most recent USFWS guidelines (USFWS 1997). As required, a pre-survey notification was sent to USFWS on February 12, 2021.

During the study, L&L field biologist Guy Bruyey conducted six (6) California gnatcatcher surveys on the site during the breeding season. These surveys were conducted concurrently with botanical surveys. This level of survey effort meets the standards recommended in the USFWS survey guidelines, as outlined above. Mr. Bruyey holds a USFWS 10(a)(1)(A) permit for California gnatcatcher (TE-837439-8). Survey dates, times, and weather conditions are provided in Table 3.

Table 3. Gnatcatcher Survey Dates, Times, and Weather Conditions

Date	Time	Weather (start/end)	Wind (mph)
03.16.2021	1030-1200	Clear, 55-65° F	0-3
03.24.2021	0900-1200	Clear, 63-74° F	1-10
03.31.2021	0845-1200	Clear, 70-86° F	2-12
04.13.2021	0915-1200	Marine layer/cloudy, 62-70° F	0-1
04.21.2021	0945-1200	Cloudy, 59-74° F	0-4
05.03.2021	1030-1200	Clear, 69-81° F	0-2

The property was first assessed for suitable California gnatcatcher habitat and then the focused survey which followed concentrated in those areas. This included south-facing slopes and ridgelines with mixed coastal scrub and chaparral vegetation at elevations between approximately 760 and 1,034 feet (232 and 315 meters) (Figure 5). Not included were disturbed/developed areas associated with an existing residence and steep slopes that could not be safely surveyed on foot (see also Section 3.3 below). The focused survey methods consisted of systematic observations by walking slowly and methodically along random transect routes. Inaccessible areas containing steep slopes were assessed from the nearest accessible area using binoculars, as well as listening for vocalizations. At selected points and times “pishing” sounds were used to detect California gnatcatcher by eliciting a response call.

As per recommended USFWS guidelines, care was taken to avoid disturbance to nesting birds (of any species) encountered during this study.

3.3) Mountain Lion

A habitat assessment for mountain lion was conducted on July 20, 2019, from 0745 to 1050; weather was clear with temperatures ranging between 67 and 76° F and winds of 1 to 4 mph. The assessment included a record search for known occurrences in the area and a field survey for potential habitat to support mountain lions, including foraging, breeding/denning, migration, and home range activities. The field survey included 100 percent visual coverage of the habitat in the study area plus a buffer prior to the lot line adjustment and inclusion of the Southern Extension.

3.4) Southern Extension

A portion of land was included in the project in July of 2021, after the field surveys were complete due to a lot line adjustment. These areas are referred to in this report as the ‘southern extension’ (Figure 3). The lot line adjustment map is provided in Appendix J. Survey limitations for this area included unwalkable slopes with limited access. Some portions of these areas were included in visual inspections from adjacent accessible areas of the project during the earlier surveys but primarily they were assessed via desktop methodologies using aerial photography and Google Earth images and other available online information. This combined information was then used to update the vegetation mapping and impact analysis for the Project.

4.1.2) Madison Fire

The Madison Fire started on April 20, 2013 and was contained on April 24, 2013. The fire burned approximately 82 acres entirely within the City of Monrovia. Vegetation in and around the area prior to the fire consisted of grasses, coastal sage scrub, and oak vegetation. No structures were damaged or destroyed (City of Monrovia 2013).

The Madison fire burned approximately 4.85 acres (62 percent) of the Project site, mainly in the northern portion of the site (Figure 7).

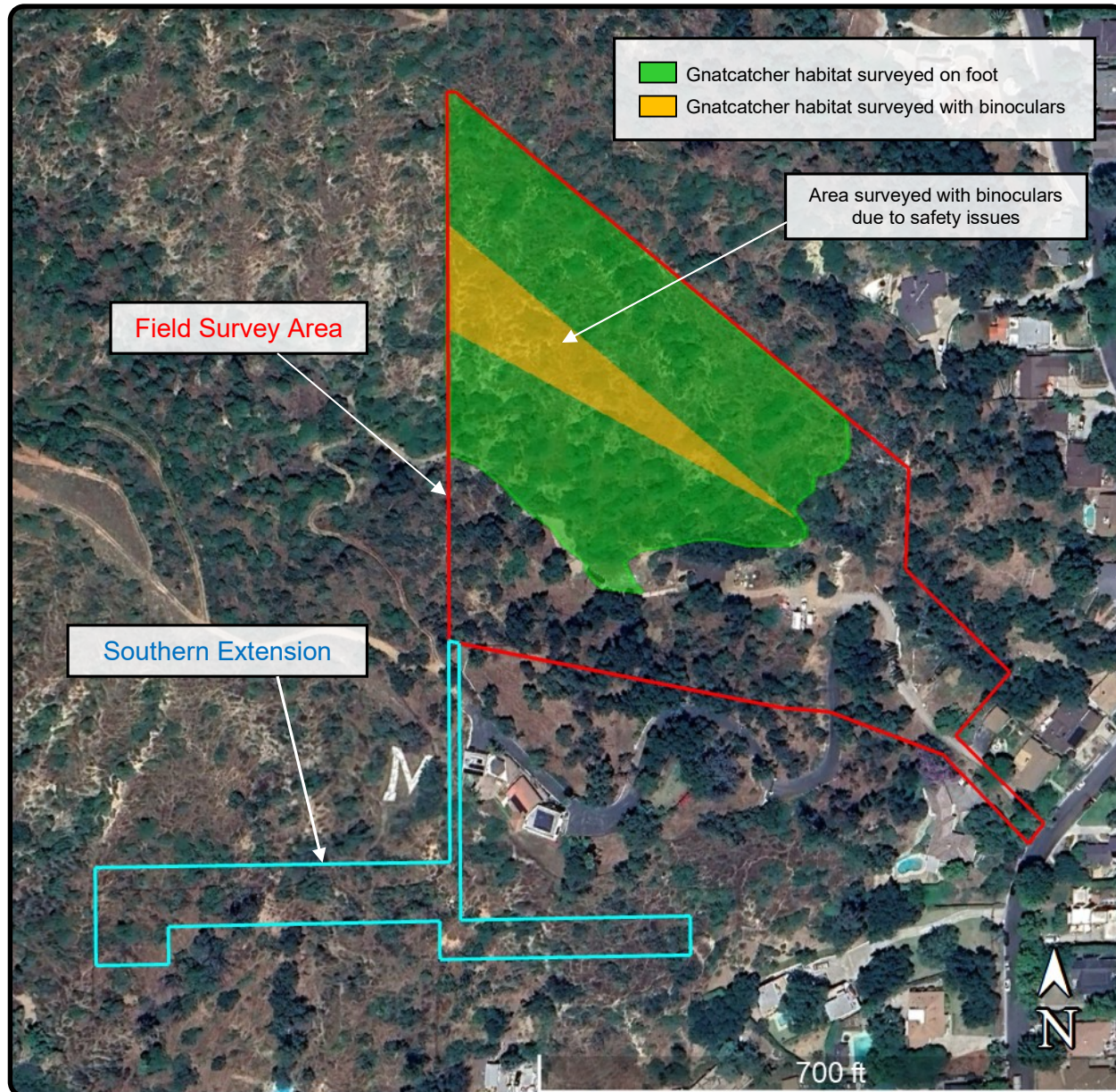
4.1.3) Precipitation Data

Precipitation data for the area was obtained from the Western Regional Climate Center (WRCC 2021). The nearest Remote Automatic Weather Stations (RAWS) to the project site are Santa Fe Dam and Henninger Flats. The Santa Fe Dam RAWS is located at an elevation of 500 feet and is about 4.4 miles southeast of the Project site. The Henninger Flats RAWS is located at an elevation of 2,800 feet and is about 5.2 miles northwest of the Project site.

Precipitation data from the Santa Fe Dam and Henninger Flats RAWS for 2010 through June 2021 are provided in Appendix G and summarized in Tables 4a and 4b (WRCC 2021).

Average annual precipitation for Santa Fe Dam and Henninger Flats for water years³ 2010 through 2020 is 14.71 and 19.05 inches, respectively. Average annual precipitation for the region (1981 to 2010) is 20 to 25 inches (WRCC 2018). Precipitation totals for the 2020 water year for Santa Fe Dam and Henninger Flats are 16.03 and 21.97 inches, respectively, with rainfall mainly from November to April (Tables 4a and 4b). Precipitation totals for the 2021 water year to date (from October 2020 through June 2021 only) for Santa Fe Dam and Henninger Flats are 6.50 and 7.31 inches, respectively.

³ A water year is October through September. For example, the 2020 water year includes October 2019 through September 2020.



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Figure 5

**California Gnatcatcher
Survey Area**

(Aerial obtained from Google Earth, June 2023)

AIN 850-301-3004, City of Monrovia
County of Los Angeles, California

4.0) RESULTS

4.1) Literature Review Results

4.1.1) Hillside Wilderness Preserve

The northern portion of the Project site, outside of the impact area, is immediately adjacent to a section of the Hillside Wilderness Preserve (HWP) (Figure 6) (CPAD 2021). The City of Monrovia has established the HWP to protect and conserve habitat and ecological function while providing opportunities for passive recreational uses. The Hillside Wilderness Preserve consists of 1,416 acres of city-owned land referred to as “Hillside Wilderness Preserve” and “Hillside Recreation.” Table 4a. Precipitation Data Summary

Water Year	Precipitation (inches)	
	Santa Fe Dam	Henninger Flats
2010	17.51*	28.57*
2011	22.20	35.86
2012	10.83*	12.64*
2013	7.35	8.14*
2014	5.79	7.07
2015	11.43	12.63*
2016	10.78*	13.50*
2017	29.16*	24.93*
2018	7.38	11.64
2019	23.39	32.63*
2020	16.03	21.97
2021	6.50**	7.31**
Average for Water Years 2010-2020	14.71*	19.05*

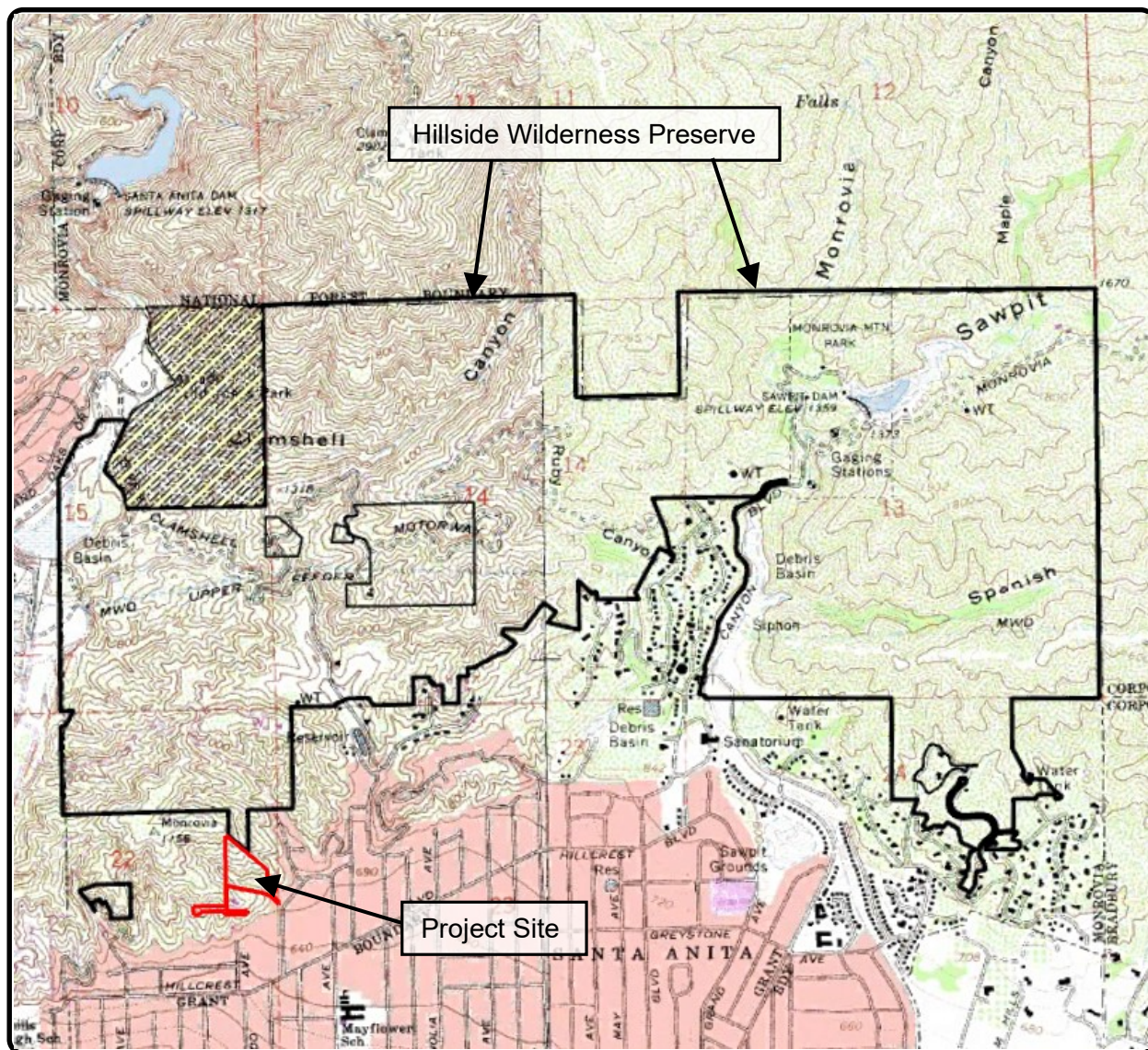
*missing data; **through June 2021.

Table 4b. Monthly Precipitation 2021

Water Year 2021	Precipitation (inches)	
	Santa Fe Dam	Henninger Flats
October	0	0
November	0.12	0.26
December	1.70	1.38
January	2.69	3.18
February	0.17	0.12
March	1.58	1.50
April	0.14	0.48
May	0.10	0.35
June	0	0.04

July	*	*
August	*	*
September	*	*
Total	6.50**	7.31**

*missing data; **through June 2021



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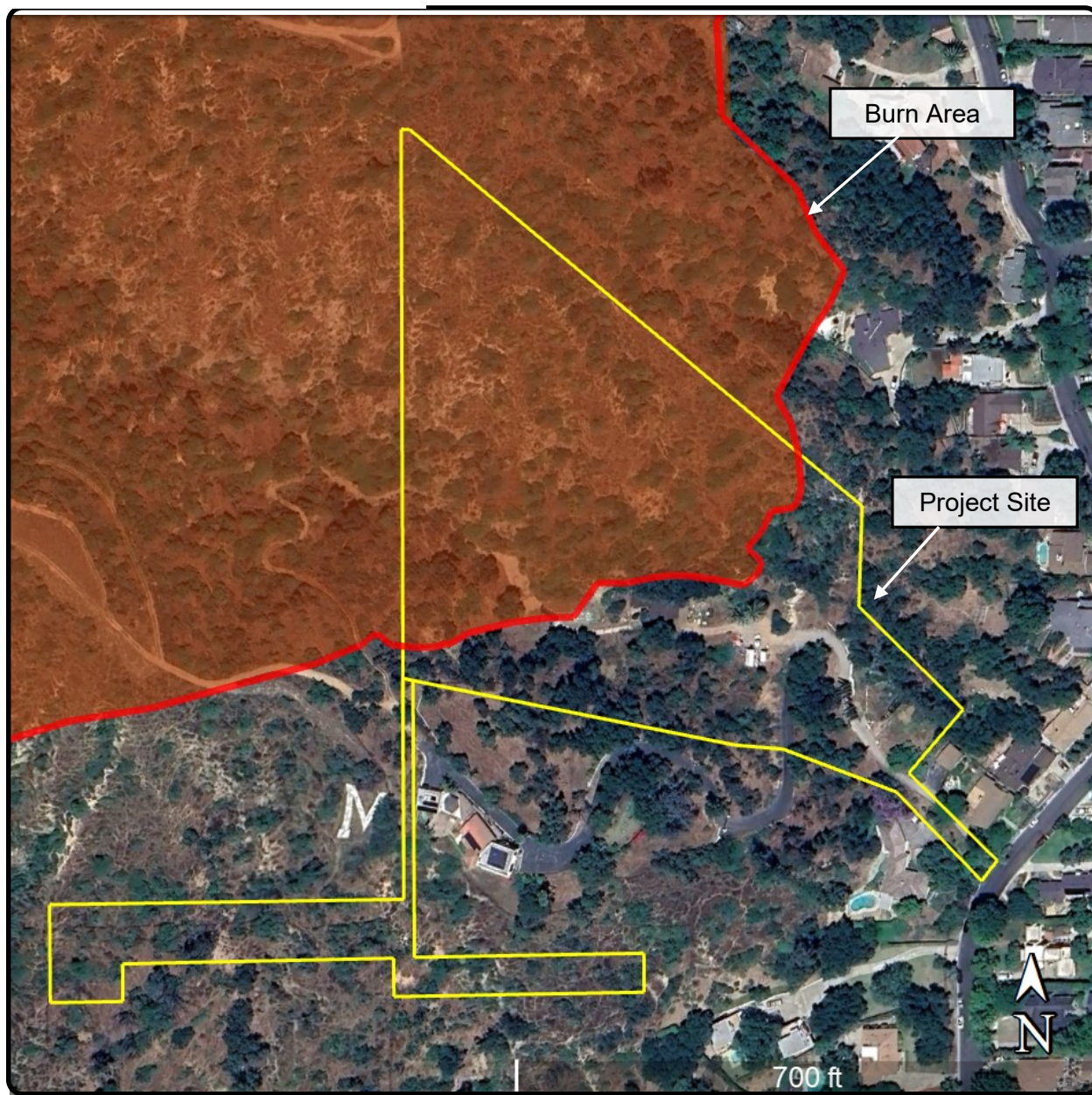
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Figure 6

Hillside Wilderness Preserve
(LSA 2008)

347 North Highland Place, City of Monrovia
County of Los Angeles, California



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Figure 7

Madison Fire Burn Area

(Aerial obtained from Google Earth, June 2023)

*AIN 850-301-3004, City of Monrovia
County of Los Angeles, California*

4.2) Vegetation Communities

Vegetation communities within the Project consist of coast live oak woodland, laurel sumac scrub (burned), laurel sumac scrub (unburned), an area of mixed coast live oak woodland and laurel sumac scrub (unburned), and disturbed/developed/ornamental areas. Acreages of each vegetation community on the Project are provided in Table 5 and depicted in Figure 8. Representative photos are included in Appendix D.

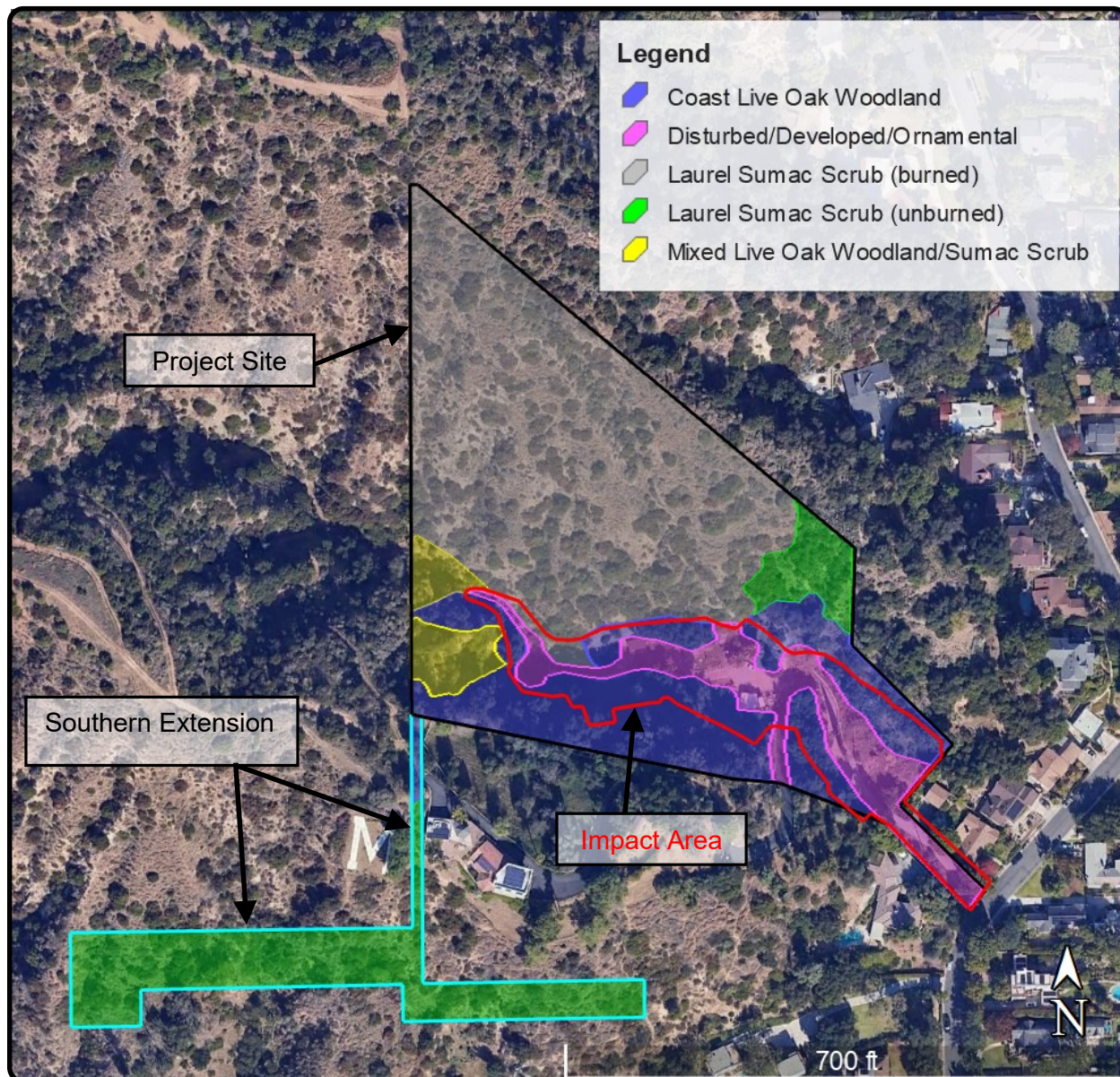
Table 5. Vegetation Communities

Vegetation Community and Classification	Area (acres)	
	Total Present Onsite	Project Impact Area
Coast Live Oak Woodland	1.70	0.74
Coast Live Oak Woodland/Laurel Sumac Scrub	0.29	0.003
Laurel Sumac Scrub (burned)	3.61	0.07
Laurel Sumac Scrub (unburned)	1.42	0
Disturbed/Developed/Ornamental	0.78	0.75
TOTAL	7.80	1.56

4.2.1) Coast Live Oak Woodland

Coast live oak woodland consists of an evergreen woodland dominated by coast live oak (*Quercus agrifolia*). Coast live oak woodland is present on the southern third of the site in association with slopes just above the onsite canyon bottom and mixes on the steep hillsides with laurel sumac scrub. Non-native grasses dominate the understory and include ripgut brome (*Bromus diandrus*), red brome (*Bromus madritensis ssp. rubens*), cheatgrass (*Bromus tectorum*), and Mediterranean grass (*Schismus barbatus*). Other plants observed in the understory include western poison oak (*Toxicodendron diversilobum*) and southern honeysuckle (*Lonicera subspicata*). Based on review of aerial images (Google Earth 2021), most of the coast live oak woodland did not burn in the 2013 Madison Fire.

CDFW ranks coast live oak woodland as S4 (apparently secure, uncommon but not rare) and it is not considered a sensitive vegetation community.



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Figure 8

Vegetation Communities

(Aerial from Google Earth, November 2023)

AIN 850-301-3004, City of Monrovia
 County of Los Angeles, California

4.2.2) Laurel Sumac Scrub (burned)

The northern two-thirds of the site includes a mix of coastal scrub and chaparral shrubs and would be generally categorized as coastal sage – chaparral scrub. It is mainly dominated by laurel sumac (*Malosma laurina*) and best classified as laurel sumac scrub (*Malosma laurina* Shrubland Alliance). This area is on a south-facing slope that burned in the Madison Fire in 2013. The canopy is open and the shrubs are relatively small compared to unburned areas.

Other species commonly present are California sagebrush (*Artemisia californica*), ceanothus (*Ceanothus* species), deerweed (*Acmispon glaber* var. *brevialutus*), and black sage (*Salvia mellifera*). Other species are present but in fewer number, including (but not limited to) chamise (*Adenostema fasciculatum*), California buckwheat (*Eriogonum fasciculatum* var. *polifolium*), and scrub oak (*Quercus berberidifolia*) and/or San Gabriel oak (*Quercus durata* var. *gabrielensis*).

Other species observed in this vegetation community are blue elderberry (*Sambucus nigra* ssp. *caerulea*), California brickellbush (*Brickellia californica*), coast prickly pear (*Opuntia littoralis*), wild cucumber (*Marah macrocarpa*), California everlasting (*Pseudognaphalium californicum*), caterpillar phacelia (*Phacelia cicutaria*), and chaparral dodder (*Cuscuta californica*).

The understory also included non-native grasses and forbs. The most commonly observed non-native species are ripgut brome, red brome, cheatgrass, and Mediterranean grass. Native annuals were also present, mainly in open areas, and include (but are not limited to) golden-yarrow (*Eriophyllum confertiflorum*), quillwort (*Malacothrix saxatilis*), chia (*Salvia columbariae*), scarlet larkspur (*Delphinium cardinale*), and chaparral nightshade (*Solanum xanti*).

CDFW ranks laurel sumac scrub as S4 (apparently secure, uncommon but not rare) and it is not considered a sensitive vegetation community.

4.2.3) Laurel Sumac Scrub (unburned)

An area on the northeastern corner of the site appeared to escape the 2013 fire and has much larger shrubs and denser vegetation than the adjacent south-facing slopes to the west. This area has a similar mix of shrub species as the unburned areas of coastal sage – chaparral scrub to the west as well as toyon (*Heteromeles arbutifolia*), western poison oak, hollyleaf redberry (*Rhamnus ilicifolia*), birch-leaf mountain-mahogany (*Cercocarpus betuloides*), California matchweed (*Gutierrezia californica*), climbing bush-penstemon (*Keckiella cordifolia*), southern honeysuckle, wild cucumber, and chaparral yucca (*Hesperoyucca whipplei*). The desktop review found that most of the southern extension is also vegetated with laurel sumac scrub and was not burned in the 2013 fire.

4.2.4) Disturbed/Developed/Ornamental

Disturbed/developed/ornamental areas consist mainly of paved and unpaved driveways and walkways, parking areas, a residence, guest house, shed, ornamental landscaping, and cleared areas and trails. In these areas, the property was either hardscaped, heavily compacted, or landscaped with ornamental trees, bushes, and lawns, or has sparse to dense non-native grasses.

The most common non-native species in these areas include mustards (*Hirschfeldia* and/or *Sisymbrium* species), red-stemmed filaree (*Erodium cicutarium*), tocalote (*Centaurea melitensis*), and various non-native grasses. Other plants less commonly observed in disturbed areas include Russian thistle (*Salsola tragus*), tree tobacco (*Nicotiana glauca*), Italian thistle (*Carduus pycnocephalus*), prickly-lettuce (*Lactuca serriola*), and sow-thistle (*Sonchus oleraceus*). Native plants that are tolerant of disturbed areas were observed onsite and include annual sunflower (*Helianthus annuus*), fiddleneck (*Amsinckia menziesii* var. *intermedia*), doveweed (*Croton setiger*), and telegraph weed (*Heterotheca grandiflora*).

Non-native ornamental landscaping is present, mainly in association with the existing residence and along a paved driveway entering the site from Highland Place. Various ornamental trees and shrubs, including (but not limited to) pine (*Pinus* species), blue jacaranda (*Jacaranda mimosifolia*), sweetgum (*Liquidambar* species), Italian cypress (*Cupressus sempervirens*), oleander (*Nerium oleander*), avocado (*Persea americana*), olive (*Olea europea*), century plant (*Agave americana*), and date palm (*Phoenix dactylifera*) are present.

4.3) Plant Species

A total of 110 plant species were observed onsite during surveys conducted in 2019 and 2021. A list of all plant species observed during surveys is included in Appendix A. This list includes conspicuous ornamental species present on the site in association with the existing residence. The species list may not include all ornamental species present.

No state or federally listed plant species were observed and only one, Branton's milk-vetch (*Astragalus brauntonii*), has a moderate potential to occur and is discussed below. Two (2) special status plant species were observed on the site, San Gabriel oak (*Quercus durata* var. *gabrielensis*) and Southern California black walnut (*Juglans californica*), and are described below. Locations of special status plant species are provided in Appendix B and mapped on Figure 10. CNDDDB forms are included in Appendix E. Potential for occurrence of other listed and special status plants is provided in Appendix C.

4.3.1) Listed Plant Species

No state or federally listed plants were observed on the site. Braunton's milk-vetch is a federally listed species that was not observed on the site during focused surveys but has a moderate potential to occur (Appendix C). No other state or federally listed plants have a moderate or high potential to occur.

Braunton's Milk-vetch

Braunton's milk-vetch (*Astragalus brauntonii*) is a perennial herb in the Fabaceae (Legume or Pea) family. It flowers from January through August and is found in chaparral, coastal scrub, and valley and foothill grassland. It is generally found on recent burns or disturbed areas and usually on sandstone soils with carbonate layers. It requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. Its elevation range is 15 to 2,100 feet (4 to 640 meters). This species is found in Los Angeles, Orange, and Ventura Counties (CNPS 2021, CDFW 2021c).

Braunton's milk-vetch is federally listed as endangered and has a California Rare Plant Rank (CRPR) of 1B.1 (rare or endangered in California and elsewhere, seriously threatened in California). USFWS-designated critical habitat for this species is located approximately 0.5 mile north of the Project site (USFWS 2021b).

The CNDDDB has four (4) records of Braunton's milk-vetch within five (5) miles of the Project site. CNDDDB Element Occurrence (EO) #6 is about 0.8 mile northeast of the site and was last observed in 1981. This occurrence has been extirpated by development. EO #24 is about 0.8 mile north-northwest of the site and was last documented in 2001 when less than 20 plants were observed. EO #16 is about 0.9 mile north of the site and was last observed in 2019. This occurrence had a high of 1,465 plants in 2004 but only one plant was observed in 2019. EO #57 is about 1.8 miles northeast of the site and was last observed in 2018 with 11 to 50 plants. EO #16 and 24 are located within the Arcadia Wilderness Park and/or the Monrovia (Hillside) Wilderness Preserve. EO# 57 is within Monrovia Canyon Park (CDFW 2021c).

Due to restrictions associated with Covid and a recent wildfire, the known populations in Arcadia Wilderness Park, Monrovia Wilderness Preserve, and Monrovia Canyon Park could not be accessed during the survey. Another reference site for this species (EO #4) was identified. EO #4 is located within Chino Hills State Park, about 27.5 miles southeast of the site at an elevation of 600 feet. This occurrence was last observed in 2020 with 11 to 50 plants, and a high of 1,000 plants in 2018. EO #4 was visited by L&L field biologist Guy Bruyey on May 14, 2021 and a thorough search found only one plant (see photo in Appendix D and CNDDDB form in Appendix E). The plant was flowering and identifiable, but about two weeks past peak bloom at that time. Although the reference site is some distance from the site and a slightly lower

elevation, it demonstrates that Braunton's milk-vetch was flowering and identifiable at the time of the survey.

Potentially suitable habitat for Braunton's milk-vetch is located on the northern portions of the site and the southern extension. This species was not observed on the Project site during the focused botanical survey. Due to the large population fluctuations noted at CNDDDB occurrences, low levels of precipitation, and the difficult terrain in the northern portion of the site, the presence of this species cannot be ruled out. Therefore, Braunton's milk-vetch is determined to have a moderate potential for occurrence on the site. However, there is no suitable habitat within the Project impact area and this species is considered absent from that area.

4.3.2) Special Status Plant Species

Two special status plant species were observed during surveys, southern California black walnut and San Gabriel oak, and are described below. Observation locations are shown on Figure 10 and details are provided in Appendix B. CNDDDB forms (if required) are provided in Appendix E.

Southern California Black Walnut

Southern California black walnut (*Juglans californica*) is a deciduous tree in the Juglandaceae (Walnut) family that grows up to about 30 feet tall. This species is found on hillsides and canyons in chaparral, cismontane woodland, coastal scrub, and riparian woodland, often in alluvial areas. Its elevation range is 165 to 2,955 feet (50 to 900 meters). It is endemic to California and found mainly in the more coastal regions of southern California up into portions of central California (CNPS 2021, Jepson 2021).

This species is not state or federally listed; it has a CRPR of 4.2 (limited distribution with moderate degree and immediacy of threat). It is not tracked in the CNDDDB.

One Southern California black walnut tree was observed in the survey area along the driveway entrance (see Section 4.3.3). This tree may be naturally occurring, but this species is sold commercially and may have been planted in this location. This tree is within the Project impact area and will be impacted by the Project.

San Gabriel Oak

San Gabriel oak (*Quercus durata* var. *gabrielensis*) is a perennial evergreen shrub in the Fagaceae (Oak) family. It is found in chaparral and cismontane woodland at elevations from 1,475 to 3,280 feet (450 to 1,000 meters). It is endemic to California and found only in the San Gabriel Mountains (CNPS 2021).

This species is not state or federally listed; it has a CRPR of 4.2 (limited distribution with moderate degree and immediacy of threat). It is not tracked in the CNDDDB. There are several mapped occurrences of this species in the vicinity of the site in the California Consortium of Herbaria database (CCH 2021).

The Project site is just below the low end of the elevation range of this species. It is also difficult to distinguish from the common scrub oak (*Quercus berberidifolia*). One or both species or a hybrid may be present. This species is present along the ridgeline along the northern and northeastern boundary and is not within the Project impact area.

Other Special Status Plants

Several other special status plants have not been observed on the site but have a low to moderate, moderate, or high potential to occur on the site (Appendix C). These species are:

- Plummer's mariposa lily (*Calochortus plummerae*; CRPR 4.2),
- San Gabriel River dudleya (*Dudleya cymosa* ssp. *crebrifolia*; CRPR 1B.2),
- San Gabriel Mountains dudley (*Dudleya densiflora*; CRPR 1B.1),
- Mesa horkelia (*Horkelia cuneata* ssp. *puberula*; CRPR 1B.1),
- Fragrant pitcher sage (*Lepechinia fragrans*; CRPR 4.2),
- Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*; CRPR 4.3),
- White rabbit-tobacco (*Pseudognaphalium leucocephalum*; CRPR 2B.2),

These species would potentially occur in the northern portion of the site and the southern extension but are unlikely to be found within the Project impact area.

4.3.3) Oak and Non-oak Trees

The tree survey found 45 trees within or adjacent to the Project impact area, including 23 coast live oak trees (*Quercus agrifolia*), one (1) southern California black walnut tree, and 21 non-native ornamental trees (Figure 9). Tree data and photographs are provided in Appendix F.

Coast live oak is a native evergreen oak tree found in valleys, on steep hillsides, rocky canyons, and along streams in coastal California from the Mexican border north to Mendocino County (Pavlik et al. 1991). It is not a special status species but impacts to oak trees are regulated under the City of Monrovia Oak Tree Preservation Ordinance (see Section 2.10) and Madison Specific Plan (see Section 2.11) .

Scrub oak (*Quercus berberidifolia*) and/or San Gabriel oak (*Quercus durata* var. *gabrielensis*) or hybrids were also observed on the site but are not present within the Project impact area. One

southern California black walnut, a special status species, was found within or adjacent to the Project impact area (see Section 4.3.2).

Other trees within or adjacent to the Project impact area are two (2) ornamental junipers (*Juniperus* species), one (1) hibiscus (*Hibiscus* species), two (2) avocados (*Persea americana*), nine (9) Italian cypresses (*Cupressus sempervirens*), two (2) olives (*Olea europaea*), two (2) date palms (*Phoenix dactylifera*), one (1) apricot (*Prunus* species), one (1) jacaranda (*Jacaranda mimosifolia*), and one (1) sapote (*Casimiroa* species).

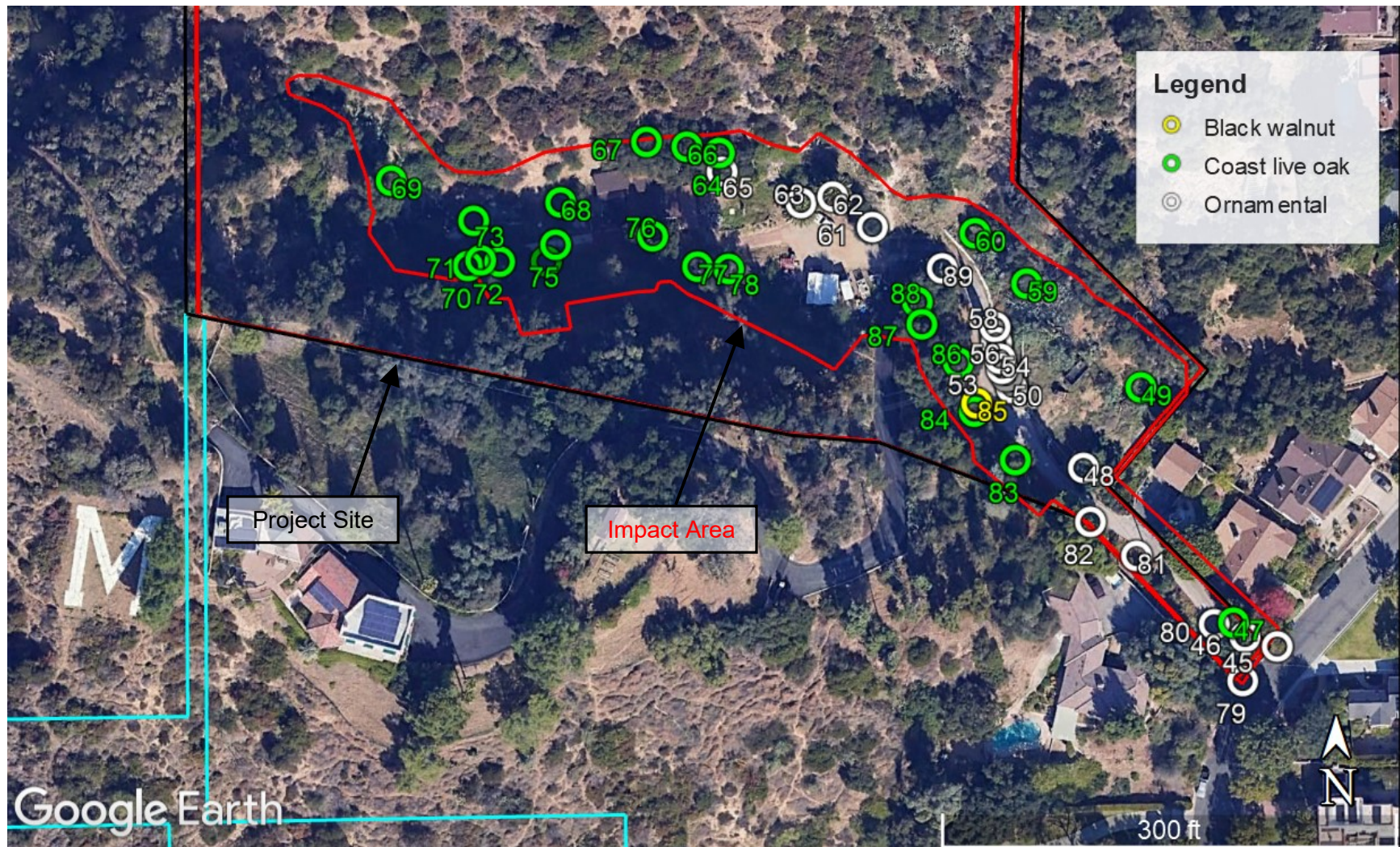


Figure 9. Oak and Non-oak Trees (Google Earth November 2023)

4.4) Wildlife Species

A total of 56 vertebrate wildlife species, plus domestic dog, were detected onsite during surveys in 2019 and 2021. A list is provided in Appendix A.

Eight (8) special status wildlife species, as well as habitat for nesting birds and roosting special status bats, were observed on the site, as described below. Potential for occurrence of other listed and special status wildlife is provided in Appendix C.

4.4.1) Listed and Fully Protected Wildlife

No state and/or federally listed wildlife species were observed during surveys. Surveys included a protocol breeding season survey for coastal California gnatcatcher. No California gnatcatchers were detected as described below. Two (2) other listed, candidate for listing, or fully protected species have a moderate potential to occur on the Project site and are described below. No other listed or fully protected wildlife species have a moderate or high potential to occur (Appendix C).

Coastal California Gnatcatcher

Coastal California gnatcatcher (*Poliioptila californica californica*) is federally listed as threatened and a CDFW Species of Special Concern. This small, insectivorous songbird occurs almost exclusively in several distinctive sub-associations of the coastal sage scrub plant community below 2,500 feet elevation (USFWS 1993). The Project site is not located within the revised critical habitat (USFWS 2007) for this species. The nearest critical habitat is about 9.2 miles south of the Project site.

There are six (6) CNDDDB records for coastal California gnatcatcher within 5 miles of the Project site (CDFW 2021c). Three of the six occurrences are considered extirpated or possibly extirpated by development: EO #23, 1008, and 1015. EO #23 was last observed in 1928 in the Santa Anita Wash near Arcadia about 0.5 miles west of the Project site (exact location unknown) at an elevation of 523 feet. EO #1008 was last observed in 1903 in Eaton Wash, east of Pasadena about 3.4 miles west of the site (exact location unknown) at an elevation of 803 feet. EO #1015 was last observed in 1906 in the vicinity of El Monte about 5.0 miles south of the site (exact location unknown) at an elevation of 300 feet.

The remaining three (3) occurrences are presumed extant: EO #854, 1009, and 1010. EO #854 is in the Santa Fe Dam Regional Park in Irwindale, about 4.8 miles southeast of the site, at an elevation of 500 feet. One adult female and later an adult male were observed in 2007. The CNDDDB notes that this is a historical locality but (prior to the 2007 observation) the species had not been reported from this area for at least 30 years.

EO #1009 is along the San Gabriel River in Irwindale, about 4.0 miles southeast of the site, at an elevation of 553 feet. Observations were recorded from 1906 to 1927 and again in 2010 when one adult was observed. EO #1010 is in a quarry area at the mouth of Fish Canyon, northwest of Azusa, about 4.9 miles east of the site, at an elevation of 760 feet. This occurrence was last observed in 1919 and the CNDDDB notes that large areas of vegetation have been removed due to quarry activity since the observation. Focused surveys in 2011 did not detect any California gnatcatchers at this location.

The northern portion of the site and the southern extension includes potentially suitable habitat for coastal California gnatcatcher. There is minimal potentially suitable habitat within the Project impact area and it is subject to ongoing human disturbance. This species was not detected on the Project site during the protocol breeding season surveys in 2021, or incidentally during other biological surveys in 2019 and 2021 and is considered absent from the site at this time.

Crotch Bumble Bee

Crotch bumble bee (*Bombus crotchii*) was formerly a special status species but became a candidate for state listing as endangered on June 12, 2019. Impacts require incidental take permitting.

This species occurs in open grassland and scrub habitats and nests underground. Food plants include *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, and *Salvia* (Williams et al. 2014). The range of this species includes all of California, but the majority of records are south of San Francisco along the coast and western desert into southern California. There are three (3) CNDDDB records within five (5) miles of the site. The closest observation of this species is from 2020 (EO #340), approximately 2.3 miles east-southeast of the site at the Los Angeles County Arboretum. Another record from 2020 (EO #323) is about 3.9 miles south of the site at the Peck Road Water Conservation Park. The third record (EO #151) was last observed in 1970 and is about 4.2 miles west-northwest of the site at Eaton Canyon (exact location unknown).

Suitable habitat and food plants for the species occur in the northern portion of the site and the southern extension and the species has a moderate potential for occurrence there. However, there is no suitable habitat within the Project impact area and the species is considered absent from that area.

Mountain Lion

The Southern California/Central Coast ESU (evolutionarily significant unit) of mountain lion (*Puma concolor*) became a candidate for listing under the California Endangered Species Act (CESA) on April 21, 2020 and as a candidate is afforded the same protections as listed species. It is also protected under California Fish and Game Code (FGC) section 4800.

Mountain lions occur throughout California and are known to occur in the San Gabriel Mountains. Mountain lions are known to use large areas, with home range sizes in the Santa Monica Mountains averaging 372 kilometers (km)² (92,000 acres) for adult males and 134 km² (33,000 acres) for adult females. Mountain lions will hunt at night, especially when there is human activity nearby. We found no published studies on mountain lion activity patterns within the San Gabriel Mountains during the literature and database searches conducted for this analysis and no reference to ongoing studies for mountain lions were found for the area. Therefore, this analysis uses data from other areas to assess the habitat and potential impacts that may occur from this project.

Mountain lions are exceptionally vulnerable to human disturbance and areas of high human activity have lower occupancy of rare carnivores in general. Mountain lions tend to avoid roads and trails by the mere presence of those features, regardless of how much they are used (Lucas 2020).

The assessment relied on both a literature review and a field survey. The record search included online data sources and interviews with knowledgeable people in the area such as residents and local landowners. The field survey included a search for and an identification of plant communities present on site and in the general area with the composition and density of both native and non-native habitat suitable for use by mountain lions. The criteria for the quality of habitat to support mountain lion use included suitability to provide foraging, breeding/denning, migration, and home range activities. The field survey included 100 percent visual coverage of the study area and a visible buffer around the project site, plus a review of topographic maps, aerial photos and google earth which is large enough to understand the density and spatial ecology of habitat that could reasonably be used by mountain lions near the project.

Mountain lion denning sites are typically located away from development in areas of native plant communities with dense cover, where caves or other natural cavities and rock outcrops are common, and large expanses of surrounding foraging areas suitable to support a reproducing pair with young is present. To be effective ambush predators like mountain lions require dense woody vegetation such as chaparral, coastal sage scrub, or woodlands with a dense understory in which to hide. They do not typically follow prey into open areas, rather they tend to instead wait in dense brush at the edge and ambush prey when they enter the denser vegetation.

A habitat assessment for mountain lions was conducted by biologist Guy Bruyey on July 20, 2019, from 0745 to 1050; weather was clear with temperatures ranging between 67 and 76° F and winds of 1 to 4 mph. The entire site was visually assessed for potential to support habitat for mountain lions, including foraging, breeding/denning, migration, and home range activities. The field survey included 100 percent visual coverage of the study area, which included the project site and the visible adjacent buffer area.

Mountain lion observations are not tracked in the CNDDDB, but there have been recent news reports of mountain lions seen in Monrovia (Los Angeles Times, June 23, 2020; Patch, January 6, 2020; WTHR, November 20, 2020). However, a mountain lion has been observed on the site by the current resident (pers. comm.). Mule deer (*Odocoileus hemionus*), the mountain lion's primary prey, were frequently observed on the site during surveys, both within the canyon bottom and on the steep slopes, and usually in groups. iNaturalist⁴ records 3 sightings of mountain lions in the city of Monrovia. The closest (Jun 8, 2021, 2:43 am) along Crescent Drive and El Nido Avenue, within blocks of the project, may also be the individual the resident reported to L&L during the assessment. A more recent sighting occurred on November 27th, 2023, along Lower Clamshell TKTL and a much earlier sighting occurred on Dec. 12, 2020, along Oakglade Drive.

The northern part of the project site includes mature laurel sumac scrub on the eastern edge closest to other developments and roadways. The northwestern portion of the site includes the burn area which is recovering but lacks dense mature vegetation where mountain lions could be expected to forage regularly. No mountain lions, natal dens, or evidence of presence was observed during the habitat assessment nor during any of the 2019 or 2021 surveys.

The proposed development is entirely within a previously disturbed area of ornamental and non-native vegetation and oak trees and would not result in loss or direct impacts to native plant communities or areas that would be habitat for mountain lions. Because the proposed development is within an already developed parcel and immediately adjacent to existing houses and paved roads it does not serve as a habitat, linkage or wildlife movement corridor between habitat blocks. While mountain lions occasionally move through the area, it isn't likely that they would use the area for reproduction or during dispersal. Areas of suitable habitat for mountain lions such as dense laurel sumac scrub is either not present or is present only in the northern portion of the parcel which would not be impacted by the project. No direct impacts to mountain lion habitat is proposed or would occur as a result from the proposed project.

Areas within the proposed development contain grasses, ornamental vegetation and oaks which lack the dense ground level shelter needed for lying in wait, so while mountain lions are known to move through the area and mule deer are present it isn't likely that a great deal of foraging occurs within the planned project area.

The further development of this parcel from a single-family residence to 3 residential units would increase human presence, noise, traffic on the parcel and in the general area particularly during the construction period, but also afterwards when the units are occupied. The entire 7.8-acre parcel including the area not planned for impact represents less than 0.002% of a female mountain lion average home range size and is immediately adjacent to other developed areas

⁴ [Mountain Lion from Monrovia, CA, USA on June 08, 2021 at 02:43 AM by Dave Campbell · iNaturalist](#)

and human land uses. Because it is generally accepted that developed areas are used less by mountain lions and because the project is already developed and surrounded by other developed areas it is not expected that the project would cause new habitat fragmentation and it will not extend development further into a wildland area. Rather the proposed project makes use of an existing developed residential property which is consistent with current conservation goals of increasing human land use within areas which have already been converted from native habitat.

Indirect impacts could occur if light or noise from construction were to extend into adjacent mountain lion habitat areas to the north and west of the proposed development. To avoid potential edge effects to mountain lions from night lighting or construction noise and developments, Mitigation Measure BIO-2 is provided, which limits time of construction to daytime hours, requires fencing and trash and debris control during construction, and restricts night lighting spillover in the adjacent parks and undeveloped areas. In addition, Mitigation Measure BIO-3 has also been provided, as recommended by the CDFW, to provide for proper notification of large wildlife, including mountain lions, due to the location of the site at the foothills of the San Gabriel mountains. These mitigation measures will reduce the potential impacts to a less than significant level.

4.4.2) Special Status Wildlife

Eight (8) special status wildlife species, all birds, were observed during the 2019 and/or 2021 surveys (Figure 10, Appendix B). Additional information regarding these species is provided in Appendix C. CNDDDB forms (if required) are included in Appendix E. These species and their current conservation status are:

- Allen's hummingbird (*Selasphorus sasin*; USFWS Bird of Conservation Concern),
- Cooper's hawk (*Accipiter cooperii*; CDFW Watch List species),
- Costa's hummingbird (*Calypte costae*; CDFW Special Animal, USFWS Bird of Conservation Concern),
- Northern harrier (fly over) (*Circus hudsonius*; CDFW Species of Special Concern, USFWS Bird of Conservation Concern),
- Nuttall's woodpecker (*Dryobates nuttallii*; USFWS Bird of Conservation Concern),
- Oak titmouse (*Baeolophus inornatus*; USFWS Bird of Conservation Concern),
- Wrentit (*Chamaea fasciata*; USFWS Bird of Conservation Concern),
- Yellow warbler (*Setophaga petechia*; CDFW Species of Special Concern).

Other special status wildlife species have not been observed on the site during surveys, but have a low to moderate, moderate, or high potential to occur (Appendix C). These species are:

- San Gabriel chestnut snail (*Glyptostoma gabrielense*; CDFW Special Animal),

- Coast Range newt (*Taricha torosa*; CDFW Species of Special Concern),
- Southern California legless lizard (*Anniella stebbinsi*; CDFW Species of Special Concern),
- California glossy snake (*Arizona elegans occidentalis*; CDFW Species of Special Concern),
- Coastal whiptail (*Aspidoscelis tigris stejnegeri*; CDFW Species of Special Concern),
- Coast horned lizard (*Phrynosoma blainvillii*; CDFW Species of Special Concern),
- Black swift (foraging) (*Cypseloides niger*; USFWS Bird of Conservation Concern, CDFW Species of Special Concern),
- Lewis's woodpecker (foraging and nesting) (*Melanerpes lewis*; USFWS Bird of Conservation Concern, CDFW Special Animal),
- Rufous hummingbird (foraging) (*Selasphorus rufus*; USFWS Bird of Conservation Concern, CDFW Special Animal),
- Lawrence's goldfinch (foraging and nesting) (*Spinus lawrencei*; USFWS Bird of Conservation Concern, CDFW Special Animal),
- Western mastiff bat (foraging and roosting) (*Eumops perotis californicus*; CDFW Species of Special Concern),
- Western red bat (foraging and roosting) (*Lasiurus blossevillii*; CDFW Species of Special Concern),
- Hoary bat (foraging and roosting) (*Lasiurus cinereus*; CDFW Special Animal),
- Southern grasshopper mouse (*Onychomys torridus ramona*; CDFW Species of Special Concern).

Most of the terrestrial wildlife species would be more likely to occur in the northern portion of the site or the southern extension rather than in the impact area. Birds may forage and nest throughout the site. The trees in the impact area may be utilized for nesting by some species. Bats may forage throughout the site and may roost in trees or structures within the impact area.

Nesting Birds

Habitat suitable for nesting birds (including raptors) protected by the California Fish and Game Code is present throughout the site and adjacent areas. Birds may nest in trees, shrubs, and other vegetation, in tree cavities, on open ground, or on structures and other surfaces, etc. One (1) active songbird nest was observed during surveys in 2021. This was a Bewick's wren (*Thryomanes bewickii*) nest in ornamental vegetation near the existing driveway. No active songbird nests were observed in 2019. No raptor nests (active or inactive) were observed during surveys in 2019 and 2021.

Roosting Bats

Special status bat species may utilize the site for foraging and roosting. Potential roosting sites include trees and structures within the Project impact area. Roosting includes day roosts, night roosts, maternity roosts, and hibernacula. 4.4.3) Wildlife Corridors

Wildlife corridors link together areas of suitable wildlife habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated “islands” of wildlife habitat. Various studies have concluded that in the absence of habitat linkages that allow movement to adjoining open space areas, some wildlife species (especially the larger and more mobile mammals) will not likely persist over time. Such fragmented or isolated habitat areas hinder the transfer of new individuals and genetic information.

Corridors mitigate the effects of this fragmentation by:

- Allowing animals to move between remaining habitats, thereby permitting depleted populations to be replenished and promoting genetic exchange;
- Providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (fire, disease, etc.) will result in population or local species extinction; and
- Serving as travel routes for individual animals as they move in their home ranges in search of food, water, mates, and other necessary resources.

Wildlife movement activities usually fall into one of three movement categories: dispersal (e.g., juvenile animals from natal areas or individuals extending range distributions), seasonal migration, and movements related to home range activities (e.g., foraging for food or water, defending territories, or searching for mates, breeding areas, or cover).

The Project site is bordered on the north and east by undeveloped land, some of which is conserved open space (Hillside Wilderness Preserve) with additional conserved open space to the north (Arcadia Wilderness Park, Hillside Wilderness Preserve, Monrovia Canyon Park, and Angeles National Forest).

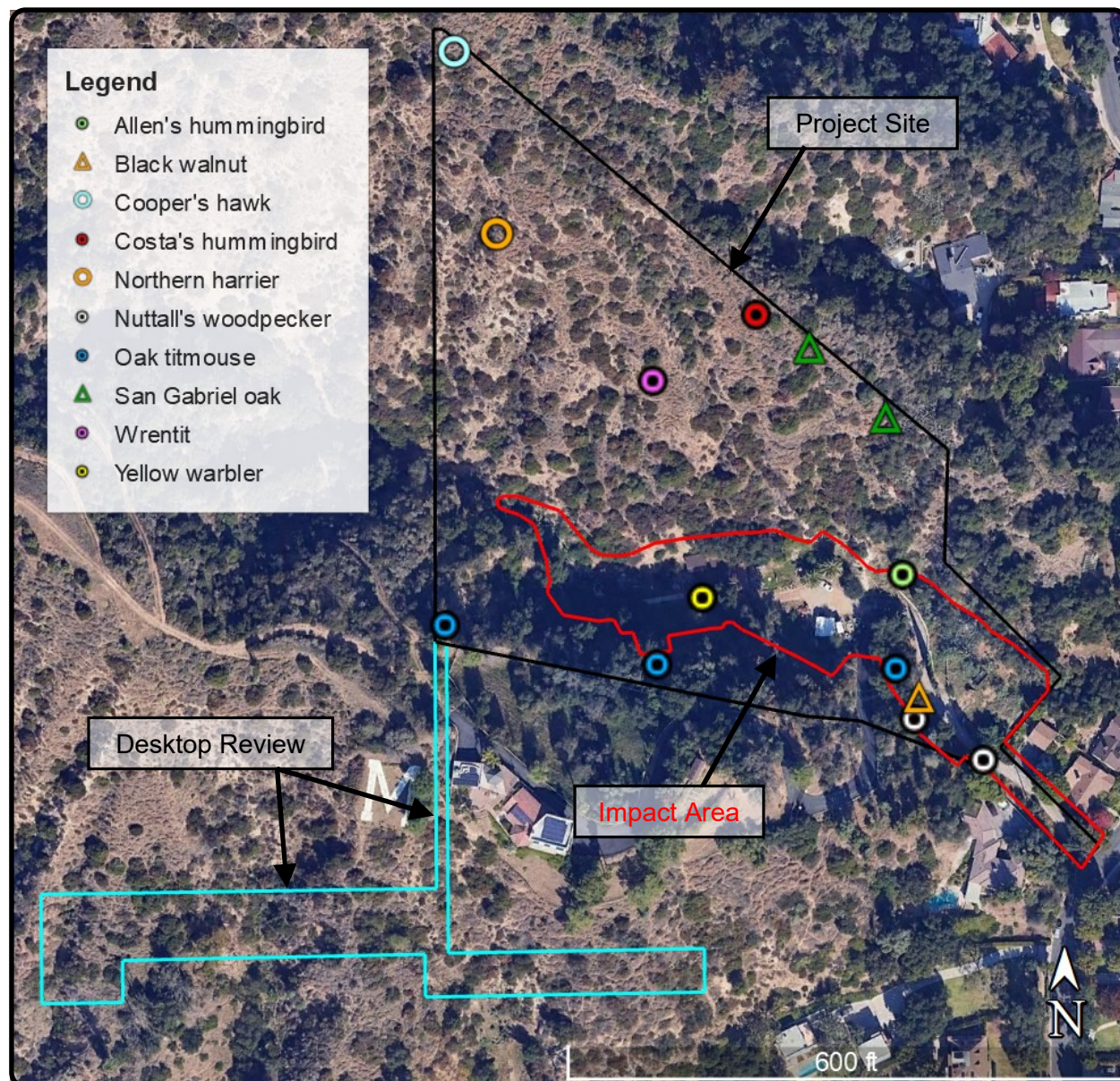
The Project site likely contributes generally to wildlife movement in the area. The site, particularly the undeveloped northern portion, provides native habitat and local movement opportunities for species that live within the site and immediately adjacent undeveloped lands. However, the site does not provide linkage between two habitat blocks and is not within a wildlife corridor.

4.5) Jurisdictional Waters and Wetlands

A jurisdictional delineation was conducted by L&L in 2019 and updated in 2024. A separate jurisdictional delineation report has been prepared and a brief summary of the results is provided here.

Jurisdictional drainages within the study area consist of 0.57 acre of ephemeral CDFW state streambed and RWQCB waters of the state (not including the drainage on the southern extension). No state or federal wetlands or federal waters are present. The jurisdictional area planned for impacts consists of 0.28 acre of ephemeral CDFW streambed and RWQCB state waters (Figure 11). No impacts are planned to the drainage on the southern extension. No state or federal wetlands or federal waters will be impacted by the project as none is present.

Prior to undertaking any Project-related ground disturbing activities, the Project proponent will obtain a CDFW Streambed Alteration Agreement (1602) and a RWQCB Waste Discharge Requirements permit under the Porter-Cologne Water Quality Act.



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INVESTIGATIONS AND MONITORING

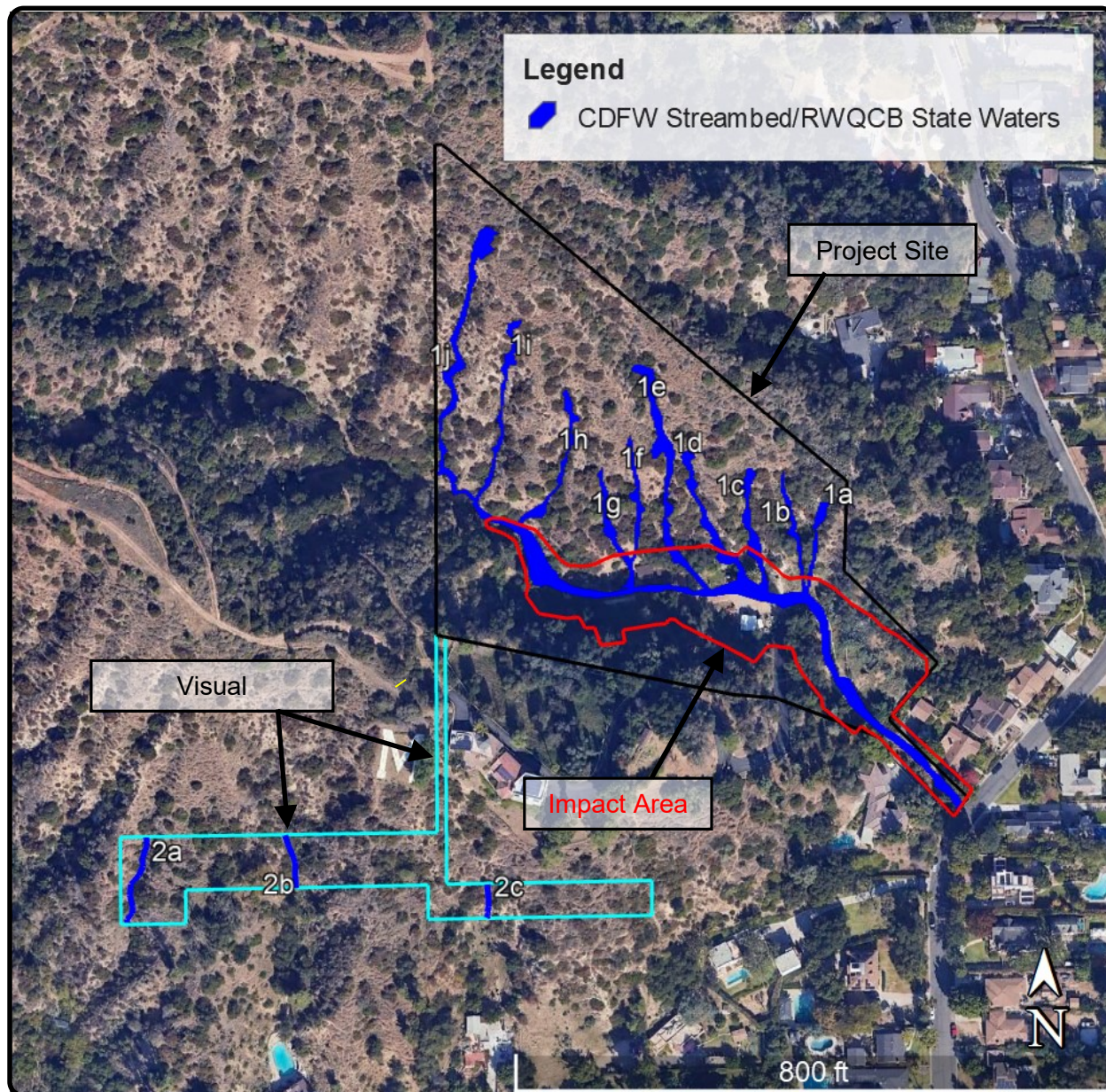
BDIX-19-711

Figure 10

Special Status Species Observations

(Aerial from Google Earth, November 2023)

AIN 850-301-3004, City of Monrovia
County of Los Angeles, California



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BDIX-19-711

Figure 11

Jurisdictional Areas

(Aerial obtained from Google Earth, November 2023)

AIN 850-301-3004, City of Monrovia
County of Los Angeles, California

5.0) SUMMARY AND RECOMMENDATIONS

Sensitive Vegetation Communities

There are no riparian or other sensitive vegetation communities on the site and none will be impacted.

Listed and Special Status Plants

Braunton's milk-vetch was not observed during focused surveys, but due to the large population fluctuations noted at CNDDDB occurrences, low levels of precipitation in 2021, and the difficult terrain in the northern portion of the site, the presence of this species cannot be ruled out. Braunton's milk-vetch has a moderate potential for occurrence on the site but there is no suitable habitat within the Project impact area and this species is considered absent from that area. Braunton's milk-vetch, if present, would not be impacted by implementation of the Project.

One southern California black walnut tree is present on the site adjacent to the existing driveway and within the impact area. It is unknown if this is a natural occurrence. Impacts to this tree would not substantially affect regional populations and would be less than significant.

San Gabriel oak is present in the northern portions of the site but is not present in the Project impact area and would not be impacted by implementation of the Project.

Other special status plants have not been observed on the site, but several have some potential to occur. These species would likely occur on the northern portion of the site and/or on the southern extension outside of the Project impact area. Impacts, if any, would not substantially affect regional populations or result in loss of substantial areas of potential habitat and would be less than significant.

Oaks and Other Trees

There are 23 coast live oak trees within or adjacent to the Project impact area. Impacts to oak trees are regulated under the Madison Specific Plan and require evaluation by an arborist, preparation and City approval of a Landscape and Revegetation Plan, and replacement of impacted trees at a 4:1 ratio, as well as other requirements. There is one (1) southern California black walnut tree within the Project impact area as noted above. An additional 21 non-native ornamental trees are present in or adjacent to the impact area.

California Gnatcatcher

The northern portion of the site and the southern extension includes potentially suitable habitat for coastal California gnatcatcher but there is no suitable habitat within the Project impact area. This species was not detected on the Project site during the protocol breeding season surveys

in 2021 and is considered absent from the site at this time. Implementation of the Project would have a less-than-significant impact on California gnatcatcher.

Crotch Bumble Bee

Suitable habitat and food plants for Crotch bumble bee occur in the northern portion of the site and the southern extension and the species has a moderate potential for occurrence there. However, there is no suitable habitat within the Project impact area and the species is considered absent from that area. Implementation of the Project would not have a significant impact on Crotch bumble bee.

Mountain Lion

Mountain lions are present in the region and it has a low-moderate potential to occur on the site. Adult mountain lions would be expected to avoid or flee from construction activities and other disturbance and the potential for harm to individuals would be largely limited to natal dens with cubs. This species could potentially move through or forage within the impact area, but due to the proximity of ongoing human disturbance, it would not den there and any potential impact would be less than significant. Large areas of suitable habitat for mountain lion are present in conserved open space to the north of the Project site and loss of the habitat within the Project impact area would not be a significant impact.

Other Special Status Wildlife

Eight (8) special status wildlife species were observed during the 2019 and/or 2021 surveys and several other species have a moderate or high potential to occur. Most of the terrestrial wildlife species would be more likely to occur in the northern portion of the site and/or the southern extension rather than in the impact area. Impacts, if any, would be less than significant.

Nesting Birds

There is potential habitat for nesting birds throughout the site and adjacent areas, including the impact area. Nesting birds include common and special status species that may nest on the Project site and all are protected under the federal Migratory Bird Treaty Act and California Fish and Game Code. Since potentially suitable habitat for nesting birds is common in the region, loss of the suitable habitat on the Project would be a less-than-significant impact.

Adult birds will typically avoid or flee from construction activities and other disturbance and the potential for harm during construction would generally be limited to nests, eggs, and dependent juveniles. The following mitigation measure is recommended to avoid and minimize potential impacts to nesting birds:

Project activities, including vegetation trimming/clearing, ground disturbance, and demolition, shall be avoided during the nesting season (February 1 to September 15). If the nesting season cannot be avoided, a nesting bird clearance survey shall be conducted by a qualified biologist within three (3) days prior to the start of Project activities within the nesting season. If active nests are present, an avoidance buffer of 300 feet (for songbirds) or 500 feet (for raptors and special status bird species), or as determined by a biologist, shall be established and maintained until a biologist has verified that juvenile birds are no longer dependent on the nest or the nest has otherwise become inactive. No Project activities shall occur within the avoidance buffer while the nest is active. An active nest is defined as a nest with eggs, chicks, or dependent juveniles, or a nest actively being constructed or utilized for reproduction.

With implementation of the recommended measure, impacts to nesting birds would be less than significant.

Roosting Bats

Special status bat species may utilize the site for foraging and roosting, including trees and structures within the Project impact area. Since potentially suitable habitat for foraging and roosting bats is common in the region, loss of the suitable habitat on the Project would be a less-than-significant impact but roosting special status bats could be injured or killed during Project implementation if they are present in the impact area.

Foraging bats are unlikely to be affected by construction activities and other disturbance and the potential for harm during construction would generally be limited to roosting bats, including day roosts, night roosts, maternity roosts and hibernacula. The following mitigation measure is recommended to avoid and minimize potential impacts to roosting special status bats:

To the extent feasible, demolition or disturbance to suitable bat roosting habitat shall be scheduled between October 1 and February 28, outside of the maternity roosting season. If trees must be encroached during the maternity season (March 1 to September 30), or structures must be removed at any time of the year, a qualified bat specialist shall conduct a pre-construction survey to identify those trees or structures proposed for disturbance that could provide hibernacula or nursery colony roosting habitat for bats.

Each tree or structure identified as potentially supporting an active maternity roost or hibernating colony shall be closely inspected by the bat specialist no greater than seven (7) days prior to tree disturbance to more precisely determine the presence or absence of roosting bats.

If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year, trees or structures shall be brought down in a controlled manner using heavy machinery. In order to ensure the optimum warning for any roosting bats that may still be present, the trees or structures shall be nudged lightly two to three times, with a pause of

approximately 30 seconds between each nudge to allow bats to become active. Trees or structures may then be pushed to the ground slowly under the supervision of a bat specialist.

Felled trees shall remain in place until they are inspected by a bat specialist. Trees that are known to be bat roosts shall not be sawed up or mulched immediately. A period of at least 48 hours shall elapse prior to such operations to allow bats to escape.

Bats shall be allowed to escape prior to demolition of buildings. This may be accomplished by placing one-way exclusionary devices into areas where bats are entering a building that allow bats to exit but not enter the building.

Maternity season lasts from March 1 to September 30. Trees or structures determined to be maternity roosts shall be left in place until the end of the maternity season. A structure containing a hibernating colony shall be left in place until a qualified biologist determines that the bats are no longer hibernating.

The bat specialist shall document all demolition monitoring activities and prepare a summary report to the City upon completion of tree disturbance or building demolition activities. If special status bats are detected during pre-construction surveys, all construction-related activity shall be halted immediately, and the California Department of Fish and Wildlife (CDFW) shall be notified. Work may only resume subsequent to CDFW approval.

With implementation of the recommended measure, impacts to roosting special status bats would be less than significant.

Wildlife Corridors

The site is not within a wildlife corridor and the Project would have no impacts on wildlife corridors.

Jurisdictional Waters and Wetlands

Planned impacts to jurisdictional areas are 0.28 acre of ephemeral CDFW streambeds and RWQCB state waters. No state or federal wetlands or federal waters are present and none will be impacted.

Prior to undertaking any Project-related ground disturbing activities, the Project proponent will obtain a CDFW Streambed Alteration Agreement (1602) and a RWQCB Waste Discharge Requirements permit under the Porter-Cologne Water Quality Act.

6.0) CITY OF MONROVIA STANDARD CONDITIONS

The following City of Monrovia Standard Conditions are intended to reduce direct and indirect impacts to a level that is less than significant.

SC BIO-1 Capture and Handling of Wildlife. The project may require capture, handling, and relocation of wildlife. Pursuant to the California Code of Regulations, title 14, section 650, the project sponsor's qualified biologist must obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with project construction and activities. Details on what activities require a permit, permit application forms, and other information are available from CDFW at <https://wildlife.ca.gov/Licensing/Scientific-Collecting>.

CDFW has the authority to issue permits for the take or possession of wildlife, including mammals; birds, nests, and eggs; reptiles, amphibians, fish, plants; and invertebrates (Fish & G. Code, §§ 1002, 1002.5, 1003). Effective October 1, 2018, a Scientific Collecting Permit is required to monitor project impacts on wildlife resources, as required by environmental documents, permits, or other legal authorizations; and, to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with otherwise lawful activities (Cal. Code Regs., tit. 14, § 650).

SC BIO-2 Special-status Species Preconstruction Survey. The project sponsor shall retain a qualified biologist with experience surveying for coast (Blainville's) horned lizard, coastal whiptail, Southern California legless lizard, California glossy snake, and coast patch-nosed snake. Prior to commencing any project-related ground-disturbing activities, the qualified biologist shall conduct focused surveys for species of special concern (SSC) and suitable habitat no more than one month before the start of any ground-disturbing activities or vegetation removal where there may be impacts to SSC. Project-related activities include construction, equipment and vehicle access, parking, and staging. In addition, the qualified biologist shall conduct daily biological monitoring during any activities involving vegetation clearing or modification of natural habitat. Positive detections of SSC and suitable habitat at the detection location shall be mapped and photographed. The qualified biologist shall provide a summary report of SSC surveys to the City prior to implementing any project-related ground-disturbing activities and vegetation removal. Depending on the survey results, a qualified biologist shall develop species-specific mitigation measures for implementation during the project. All observations of special-status species will be documented and submitted to the CNDDB by reporting any special status species detected by completing and submitting CNDDB Field Survey Forms. This includes all documented occurrences of mountain lion, San Diego desert woodrat, and potential occurrences of Crotch's bumble bee, and other special status species. The City shall ensure the data has been properly submitted, with all data fields applicable filled out, prior to project ground-disturbing activities. The City will require the project sponsor's

qualified biologist's assistance with the required reporting. The project sponsor shall provide CDFW with confirmation of data submittal.

SC BIO-3 Protection Plan. Wildlife should be protected or allowed to move away on its own (non-invasive, passive relocation) to adjacent appropriate habitat within the open space on site or in suitable habitat adjacent to the project area (either way, at least 200 feet from the grading limits). Special status wildlife shall only be captured by a qualified biologist with proper handling permits (see SC BIO-1). The qualified biologist shall prepare a species-specific list (or plan) of proper handling and passive relocation protocols. The list (or plan) of protocols shall be implemented during project construction and activities/biological construction monitoring.

SC BIO-4 Injured or Dead Wildlife. If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area shall stop immediately, the qualified biologist will be notified, and dead or injured wildlife documented. A formal report shall be sent to CDFW and the City within three calendar days of the incident or finding. Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.

SC BIO-5 Entrapment. The project may result in the use of open pipes used as fence posts, property line stakes, signs, etc. CDFW recommends that all hollow posts and pipes be capped to prevent wildlife entrapment and mortality because these structures mimic the natural cavities preferred by various bird species and other wildlife for shelter, nesting, and roosting. Raptor's talons can become entrapped within the bolt holes of metal fence stakes resulting in mortality. Metal fence stakes used on the project site are required to be plugged with bolts or other materials to avoid this hazard.

SC BIO-6 Rodenticides. Second-generation anticoagulant rodenticides shall not be used on site during construction and over the life of the project.

Project Specific Mitigation Measures:

BIO-1 Nesting Birds. If possible, construction activities for the project should avoid the bird and raptor nesting season recommended by CDFW (January 1 through September 15). In the event that vegetation and tree removal or trimming needs to occur between January 1 and September 15, the Project Sponsor shall retain a qualified biologist to conduct a nesting bird survey no more than 3 days prior to commencement of construction, vegetation removal and/or ground disturbing activities (e.g., staging, mobilization, grading). Results of the pre-construction survey shall be submitted to the City's Planning Division and CDFW prior to the commencement of all such construction or ground disturbing activities and the issuance of any permits. The biologist conducting the clearance survey shall document the negative results, if no active bird nests are observed on the project site or within the vicinity during the clearance survey with a

brief letter report, submitted to the City's Planning Division prior to commencement of construction or ground disturbing activities, indicating that no impacts to active bird nests would occur, before construction or ground disturbing activities can proceed.

If an active avian nest is discovered during the pre-construction clearance survey, all construction and ground disturbing activities shall stay outside of a 300-foot buffer around the active nest. For listed raptor species, this buffer shall be 500 feet. All observations of special-status species will be documented and submitted to the CNDDDB by reporting any special status species detected by completing and submitting CNDDDB Field Survey Forms. The City shall ensure the data has been properly submitted, with all data fields applicable filled out, prior to project ground- disturbing activities. The City will require the project sponsor's qualified biologist's assistance with the required reporting. The project sponsor shall provide CDFW with confirmation of data submittal. If active nests are determined to be present, a biological monitor shall be on-site to delineate the boundaries of the buffer area and to monitor the active nest at least twice weekly to ensure that nesting behavior is not adversely affected by construction or ground disturbing activity or until construction activity is completed, whichever comes first. No impacts to active nests and/or nesting habitat shall be allowed without prior approval from CDFW. Monitoring activities shall be reported to the City's Planning Division and CDFW for review and approval monthly until nesting behavior is not adversely affected by construction or ground disturbing activity or all such construction activity is completed, whichever comes first. If, as a result of the monitoring, active nesting habitat is identified and determined to be an impediment to construction activities, CDFW shall be consulted to identify next steps and appropriate protection and compensation approaches. Removal or impact to an active nest or nesting habitat shall not occur without CDFW approval. CDFW may require compensation for any proposed habitat loss. Compensation for habitat loss would increase with the occurrence of any California Species of Special Concern and/or CESA-listed species.

BIO-2 Mountain Lion. As directed by CDFW, a habitat assessment for mountain lion was conducted for the parcel in 2019. As a result of assessment, measures to avoid potential impacts to mountain lions from night lighting or construction noise have been identified. The following measures shall be required to address potential construction-period impacts to the mountain lion, could occur adjacent to the project site in habitat that is suitable for mountain lions for foraging and dispersal or movement events:

- The construction site shall be fenced to exclude wildlife such as mountain lions from entering the development areas.
- Fencing or walls shall be prohibited within areas of native habitat, except where necessary for public safety or habitat protection or restoration. Fencing or walls that do not permit the free passage of wildlife shall be prohibited in any wildlife corridors.

- Construction activities for the project shall be restricted and no work shall occur from 1-hour after sunset to 1-hour before sunrise.
- Trash and debris shall be contained onsite during construction.
- Exterior lighting (except traffic lights, navigational lights, and other similar safety lighting) shall be minimized, restricted to low intensity features, shielded, and directed away from native habitats to minimize impacts on wildlife. Permitted lighting shall conform to the following standards:
 - The minimum necessary to light walkways used for entry and exit to the structures, including parking areas, on the site. This lighting shall be limited to fixtures that do not exceed two feet in height, that are directed downward, and use bulbs that do not exceed 60 watts, or the equivalent, unless a higher wattage is authorized by the City.
 - Security lighting attached to the residence controlled by motion detectors limited to 60 watts, or the equivalent.
 - The minimum lighting necessary for safe vehicular use of the driveway. The lighting shall be limited to 60 watts, or the equivalent.
 - No lighting around the perimeter of the site, no lighting for sports courts or other private recreational facilities, and no lighting for aesthetic purposes is allowed.

In addition, all observations of special-status species will be documented and submitted to the CNDDDB by reporting any special status species detected by completing and submitting CNDDDB Field Survey Forms. The City shall ensure the data has been properly submitted, with all data fields applicable filled out, prior to project ground-disturbing activities. The City will require the project sponsor's qualified biologist's assistance with the required reporting. The project sponsor shall provide CDFW with confirmation of data submittal.

If "take" or adverse impacts to mountain lion cannot be avoided either during Project construction and over the life of the Project, the Proponent should consult CDFW and acquire a CESA Incidental Take Permit (pursuant to Fish & Game Code, Section 2080 *et seq.*).

BIO-3 Mountain Lion and Black Bear Reporting. Due to the location of the site at the foothills of the San Gabriel mountains, any occurrence of mountain lion or black bear spotted in the project area (any location visible from the project site) shall be reported to the South Coast Regional Office of CDFW – (858) 467-4201 or AskR5@wildlife.ca.gov. If the sighting is not during normal business hours, the sighting should first be reported to the local police or sheriff officers. If it is determined during consultation with the CDFW that a mitigation and avoidance plan and/or incidental take permit (ITP) are needed, construction will not proceed until these have been prepared and approved by CDFW and the City.

BIO-4 Preconstruction Bat Survey. Prior to construction activities, a qualified bat specialist shall conduct bat surveys within these areas (plus a 100-foot buffer as access allows) in order to

identify potential habitat that could provide daytime and/or nighttime roost sites, and any maternity roosts. Acoustic recognition technology shall be utilized to maximize detection of bat species to minimize impacts to sensitive bat species. A discussion of the survey results, including negative findings shall be provided to the City. Depending on the survey results, a qualified bat specialist shall discuss potentially significant effects of the project on bats and include species-specific mitigation measures to reduce impacts to below a level of significance (CEQA Guidelines, § 15125). All observations of special-status species will be documented and submitted to the CNDDDB by reporting any special status species detected by completing and submitting CNDDDB Field Survey Forms. The City shall ensure the data has been properly submitted, with all data fields applicable filled out, prior to project ground-disturbing activities. The City will require the project sponsor's qualified biologist's assistance with the required reporting. The project sponsor shall provide CDFW with confirmation of data submittal. Surveys, reporting, and preparation of robust mitigation measures by a qualified bat specialist shall be completed and submitted to the City prior to any project-related ground-disturbing activities or vegetation removal at or near locations of roosting habitat for bats.

BIO-5 Tree Roost Impact Minimization. If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year and could roost in trees at a given location, during tree trimming, trees shall be pushed using heavy machinery prior to using a chainsaw to remove branches. To ensure the optimum warning for any roosting bats that may still be present, trees shall be pushed lightly two or three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. A period of at least 24 hours, and preferable 48 hours, shall elapse prior to such operations to allow bats to escape.

BIO-6 Bat Maternity Roosts. If maternity roosts are found, work shall be scheduled between October 1 and February 28, outside of the maternity roosting season when young bats are present but are yet ready to fly out of the roost (March 1 to September 30).

These mitigation measures shall be added to the site plans as notes labeled "TREE PROTECTION REQUIREMENTS."

BIO-7 Oak Tree Infectious Disease Management. An infectious tree disease management plan shall be developed and implemented prior to initiating project activities. All trees scheduled for pruning shall be inspected prior to start of those activities for contagious tree diseases including but not limited to: thousand canker fungus (*Geosmithia morbida*),⁴⁴ polyphagous shot hole borer (*Euwallacea* spp.),⁴⁵ and goldspotted oak borer (*Agrilus auroguttatus*).⁴⁶ To avoid the spread of infectious tree diseases, diseased trees, or any parts thereof, shall not be transported from the project site without first being treated using best available management practices relevant for each tree disease observed.

BIO-8 Oak Tree Construction Management. The following measures shall be implemented to protect the coast live oak trees prior to and during the construction process. Numbering reference for the oak trees corresponds with the numbering in the arborist report and as shown on Figure 2-5 of this Initial Study/Mitigated Negative Declaration. All work shall be overseen by a certified arborist, who will serve as the arborist for the project (project arborist).

- a. Fencing: Provide protective fencing at the edge of the canopy plus 5 feet. Fencing shall be already installed and inspected by the project arborist prior to the beginning of work on-site. Tree protection fencing shall be a chain link fence with an access gate at least 4 feet high with 2 inch by 6-inch steel posts installed at 8 feet on center. Post locations to be installed under observation by a qualified consulting arborist to avoid root damage.
- b. Signage: Provide a minimum 8.5 inch by 11-inch retroreflective sign spaced a maximum of every 100 feet along each fence perimeter. The signs shall display the following information:
 - I. "TREE PROTECTION ZONE"
 - II. Name and contact information of project owner or authorized representative.
 - III. Mechanical injury and compaction to roots, root flares, trunks, and branches under the dripline of any tree to be retained shall not occur.
 - IV. Lay steel plates across any areas near street trees or under protected trees used for access.
 - V. No construction staging, washout or disposal of construction materials or by products shall be placed within the tree protection zones. Avoid storing soil or material on unprotected natural grade. Containment to be provided for concrete, paint, stucco, and other washout activities.
 - VI. Equipment shall not idle under the driplines of trees. Significant burn can occur to leaves and bark from exhaust and heat.
 - VII. The tree/root protection zone shall be irrigated sufficiently with clean, potable water to keep the tree in good health and vigor before, during and after construction. Trees shall be soaked so that water reaches a depth of 2-3 feet on a monthly basis, starting as soon as possible.
 - VIII. Apply mulch and compost around the trees once every 6 months during construction. Mulch in the form of wood chips is recommended for application over the surface of the soil to 4 inches deep to preserve moisture and improve soil condition.
- c. INSPECTION: Trees shall be inspected on a periodic basis by a qualified tree consultant. The relative age, condition and targets under the tree shall determine the inspection frequency. It is the responsibility of the property owner to establish and implement an appropriate inspection schedule based on the recommendation provided by a qualified arboricultural consultant.

CONCLUSIONS

Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Services?

No Impact. Riparian habitats are those occurring along the banks of rivers, streams, lakes, and other surface water bodies. Sensitive natural communities are natural communities that are considered rare in the region by regulatory agencies, known to provide habitat for sensitive animal or plant species, or known to be important wildlife corridors. The Sawpit Wash is a concrete-lined flood control channel identified as riverine habitat on USFWS's National Wetlands Inventory web mapping application. As the Sawpit Wash is located approximately 350 feet southwest of the project site, it is not within, nor in the immediate vicinity of, the proposed limits of disturbance for project construction and operation.

Mitigation Measures: No mitigation measures are required.

U.S. Fish and Wildlife Service (USFWS). 2020. National Wetlands Inventory. Available at: <https://www.fws.gov/wetlands/data/mapper.html>. Accessed November 6, 2020.

Have a substantial adverse effect on State or Federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. Refer to Response 4.4(b). No wetland features are located on-site. The project site is not located near any marsh, vernal pool, or coastal wetlands, and no hydrology, soils, or vegetation occur on-site that could constitute or support wetlands. In addition, pursuant to Municipal Code 15.28.050, the project would be required to obtain an erosion control permit for any grading that occurs, or unprotected graded surface that remains, during the period of October 15 through April 15. The best management practices (BMPs) required in the erosion control permit would reduce impacts to Sawpit Wash from construction-related runoff to less than significant.

Mitigation Measures: No mitigation measures are required.

Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery site?

Less Than Significant Impact. No identified wildlife corridors or native wildlife nurseries occur within the boundaries of the project site. The project site is very steep and lies on the edge of the urban/wildland interface. Based on its topography and position relative to existing

development in the City of Monrovia, the site does not serve as a significant wildlife movement corridor for any terrestrial wildlife species through the local area or wider region. No impact to migratory wildlife corridors would occur.

Mitigation Measures: No mitigation measures are required.

Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Less Than Significant Impact with Mitigation Incorporated. Coast live oak trees (*Quercus agrifolia*) are protected under the City of Monrovia Oak Tree Preservation Ordinance. According to the City of Monrovia Oak Tree Preservation Ordinance (17.20.40 of the Monrovia Municipal Code) all coast live oak on vacant lots that are 10 inches in diameter or more when measured at 2 feet above the level ground are protected. If trees cannot be avoided the City of Monrovia will review and approve a mitigation plan for any trees to be impacted prior to permit.

Conflict with provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The property does not occur within a Los Angeles County Significant Ecological Area, Habitat Conservation Plan or Natural Communities Conservation Plan area, or other local or regional conservation planning area, and implementation of the project would not have a significant adverse effect on local or regional planning efforts. No impact would occur.

Mitigation Measures: No mitigation measures are required.

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APPENDIX A: PLANT AND WILDLIFE SPECIES OBSERVED

This list includes all plant and vertebrate wildlife species identified on the site during 2019 and 2021 surveys. One asterisk (*) indicates a non-native species; two asterisks (**) indicates a special status species; a question mark (?) indicates uncertainty regarding identification or native/non-native status. The list may not include all of the ornamental plant species found near the existing residence.

Scientific Name

Common Name

VASCULAR PLANTS DICOTYLEDONS

Ferns

FILICALES

Pellaea andromedifolia
Polypodium californicum

FERN FAMILIES (SEVERAL INCLUDED TOGETHER)

Coffee fern
California polypody

Gymnosperms

CUPRESSACEAE

* *Juniperus sp.*
* *Cupressus sempervirens*

CYPRESS FAMILY

Unid. ornamental
Italian cypress

CYCADACEAE

* *Cycus revoluta*

CYCAD FAMILY

Sago palm

PINACEAE

* *Abies species*
* *Pinus species*

PINE FAMILY

Ornamental fir
Ornamental pine

Angiosperms

ADOXACEAE

Sambucus nigra ssp. cerulea
(*S. mexicana*)

MUSKROOT FAMILY

Mexican elderberry, blue elderberry

ANACARDIACEAE

Malosma laurina (Rhus laurina)
Toxicodendron diversilobum

SUMAC or CASHEW FAMILY

Laurel sumac
Western poison oak

APOCYNACEAE

* *Nerium oleander*

DOGBANE FAMILY

Common ornamental oleander

ASTERACEAE

Acourtia microcephala
(*Perezia microcephala*)
Artemisia californica

ASTER FAMILY

Scapellote, perezia
California sagebrush

Scientific Name	Common Name
* <i>Bidens pilosa</i>	Common beggar-ticks
<i>Brickellia californica</i>	California brickellbush
* <i>Carduus pycnocephalus</i>	Italian thistle
* <i>Centaurea melitensis</i>	Tocalote
<i>Erigeron bonariensis</i>	
* (<i>Conyza bonariensis</i>)	Flax-leaved horseweed
<i>Eriophyllum confertiflorum</i>	Golden-yarrow
<i>Gutierrezia californica</i> (<i>G. bracteata</i>)	California matchweed
<i>Hazardia squarrosa</i>	
(<i>Haplopappus squarrosus</i>)	Saw-toothed goldenbush
<i>Helianthus annuus</i>	Western sunflower
<i>Heterotheca grandiflora</i>	Telegraph weed
* <i>Lactuca serriola</i>	Prickly lettuce
<i>Malacothrix saxatilis</i>	Quillwort
<i>Matricaria discoidea</i>	
(<i>Chamomilla suaveolens</i> ,	
* <i>M. matricarioides</i>)	Pineapple weed
<i>Pseudognaphalium californicum</i>	
(<i>Gnaphalium californicum</i>)	California everlasting
<i>Pseudognaphalium luteoalbum</i>	
* (<i>Gnaphalium luteoalbum</i>)	Pearly everlasting
* <i>Sonchus oleraceus</i>	Common sow thistle
* <i>Taraxacum officinale</i>	Common dandelion
BIGNONIACEAE	TRUMPET-CREEPER or JACARANDA FAMILY
* <i>Jacaranda mimosifolia</i>	Blue jacaranda
BORAGINACEAE	BORAGE OR WATERLEAF FAMILY
<i>Amsinckia intermedia</i>	
(<i>A. menziesii</i> var. <i>intermedia</i>)	Large flower rancher's fiddleneck
<i>Phacelia cicutaria</i>	Caterpillar phacelia
<i>Phacelia minor</i>	Wild Canterbury bells
<i>Phacelia ramosissima</i>	Branching phacelia
BRASSICACEAE	MUSTARD FAMILY
* <i>Brassica juncea</i>	India mustard
* <i>Hirschfeldia incana</i>	Shortpod mustard
(<i>Brassica geniculata</i>)	
* <i>Lobularia maritima</i>	Sweet alyssum
* <i>Sisymbrium orientale</i>	Wild mustard, hare's ear cabbage
CACTACEAE	CACTUS FAMILY
<i>Opuntia littoralis</i>	
(includes <i>O. occidentalis</i>)	Coast prickly pear
CAPRIFOLIACEAE	HONEYSUCKLE FAMILY
<i>Lonicera subspicata</i>	Southern honeysuckle
CARYOPHYLLACEAE	PINK FAMILY, CARNATION FAMILY

Scientific Name	Common Name
* <i>Stellaria media</i>	Common chickweed
CHENOPODIACEAE	GOOSEFOOT FAMILY
* <i>Chenopodium album</i>	Lamb's quarters, common goosefoot
* <i>Salsola tragus</i>	Russian thistle
CONVOLVULACEAE	MORNING-GLORY FAMILY
<i>Cuscuta californica</i>	Chaparral dodder, witch's hair
CRASSULACEAE	STONECROP FAMILY
<i>Crassula connata</i> (C. erecta)	Pygmy-weed, pygmy stonecrop
* <i>Crassula ovata</i>	Jade plant
CUCURBITACEAE	GOURD FAMILY, CUCUMBER FAMILY
<i>Marah macrocarpa</i>	Chilicothe, wild cucumber
EUPHORBIACEAE	SPURGE FAMILY
<i>Croton setiger</i> (C. setigerus, <i>Eremocarpus setiger</i> , E. <i>setigerus</i>)	Turkey-mullein, doveweed
* <i>Euphorbia species</i> <i>Euphorbia crenulata</i>	Ground spurge Chinese caps
FABACEAE	LEGUME FAMILY, PEA FAMILY
* <i>Acacia baileyana</i>	Cootamundra wattle
<i>Acmispon glaber</i> var. <i>brevialutus</i> (<i>Lotus scoparius</i> ssp. <i>brevialutus</i>)	Deerweed
<i>Lupinus truncatus</i>	Collar lupine
FAGACEAE	OAK FAMILY
<i>Quercus agrifolia</i>	Coast live oak
<i>Quercus berberidifolia</i> (Q. dumosa)	Scrub oak
** <i>Quercus durata</i> var. <i>gabrielensis</i>	San Gabriel oak
GERANIACEAE	GERANIUM FAMILY
* <i>Erodium cicutarium</i>	Redstem filaree
* <i>Geranium species</i>	Crane's-bill
GROSSULARIACEAE	GOOSEBERRY FAMILY, CURRANT FAMILY
<i>Ribes aureum</i>	Golden currant
HAMAMELIDACEAE	WITCH HAZEL FAMILY
* <i>Liquidambar species</i>	Sweetgum
JUGLANDACEAE	WALNUT FAMILY
** <i>Juglans californica</i>	Southern California black walnut

Scientific Name	Common Name
LAMIACEAE	MINT FAMILY
* <i>Lamium amplexicaule</i>	Common henbit
<i>Salvia columbariae</i>	Chia
<i>Salvia mellifera</i>	Black sage
<i>Stachys bullata</i>	California hedge-nettle
LAURACEAE	LAUREL FAMILY
* <i>Persea americana</i>	Avocado
MALVACEAE	MALLOW FAMILY
* <i>Hibiscus species</i>	Unid. hibiscus
MYRSINACEAE	MYRSINE FAMILY
* <i>Lysimachia (Anagallis) arvensis</i>	Scarlet pimpernel
OLEACEAE	OLIVE FAMILY
* <i>Jasminum polyanthum</i>	Pink jasmine
* <i>Ligustrum species</i>	Privet
* <i>Olea europaea</i>	Russian olive
ONAGRACEAE	EVENING-PRIMROSE FAMILY
<i>Camissoniopsis species</i>	Sun cup
OXALIDACEAE	OXALIS FAMILY
* <i>Oxalis pes-caprae</i>	Bermuda buttercup
PLANTAGINACEAE	PLANTAIN FAMILY
<i>Keckiella cordifolia</i>	Climbing bush-penstemon
PLUMBAGINACEAE	LEADWORT FAMILY
* <i>Plumbago species</i>	Plumbago
POLYGONACEAE	BUCKWHEAT FAMILY
<i>Eriogonum fasciculatum</i> var. <i>polifolium</i>	California buckwheat
PORTULACACEAE	PURSLANE FAMILY
* <i>Portulaca oleracea</i>	Common purslane
RANUNCULACEAE	BUTTERCUP FAMILY
<i>Delphinium cardinale</i>	Scarlet larkspur
RHAMNACEAE	BUCKTHORN FAMILY
<i>Ceanothus species</i>	Ceanothus
<i>Rhamnus ilicifolia</i>	Hollyleaf redberry
ROSACEAE	ROSE FAMILY
<i>Adenostoma fasciculatum</i>	Chamise
<i>Cercocarpus betuloides</i>	Birch-leaf mountain-mahogany

Scientific Name

Common Name

Heteromeles arbutifolia
* *Prunus species*
* *Pyracantha coccinea*

Toyon, Christmas berry
Apricot
Firethorn

RUBIACEAE

MADDER FAMILY, COFFEE FAMILY

Galium angustifolium
*? *Galium aparine*

Narrowly leaved bedstraw
Goose grass, annual bedstraw

RUTACEAE

RUE FAMILY, CITRUS FAMILY

* *Casimiroa species*
* *Citrus species*

Sapote
Unid. citrus

SOLANACEAE

NIGHTSHADE FAMILY

* *Nicotiana glauca*
Solanum douglasii
Solanum xanti

Tree tobacco
Nightshade
Chaparral nightshade

MONOCOTYLEDONS

AGAVACEAE

CENTURY PLANT FAMILY, AGAVE FAMILY

* *Agave americana*
Hesperoyucca whipplei
(*Yucca whipplei*)

Century plant
Chaparral yucca

ARECACEAE

PALM FAMILY

* *Phoenix dactylifera*

Date palm

POACEAE

GRASS FAMILY

* *Arundo donax*
* *Avena species*
* *Avena barbata*
Bromus carinatus
* *Bromus diandrus (B. rigidus)*
* *Bromus madritensis ssp. rubens*
(*B. rubens*)
* *Bromus tectorum*
* *Cynodon dactylon*
* *Digitaria sanguinalis*
Elymus condensatus
(*Leymus condensatus*)
Festuca perennis (Lolium multiflorum,
L. perenne, L. p. ssp. perenne, L. p.
ssp.
* *multiflorum)*
Melica imperfecta
* *Schismus barbatus*
Stipa cernua (Nassella cernua)

Giant reed
Unid. wild oat
Slender wild oat
California brome
Ripgut brome
Red brome

Cheatgrass
Bermuda grass
Hairy crabgrass

Giant wild-rye

Awned Italian ryegrass
Little California melica, common melic
Mediterranean grass
Nodding needle grass

Scientific Name

Common Name

VERTEBRATES

Reptiles

Colubridae

Pituophis catenifer

Colubrid Snakes

Gopher snake

Phrynosomatidae

Sceloporus occidentalis

Uta stansburiana

Spiny Lizards

Western fence lizard

Side-blotched lizard

Birds

Accipitridae

** *Accipiter cooperii*

Buteo jamaicensis

** *Circus hudsonius* (*C. cyaneus*)

Hawks, Eagles, and Harriers

Cooper's hawk

Red-tailed hawk

Northern harrier (fly over)

Aegithalidae

Psaltirparus minimus

Long-tailed Tits

Bushtit

Apodidae

Aeronautes saxatalis

Swifts

White-throated swift

Cardinalidae

Pheucticus melanocephalus

Piranga ludoviciana

Cardinals

Black-headed grosbeak

Western tanager

Cathartidae

Cathartes aura

Vultures

Turkey vulture

Columbidae

Zenaida macroura

Pigeons and Doves

Mourning dove

Corvidae

Aphelocoma californica

Corvus brachyrhynchos

Corvus corax

Crows and Jays

California scrub jay

American crow

Common raven

Fringillidae

Spinus (Carduelis) psaltria

Spinus (Carduelis) tristis

Haemorhous (Carpodacus) mexicanus

Finches

Lesser goldfinch

American goldfinch

House finch

Hirundinidae

Stelgidopteryx serripennis

Swallows

Northern rough-winged swallow

Scientific Name	Common Name
Icteridae	Blackbirds
<i>Icterus cucullatus</i>	Hooded oriole
Mimidae	Mockingbirds
<i>Mimus polyglottos polyglottos</i>	Northern mockingbird
Odontophoridae	Quail
<i>Callipepla californica californica</i>	California quail
Paridae	Chickadees and Titmice
** <i>Baeolophus inornatus</i>	Oak titmouse
Parulidae	Wood Warblers
<i>Setophaga coronata</i>	Yellow-rumped warbler
** <i>Setophaga petechia</i>	Yellow warbler
Passerellidae	New World Sparrows
<i>Chondestes grammacus</i>	Lark sparrow
<i>Melospiza crissalis</i>	California towhee
<i>Pipilo maculatus</i>	Spotted towhee
<i>Zonotrichia leucophrys</i>	White-crowned sparrow
Picidae	Woodpeckers
<i>Colaptes auratus</i>	Northern flicker
** <i>Dryobates (Picoides) nuttallii</i>	Nuttall's woodpecker
<i>Melanerpes formicivorus</i>	Acorn woodpecker
Poliophtidae	Gnatcatchers
<i>Poliophtila caerulea</i>	Blue-gray gnatcatcher
Psitticidae	Parrots
* <i>Amazona autumnalis</i>	Red-lored Amazon parrot
Ptiliognatidae	Silky-flycatchers
<i>Phainopepla nitens</i>	Phainopepla
Pyronatidae	Bulbuls
* <i>Pycnonotus jocosus</i>	Red-whiskered bulbul
Regulidae	Kinglets
<i>Regulus calendula</i>	Ruby-crowned kinglet
Sturnidae	Starlings
* <i>Sturnus vulgaris</i>	European starling
Timaliidae	Babblers
** <i>Chamaea fasciata</i>	Wrentit

Scientific Name**Common Name**

Trochilidae

Hummingbirds

Calypte anna

Anna's hummingbird

** *Calypte costae*

Costa's hummingbird

** *Selasphorus sasin*

Allen's hummingbird

Troglodytidae

Wrens

Thryomanes bewickii

Bewick's wren

Troglodytes aedon

House wren

Turdidae

Thrushes

Catharus guttatus

Hermit thrush

Sialia mexicana

Western bluebird

Turdus migratorius

American robin

Tyrannidae

Tyrant Flycatchers

Myiarchus cinerascens

Ash-throated flycatcher

Sayornis nigricans

Black phoebe

Tyrannus vociferans

Cassin's kingbird

Mammals

Canis familiaris

Domestic dog

Canis latrans

Coyote

Cervidae

Deer

Odocoileus hemionus

Mule deer

Geomyidae

Pocket Gophers

Thomomys bottae

Botta's pocket gopher (sign)

Sciuridae

Squirrels

Spermophilus beecheyi

California ground squirrel

Ursidae

Bears

Ursus americanus

American black bear (sign)

APPENDIX B: SPECIAL STATUS SPECIES OBSERVATIONS

Summary of special status species observations from 2019 and 2021 surveys.

Species	Date	GPS Coordinates (decimal degrees)	Elevation (feet, approx)	Observation
PLANTS				
Southern California black walnut <i>Juglans californica</i>	2019/2021	34.158505, -118.012642	721	1 tree
San Gabriel oak or hybrid <i>Quercus durata</i> var <i>gabrielensis</i>	2021	34.159326, -118.012760	829	2 shrubs
		34.159531, -118.013031	868	1 shrub
WILDLIFE				
Allen's hummingbird <i>Selasphorus sasin</i>	04.13.2021	34.158870, -118.012695	746	1 adult male
Cooper's hawk <i>Accipiter cooperii</i>	03.31.2021	34.160399, -118.014293	1029	1 adult
Costa's hummingbird <i>Calypte costae</i>	06.03.2021	34.157933, -118.013215	885	1 adult male
Northern harrier <i>Circus hudsonius</i>	05.19.2021	34.159864, -118.014042	937	1 adult
Nuttall's woodpecker <i>Dryobates nuttallii</i>	07.20.2019	34.158326, -118.012408	706	1 adult male
	03.24.2021	34.158446, -118.012653	723	1 adult male
	06.03.2021	Same area	723	1 adult female
Oak titmouse <i>Baeolophus inornatus</i>	07.20.2019	34.158594, -118.012719	727	1 adult male
	03.24.2021	34.158606, -118.013566	771	1 adult male
	05.19.2021	34.158722, -118.014319	771	1 adult female
Wrentit <i>Chamaea fasciata</i>	07.20.2019	34.159702, -118.014485	883	1 adult
	03.16.2021	34.159439, -118.013582	862	1 adult
	05.03.2021	Same area	862	1 adult
Yellow warbler <i>Setophaga petechia</i>	06.03.2021	34.158802, -118.013406	751	1 adult male

APPENDIX C: SPECIAL STATUS SPECIES POTENTIALS FOR OCCURRENCE

The analysis of potentials for occurrence for plant species is intentionally conservative because rainfall was very low in 2021 and plants may not have grown or flowered. Also portions of the site are extremely steep and difficult to survey and plants in these areas may not have been observed.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Plants				
<i>Acanthoscyphus parishii</i> var. <i>parishii</i> Parish's oxytheca	Annual herb. Sandy or gravelly soils in chaparral, lower montane coniferous forest at 1220-2600m elevation. LA, San Bernardino, Ventura Cos. Not tracked in CNDDB.	Jun-Sep	Fed: None Calif: S3S4 CRPR: 4.2	Not expected. Potentially suitable habitat, well below elevation range, not observed during surveys.
<i>Anomobryum julaceum</i> Slender silver moss	Moss. Damp rock and soil on outcrops, usually on roadcuts, broadleafed upland forest, lower montane coniferous forest, North Coast coniferous forest at 100-1000m elevation. LA and Santa Barbara Cos., northern CA.	Not applicable	Fed: None Calif: S2 CRPR: 4.2	Not expected. No or marginal suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Arctostaphylos glandulosa</i> ssp. <i>gabrielensis</i> San Gabriel manzanita	Perennial evergreen shrub. Rocky areas in chaparral at 595-1500m elevation. LA, Santa Barbara, San Bernardino Cos.	Mar	Fed: None Calif: S3 CRPR: 1B.2 USFS: S BLM: S	Not expected. Potentially suitable habitat, well below elevation range, one documented occurrence within 5 mi. (EO#6) in the Angeles National Forest at an elevation of 5000 feet, not observed during surveys.
<i>Arctostaphylos parryana</i> ssp. <i>tumescens</i> Interior manzanita	Perennial evergreen shrub. Montane chaparral, cismontane woodland at 2100-2310m elevation. Los Angeles and San Bernardino Cos. Not tracked in the CNDDB.	Feb-Apr	Fed: None Calif: S3S4 CRPR: 4.3 USFS: S	Not expected. Potentially suitable habitat, well below elevation range, not observed during surveys.
<i>Asplenium vespertinum</i> Western spleenwort	Perennial rhizomatous fern. Rocky soils and moist, shady areas in chaparral, cismontane woodland, coastal scrub at 180-1000m elevation. Southern CA and Baja. Not tracked in CNDDB.	Feb-Jun	Fed: None Calif: S4 CRPR: 4.2	Low. Potentially suitable habitat, not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Astragalus brauntonii</i> Braunton's milk vetch	Perennial herb. Scattered in southern California foothills, usually in chaparral, also coastal scrub, valley and foothill grassland, recent burns or disturbed areas; Ventura, LA, Orange Counties; usually on sandstone with carbonate layers. Elevation 4-640m.	Jan-Aug	Fed: END Calif: S2 CRPR: 1B.1	Moderate (northern portion of site and southern extension); absent (project impact area). Potentially suitable habitat in northern portion of site, no suitable habitat within project impact area 4 documented occurrences within 5 mi., not observed during focused surveys. Designated critical habitat is located about 0.5 mi. N.
<i>Atriplex serenana</i> var. <i>davidsonii</i> Davidson's saltscale	Annual herb. Alkaline soils in coastal bluff scrub, coastal scrub, floodplains with alkali scrub, alkali playas, vernal pools, and alkali grasslands; Channel Islands, coastal and cismontane southern California; 10-200m elevation.	Apr-Oct	Fed: None Calif: S1 CRPR: 1B.2	Not expected. No or marginal suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Berberis nevini</i> Nevin's barberry	Perennial evergreen shrub. Sandy or gravelly soils in chaparral, coastal scrub, cismontane woodland, riparian scrub at 70-825m elevation. Scattered localities in LA, San Bernardino, Riverside, & San Diego Co.	Mar-Jun can ID all year	Fed: END Calif: END, S1 CRPR: 1B.1	Low. Potentially suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Calochortus catalinae</i> Catalina mariposa-lily	Perennial bulbiferous herb. Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland at 15-700m elevation. LA, Orange, Santa Barbara, San Bernardino, San Diego, Ventura Co, some Channel Islands. Not tracked in CNDDB.	(Feb)Mar-Jun	Fed: None Calif: S3S4 CRPR: 4.2	Low to moderate. Potentially suitable habitat, not observed during surveys.
<i>Calochortus clavatus</i> var. <i>gracilis</i> Slender mariposa lily	Perennial bulbiferous herb. Openings in chaparral, coastal scrub, valley and foothill grassland. 320-1000m elevation. Los Angeles and Ventura Counties. Southern base of San Gabriel Mountains.	Mar-June(Nov)	Fed: None Calif: S2S3 CRPR: 1B.2 USFS: S BLM: S	Low. Potentially suitable habitat, at lower end of elevation range, no documented occurrences within 5 mi., not observed during surveys.
<i>Calochortus palmeri</i> var. <i>palmeri</i> Palmer's mariposa-lily	Perennial bulbiferous herb. Mesic soils in chaparral, lower montane coniferous forest, meadows and seeps at 710-2390m elevation. Kern, LA, Riverside, Santa Barbara, San Bernardino, San Luis Obispo, Ventura Co.	Apr-Jul	Fed: None Calif: S2 CRPR: 1B.2 USFS: S BLM: S	Not expected. Potentially suitable habitat, well below elevation range, no documented occurrences within 5 mi., not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Calochortus plummerae</i> Plummer's mariposa lily	Perennial bulbiferous herb. Granitic rocky soils in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, valley and foothill grassland at 100-1700m elevation. LA, Orange, Riverside, San Bernardino, Ventura Co.	May-Jul	Fed: None Calif: S4 CRPR: 4.2	Moderate. Potentially suitable habitat, 8 documented occurrences within 5 mi. (closest is 0.3 mi. west), not observed during surveys.
<i>Calochortus striatus</i> Alkali mariposa lily	Perennial bulbiferous herb. Alkaline, mesic soils in chaparral, chenopod scrub, Mojavean desert scrub, meadows and seeps at 70-1595m elevation. LA, San Bernardino, Inyo, Kern, and Tulare Cos. Alkali meadows, ephemeral washes, vernal depressions and seeps. South Sierra Nevada, Mojave Desert, north base of the San Bernardino Mountains, south San Joaquin Valley, and southern Nevada.	Apr-Jun	Fed: None Calif: S2S3 CRPR: 1B.2 USFS: S BLM: S	Not expected. No or marginal suitable habitat, no documented occurrences within 5 mi., outside of known geographic range, not observed during surveys.
<i>Calochortus weedii</i> var. <i>intermedius</i> Intermediate mariposa lily	Perennial bulbiferous herb. Rocky, calcareous soils in chaparral, coastal scrub, valley and foothill grassland at 105-855m elevation. LA, Orange, San Bernardino, and western Riverside Co.	May-Jul	Fed: None Calif: S2 CRPR: 1B.2 USFS: S	Low. Potentially suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Castilleja gleasoni</i> Mt. Gleason paintbrush	Hemiparasitic perennial herb. Granitic soils in chaparral, lower montane coniferous forest, and pinyon and juniper woodland at 665-2170m elevation. LA Co.	May-Jun(Sep)	Fed: None Calif: Rare, S2 CRPR: 1B.2 USFS: S BLM: S	Not expected. Potentially suitable habitat, well below elevation range, not observed during surveys.
<i>Castilleja plagiotoma</i> Mojave paintbrush	Hemiparasitic perennial herb. Great Basin alluvial scrub, Joshua tree woodland, lower montane coniferous forest, and pinyon and juniper woodland at 300-2500m elevation. LA, Kern, San Bernardino, and San Luis Obispo Cos. Not tracked in the CNDDDB.	Apr-Jun	Fed: None Calif: S4 CRPR: 4.3 USFS: S	Not expected. No suitable habitat, not observed during surveys.
<i>Centromadia parryi</i> ssp. <i>australis</i> Southern tarplant	Annual herb. Margins of marshes and swamps, vernal mesic valley and foothill grassland, vernal pools at 0-480m elevation. LA, Orange, San Diego, Ventura, Santa Barbara Cos, Baja.	May-Nov	Fed: None Calif: S2 CRPR: 1B.1	Absent. No suitable habitat, no documented occurrences within 5 mi., not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Centromadia pungens</i> ssp. <i>laevis</i> Smooth tarplant	Annual herb. Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland at 0-1170m elevation. Also fallow fields, drainage ditches; mainly in SW Riverside Co., a few sites in interior valleys of LA, San Bernardino, San Diego Co.	Apr-Sep	Fed: None Calif: S2 CRPR: 1B.1	Not expected. No or marginal suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Chorizanthe parryi</i> var. <i>fernandina</i> San Fernando Valley spineflower	Annual herb. Sandy soils in coastal scrub and valley and foothill grassland at 150-1220m elevation. LA and Ventura Cos. Presumed extirpated in Orange Co.	Apr-Jul	Fed: None Calif: END, S1 CRPR: 1B.1 USFS: S	Not expected. No or marginal suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Chorizanthe parryi</i> var. <i>parryi</i> Parry's spineflower	Annual herb. Sandy or rocky soils and openings in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland at 275-1220m elev. LA, Riverside, San Bernardino Co.	Apr-Jun	Fed: None Calif: S2 CRPR: 1B.1 USFS: S BLM: S	Low. Potentially suitable habitat, one documented occurrence within 5 mi. (from 1986, mapped on floodplain about 4 mi. ESE but exact location unknown), not observed during surveys.
<i>Cladium californicum</i> California saw-grass	Perennial rhizomatous herb. Meadows and seeps, marshes, swamps, alkaline or freshwater at 60-1600m elevation. LA, Inyo, Riverside, Santa Barbara, San Bernardino, San Luis Obispo Co, SW US. Known from fewer than 20 locations in CA. Presumed extirpated from LA, San Bernardino Co.	Jun -Sep	Fed: None Calif: S2 CRPR: 2B.2 USFS: S	Absent. No suitable habitat, one documented occurrence within 5 mi. (from 1861 and extirpated by development), presumed extirpated in LA County, not observed during surveys.
<i>Claytonia peirsonii</i> ssp. <i>peirsonii</i> (<i>C. lanceolata</i> var. <i>peirsonii</i>) Peirson's spring beauty	Perennial herb. Scree slopes in subalpine coniferous forest, upper montane coniferous forest at 1510-2745m elevation. Known only from San Gabriel and San Bernardino Mts.	(Mar)May - Jun	Fed: None Calif: S2 CRPR: 1B.2 USFS: S	Absent. No suitable habitat, well below elevation range, not observed during surveys.
<i>Clinopodium (Satureja) mimuloides</i> Monkey-flower savory	Perennial herb. Streambanks and mesic areas in chaparral and North Coast coniferous forests at 305-1800m elevation. LA, Monterey, Santa Barbara, San Luis Obispo, Ventura Counties.	Jun-Oct	Fed: None Calif: S3 CRPR: 4.2	Not expected. No or marginal suitable habitat, not observed during surveys.
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i> Peruvian dodder	Annual parasitic vine. Freshwater marshes & swamps at 15-280m elevation. Scattered locations in No, Central, and Southern CA, various US states and Baja. Presumed extirpated from San Bernardino Co.	Jul-Oct	Fed: None Calif: SH CRPR: 2B.2	Absent. No suitable habitat, one documented occurrence within 5 mi. (date unknown but prior to 1974, exact location unknown, mapped 5 mi. SSW of site), not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Diplacus johnstonii</i> Johnston's monkeyflower	Annual herb. Disturbed areas, scree, rocky or gravelly soils, roadsides in lower montane coniferous forest at 975-2920m elevation. LA and San Bernardino Co. Not tracked in the CNDDB.	(Apr)May-Aug	Fed: None Calif: S4 CRPR: 4.3	Absent. No suitable habitat, well below elevation range, not observed during surveys.
<i>Dodecahema leptoceras</i> Slender-horned spineflower	Annual herb. Open, sandy alluvial benches in valleys & canyons. Chaparral, coastal scrub, alluvial scrub, cismontane woodland at 200-760m elevation. LA, Riverside, San Bernardino Co. San Fernando Valley, Santa Ana River Valley, W Riverside Co.	Apr-Jun	Fed: END Calif: END, S1 CRPR: 1B.1	Low. No or marginal suitable habitat, one documented occurrence within 5 mi. (from 1920, in Santa Anita Wash, mapped to include the western edge of the site, extirpated), not observed during surveys.
<i>Dudleya cymosa</i> ssp. <i>crebrifolia</i> San Gabriel River dudleya	Perennial herb. Found in chaparral, on granitic slopes and flats along the San Gabriel River and in the San Gabriel Mountains between 275-457m elevation.	Apr-Jul	Fed: None Calif: S2 CRPR: 1B.2 USFS: S	Low to moderate. Potentially suitable habitat, 4 documented occurrences within 5 mi. (closest is 4 mi. NE), not observed during surveys.
<i>Dudleya densiflora</i> San Gabriel Mountains dudleya	Perennial herb. Granitic soils, cliffs, and canyon walls in chaparral, coastal scrub, cismontane woodland, lower montane coniferous forest, riparian woodland at 244-610m elevation. LA Co. San Gabriel Mountains.	Mar-Jun	Fed: None Calif: S2 CRPR: 1B.1 USFS: S	Low to moderate. Potentially suitable habitat, 3 documented occurrences within 5 mi. (closest is 4 mi. NE), not observed during surveys.
<i>Dudleya multicaulis</i> Many-stemmed dudleya	Perennial herb. Often on clay soils in chaparral, coastal scrub, valley and foothill grassland at 15-790m elevation. LA, Orange, Riverside, San Bernardino, San Diego Co.	Apr-Jul	Fed: None Calif: S2 CRPR: 1B.2 USFS: S BLM: S	Low. Potentially marginal suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Erythranthe diffusa</i> Palomar monkeyflower	Annual herb. Sandy or gravelly soils in chaparral, lower montane coniferous forest at 1220-1830m elevation. LA, Orange, Riverside, San Diego Co., Baja. Not tracked in the CNDDB.	Apr-Jun	Fed: None Calif: S3 CRPR: 4.3	Not expected. Potentially suitable habitat, well below elevation range, not observed during surveys.
<i>Frasera neglecta</i> Pine green-gentian	Perennial herb. Lower montane coniferous forest, pinyon and juniper woodland, upper montane coniferous forest at 1400-2500m elevation. Kern, LA, Santa Barbara, San Bernardino, Ventura Co. Not tracked in CNDDB.	May-Jul	Fed: None Calif: S4 CRPR: 4.3	Absent. No suitable habitat, well below elevation range, not observed during surveys.
<i>Galium angustifolium</i> ssp. <i>gabrielense</i> San Antonio Canyon bedstraw	Perennial herb. Granitic, sandy, or rocky soils in chaparral, lower montane coniferous forest at 1200-2650m elevation. LA and San Bernardino Co. Not tracked in CNDDB.	Apr-Aug	Fed: None Calif: S3 CRPR: 4.3	Not expected. Potentially suitable habitat, well below elevation range, not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Galium grande</i> San Gabriel bedstraw	Perennial deciduous shrub. Broad-leaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, 425-1500m elevation. San Gabriel Mountains.	Jan-Jul	Fed: None Calif: S1 CRPR: 1B.2 USFS: S BLM: S	Low. Potentially suitable habitat, somewhat below elevation range, 8 documented occurrences within 5 mi. (closest is 2.4 mi. N, elevations range from 1400 to 4760 feet), not observed during surveys.
<i>Galium jepsonii</i> Jepson's bedstraw	Perennial rhizomatous herb. Granitic, rocky, or gravelly soils in upper and lower montane coniferous forest at 1540-2500m elevation. LA and San Bernardino Co. Not tracked in CNDDDB.	Jul-Aug	Fed: None Calif: S3 CRPR: 4.3	Absent. No suitable habitat, well below elevation range, not observed during surveys.
<i>Galium johnstonii</i> Johnston's bedstraw	Perennial herb. Chaparral, lower montane coniferous forest, pinyon and juniper woodland, riparian woodland at 1220-2300m elevation. LA, Riverside, San Bernardino, San Diego Co. Not tracked in the CNDDDB.	Jun-Jul	Fed: None Calif: S4 CRPR: 4.3	Low. Potentially suitable habitat, well below elevation range, not observed during surveys.
<i>Helianthus nuttallii</i> ssp. <i>parishii</i> Los Angeles sunflower	Perennial rhizomatous herb. Coastal salt and freshwater marshes and swamps at 10-1525m elevation. LA, Orange, San Bernardino Co. Last seen in 1937, presumed extinct.	Aug-Oct	Fed: None Calif: SX CRPR: 1A	Absent. No suitable habitat, no documented occurrences within 5 mi., presumed extinct, not observed during surveys.
<i>Heuchera caespitosa</i> Urn-flowered alumroot	Perennial rhizomatous herb. Rocky soils in cismontane woodland, lower montane coniferous forest, montane riparian forest, upper montane coniferous forest at 1155-2650m elevation. Kern, LA, San Bernardino, Ventura Co. Not tracked in CNDDDB.	May-Aug	Fed: None Calif: S3 CRPR: 4.3 USFS: S	Low. Potentially suitable habitat, well below elevation range, not observed during surveys.
<i>Hordeum intercedens</i> Vernal barley	Annual grass. Saline flats and depressions in valley and foothill grassland, vernal pools at 5-1000m elevation. Southern, Central CA, Channel Islands. Not tracked in the CNDDDB.	Mar-Jun	Fed: None Calif: S3S4 CRPR: 3.2	Absent. No suitable habitat, not observed during surveys.
<i>Horkelia cuneata</i> ssp. <i>puberula</i> Mesa horkelia	Perennial herb. Sandy or gravelly soils in maritime chaparral, cismontane woodland, coastal scrub at 70-810m elevation. LA, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, San Luis Obispo, Ventura Co.	Feb-Jul(Sep)	Fed: None Calif: S1 CRPR: 1B.1 USFS: S	Low to moderate. Potentially suitable habitat, 4 documented occurrences within 5 mi. (1 extirpated, closest extant is 4.5 mi. NW), not observed during surveys.
<i>Hulsea vestita</i> ssp. <i>gabrielensis</i> San Gabriel Mountains sunflower	Perennial herb. Rocky areas in upper and lower montane coniferous forest at 1500-2500m elevation. LA, San Bernardino, Ventura Cos. Not tracked in CNDDDB.	May-Jul	Fed: None Calif: S3 CRPR: 4.3 USFS: S	Absent. No suitable habitat, well below elevation range, not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Imperata brevifolia</i> California satintail	Perennial rhizomatous herb. Mesic areas in chaparral, coastal scrub, Mojavean desert scrub, meadows and seeps (often alkali), riparian scrub at 0-1215m elevation. Scattered location throughout CA, SW US, Baja.	Sep-May	Fed: None Calif: S3 CRPR: 2B.1 USFS: S	Not expected. No or marginal suitable habitat, one documented occurrence within 5 mi. (from 1964, exact location unknown, mapped 4.5 mi. ENE).
<i>Juglans californica</i> Southern California black walnut	Perennial deciduous tree. Alluvial soils in chaparral, cismontane woodland, coastal scrub, riparian woodland at 50-900m elevation. LA, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, Ventura Co.	Mar-Aug	Fed: None Calif: S4 CRPR: 4.2	Occurs. Observed on the site during surveys.
<i>Juncus duranii</i> Duran's rush	Perennial rhizomatous herb. Mesic areas in lower montane coniferous forest, meadows and seeps, upper montane coniferous forest at 1769-2804m elevation. LA, Riverside, San Bernardino Co. Not tracked in CNDDB.	Jul-Aug	Fed: None Calif: S3 CRPR: 4.3	Absent. No suitable habitat, well below elevation range, not observed during surveys.
<i>Lasthenia glabrata</i> spp. <i>coulteri</i> Coulter's goldfields	Annual herb. Coastal salt marshes and swamps, playas, vernal pools at 1-1220m elevation. Scattered locations in CA, Baja.	Feb-Jun	Fed: None Calif: S2 CRPR: 1B.1 BLM: S	Absent. No suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Lepechinia fragrans</i> Fragrant pitcher sage	Perennial shrub. Rocky slopes, ridgetops, dry canyons in chaparral at 20-1310m elevation. LA, San Bernardino, Ventura Co, some Channel Islands. Not tracked in CNDDB.	Mar-Oct	Fed: None Calif: S3 CRPR: 4.2 USFS: S	Low to moderate. Potentially suitable habitat, 5 mapped CCH records within 5 mi., not observed during surveys.
<i>Lepidium virginicum</i> var. <i>robinsonii</i> Robinson's pepper-grass	Annual herb. Chaparral, coastal scrub at 1-885m elevation. LA, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, Ventura Co., Santa Cruz Island.	Jan-Jul	Fed: None Calif: S3 CRPR: 4.3	Low to moderate. Potentially suitable habitat, 3 documented occurrences within 5 mi. (closest is from 1928, 0.9 mi. NW, exact location unknown), not observed during surveys.
<i>Lilium humboldtii</i> ssp. <i>ocellatum</i> Ocellated Humboldt lily	Perennial bulbiferous herb. Openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, riparian woodland at 30-1800m elevation. LA, Orange, Riverside, Santa Barbara, San Bernardino, San Diego, Ventura Co, some Channel Islands. Lower stream benches in riparian corridors in lower montane coniferous forest and coastal chaparral or shaded, dry slopes beneath a dense oak or conifer canopy. Not tracking in CNDDB.	Mar-Jul(Aug)	Fed: None Calif: S4? CRPR: 4.2	Low. Potentially suitable habitat, 3 mapped CCH records within 5 mi. at higher elevations, not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Lilium parryi</i> Lemon lily	Perennial bulbiferous herb. Mesic soils in upper and lower montane coniferous forest, riparian forest, meadows and seeps at 1220-2745m elevation. LA, Riverside, San Bernardino, San Diego Co, Arizona, Sonora Mex.	Jul-Aug	Fed: None Calif: S3 CRPR: 1B.2 USFS: S	Not expected. No suitable habitat, well below elevation range, not observed during surveys.
<i>Linanthus concinnus</i> San Gabriel linanthus	Annual herb. Rocky soils in openings in chaparral, upper and lower montane coniferous forest at 1520-2800m elevation. LA and San Bernardino Co.	Apr-Jul	Fed: None Calif: S2 CRPR: 1B.2 USFS: S	Not expected. Potentially suitable habitat, well below elevation range, not observed during surveys.
<i>Linanthus orcuttii</i> Orcutt's linanthus	Annual herb. Openings in chaparral, lower montane coniferous forest, pinyon and juniper woodland at 915-2145m elevation. LA, Riverside, San Bernardino, and San Diego Counties, Baja California. Presumed extirpated in LA County.	May-Jun	Fed: None Calif: S2 CRPR: 1B.3 USFS: S	Not expected. Potentially suitable habitat, well below elevation range, not observed during surveys.
<i>Lupinus albifrons</i> var. <i>johnstonii</i> Interior bush lupine	Perennial shrub. Decomposed granitic soils in chaparral and lower montane coniferous forest at 1500-2500m elevation. LA Co. Not tracked in CNDDB.	May-Jul	Fed: None Calif: S4 CRPR: 4.3	Not expected. Potentially suitable habitat, well below elevation range, not observed during surveys.
<i>Lupinus elatus</i> Silky lupine	Perennial herb. Upper and lower coniferous forest at 1500-3000m elevation. LA and Ventura Cos. Not tracked in CNDDB.	(May)June-Aug	Fed: None Calif: S4 CRPR: 4.3	Not expected. No suitable habitat, well below elevation range, not observed during surveys.
<i>Lupinus peirsonii</i> Peirson's lupine	Perennial herb. Gravelly or rocky soils in Joshua tree woodland, pinyon and juniper woodland, and upper and lower montane coniferous forest at 1000-2500m elevation. LA Co.	Apr-Jun	Fed: None Calif: S3 CRPR: 1B.3 USFS: S	Not expected. No suitable habitat, well below elevation range, not observed during surveys.
<i>Malacothamnus davidsonii</i> Davidson's bush-mallow	Perennial deciduous shrub. Coastal scrub, cismontane woodland, riparian woodland, and chaparral, on slopes and in sandy washes. 185-1140m elevation; Central Coast and Traverse Ranges to LA County.	Jun-Jan	Fed: None Calif: S2 CRPR: 1B.2	Low. Potentially suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Monardella australis</i> ssp. <i>cinerea</i> Gray monardella	Perennial rhizomatous herb. Lower and upper montane coniferous forest, and subalpine coniferous forest at 1800-3050m elevation. LA and San Bernardino Cos. Not tracked in CNDDB.	Jul-Aug	Fed: None Calif: S3 CRPR: 4.3	Absent. No suitable habitat, well below elevation range, not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Muhlenbergia californica</i> California muhly	Perennial rhizomatous herb. Mesic areas, seeps, and streambanks in chaparral, coastal scrub, lower montane coniferous forest at 100-2000m elevation. LA, Riverside, San Bernardino Co.	Jun-Sep	Fed: None Calif: S4 CRPR: 4.3	Low. No or marginal suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Navarretia prostrata</i> Prostrate vernal pool navarretia	Annual herb. Mesic areas in coastal scrub, valley and foothill grassland (alkaline), meadows and seeps, vernal pools at 3-1210m elevation. Locations in northern, central, and southern CA.	Apr-Jun	Fed: None Calif: S2 CRPR: 1B.2	Not expected. No or marginal suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Nemacladus secundiflorus</i> var. <i>robbinsii</i> Robbins' nemacladus	Annual herb. Openings in chaparral and valley and foothill grassland at 350-1700m elevation. LA and Ventura Cos. and central coast.	Apr-Jun	Fed: None Calif: S2 CRPR: 1B.2 USFS: S	Low. Potentially suitable habitat, somewhat below elevation range, no documented occurrences within 5 mi., not observed during surveys.
<i>Opuntia basilaris</i> var. <i>brachyclada</i> Short-joint beavertail	Perennial stem succulent (cactus). Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland at 425-1800m elevation. LA, San Bernardino Co.	Apr-Jun(Aug)	Fed: None Calif: S3 CRPR: 1B.2 BLM: S USFS: S	Low. Potentially suitable habitat, below elevation range, no documented occurrences within 5 mi., not observed during surveys.
<i>Oreonana vestita</i> Woolly mountain parsley	Perennial herb. Gravel or talus soils in lower and upper montane and subalpine coniferous forest at 1615-3500m elevation. Kern, LA, San Bernardino Co. Endemic to San Bernardino, San Gabriel, and Scodie Mts.	Mar-Sep	Fed: None Calif: S3 CRPR: 1B.3 USFS: S BLM: S	Absent. No suitable habitat, well below elevation range, no documented occurrences within 5 mi., not observed during surveys.
<i>Orobanche valida</i> ssp. <i>valida</i> Rock creek broomrape	Perennial parasitic herb. Chaparral and pinyon juniper woodland at 1250-2000m elevation. Inyo, LA, San Bernardino, and Ventura Co.	May-Sep	Fed: None Calif: S2 CRPR: 1B.2 USFS: S	Not expected. Potentially suitable habitat, well below elevation range, no documented occurrences within 5 mi., not observed during surveys.
<i>Packera ionophylla</i> Tehachapi ragwort	Perennial herb. Granitic, rocky soils in upper and lower montane coniferous forest at 1500-2700m elevation. LA, San Bernardino, and Kern Cos. Not tracked in CNDDB.	Jun-Jul	Fed: None Calif: S4 CRPR: 4.3	Absent. No suitable habitat, well below elevation range, not observed during surveys.
<i>Phacelia hubbyi</i> Hubby's phacelia	Annual herb. Gravelly, rocky soils, talus slopes in chaparral, coastal scrub, valley and foothill grassland at 0-1000m elevation. LA, Kern, Santa Barbara, Ventura Co. Not tracked in CNDDB.	Apr-Jul	Fed: None Calif: S4 CRPR: 4.2	Low. Potentially suitable habitat, no mapped CCH records within 5 mi., not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Phacelia mohavensis</i> Mojave phacelia	Annual herb. Sandy or gravelly soil in cismontane woodland, lower montane coniferous forest, meadows and seeps, pinyon and juniper woodland at 1400-2500m elevation. LA, San Bernardino, Tulare, Ventura Co. Not tracked in CNDDDB.	Apr-Aug	Fed: None Calif: S4 CRPR: 4.3	Not expected. Potentially suitable habitat, well below elevation range, no mapped CCH records within 5 mi., not observed during surveys.
<i>Phacelia stellaris</i> Brand's star phacelia	Annual herb. Coastal dunes, coastal scrub at 1-400m elevation. Sandy openings, sandy benches, dunes, sandy washes, or floodplains. LA, Orange, Riverside, San Bernardino, San Diego Co.	Mar-Jun	Fed: None Calif: S1 CRPR: 1B.1	Not expected. No or marginal suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Pickeringia montana</i> var. <i>tomentosa</i> Woolly chaparral-pea	Evergreen shrub. Gabbroic, granitic, or clay soils in chaparral at 0-1700m elevation. LA, Riverside, Orange, San Bernardino, San Diego Co. Not tracked in CNDDDB.	May-Aug	Fed: None Calif: S3S4 CRPR: 4.3	Not expected. Potentially suitable habitat, no mapped CCH records within 5 mi., not observed during surveys.
<i>Pseudognaphalium leucocephalum</i> White rabbit-tobacco	Perennial herb. Sandy or gravelly soils in chaparral, cismontane woodland, coastal scrub, riparian woodland at 0-2100m elevation. LA, Orange, Riverside, San Bernardino, San Diego, Ventura Co, Arizona, New Mexico, Texas, Baja and Sonora Mex.	(Jul)Aug-Nov(Dec)	Fed: None Calif: S2 CRPR: 2B.2	Low to moderate. Potentially suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Quercus durata</i> var. <i>gabrielensis</i> San Gabriel oak	Perennial evergreen shrub. Chaparral, cismontane woodland. 450-1000m elevation. San Gabriel Mts. Not tracked in the CNDDDB.	Apr-May	Fed: None Calif: S3 CRPR: 4.2	Occurs. Observed during survey.
<i>Quercus engelmannii</i> Engelmann oak	Perennial deciduous tree. Chaparral, cismontane woodland, riparian woodland, valley and foothill grassland at 50-1300m elevation. Mostly in foothills of Orange, west Riverside, and San Diego Counties, also southeast San Gabriel Mountain foothills (LA County). Not tracked in the CNDDDB.	Mar-Jun	Fed: None Calif: S3 CRPR: 4.2	Low. Potentially suitable habitat, many mapped CCH records within 5 mi., not observed during surveys and not identified during tree survey.
<i>Ribes divaricatum</i> var. <i>parishii</i> Parish's gooseberry	Perennial deciduous shrub. Riparian woodland at 65-300m elevation. LA, San Bernardino Co. Extirpated in CA.	Feb-Apr	Fed: None Calif: SX CRPR: 1A	Absent. No suitable habitat, one documented occurrence within 5 mi. (from 1893, exact location unknown), not observed during surveys, extirpated in California.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Romneya coulteri</i> Coulter's matilija	Large perennial rhizomatous herb. Often in burn areas in chaparral, coastal scrub at 20-1200m elevation. LA, Orange, Riverside, San Diego Co. Not tracked in CNDDB.	Mar-Jul(Aug)	Fed: None Calif: S4 CRPR: 4.2	Low. Potentially suitable habitat, no mapped CCH records within 5 mi., not observed during surveys.
<i>Rupertia rigida</i> Parish's rupertia	Perennial herb. Chaparral, cismontane woodland, lower montane coniferous forest, meadows and seeps, pebble plain, valley and foothill grassland at 700-2500m elevation. LA, Riverside, San Bernardino, San Diego Cos., Baja. Not tracked in the CNDDB.	Jun-Aug	Fed: None Calif: S4 CRPR: 4.3	Not expected. Potentially suitable habitat, well below elevation range, no mapped CCH records within 5 mi., not observed during surveys.
<i>Scutellaria bolanderi</i> ssp. <i>austromontana</i> Southern mountains skullcap	Perennial rhizomatous herb. Mesic areas in chaparral, cismontane woodland, lower montane coniferous forest at 425-2000m elevation. Often in meadows and along streams. LA, Riverside, San Bernardino, San Diego Cos. Presumed extirpated in LA and San Bernardino Cos.	Jun-Aug	Fed: None Calif: S3 CRPR: 1B.2 USFS: S	Not expected. No or marginal potentially suitable habitat, well below elevation range, one documented occurrence within 5 mi. (from prior to 1943, exact location unknown, identification questionable), not observed during surveys.
<i>Senecio astephanus</i> San Gabriel ragwort	Perennial herb. Rocky slopes in coastal bluff scrub, chaparral at 400-1500m elevation. Kern, LA, Monterey, Santa Barbara, San Bernardino, San Diego, San Luis Obispo Co.	May-Jul	Fed: None Calif: S3 CRPR: 4.3	Low. Potentially suitable habitat, below elevation range, one mapped CCH record within 5 mi. (from 1896), not observed during surveys.
<i>Sidalcea neomexicana</i> Salt Spring checkerbloom	Perennial herb. Alkaline, mesic soils in chaparral, coastal scrub, lower montane coniferous forest, Mojavean desert scrub, playas at 15-1530m elevation. Kern, LA, Orange, Riverside, San Bernardino, San Diego, Ventura Co, western US, Sonora Mex.	Mar-Jun	Fed: None Calif: S2 CRPR: 2B.2 USFS: S	Not expected. No or marginal potentially suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Sidothea caryophylloides</i> Chickweed oxytheca	Annual herb. Sandy soils in lower montane coniferous forest at 1114-2600m elevation. LA, Riverside, San Bernardino, Tulare, Ventura Co. Not tracked in CNDDB.	Jul-Sep(Oct)	Fed: None Calif: S4 CRPR: 4.3 USFS: S	Not expected. No suitable habitat, well below elevation range, not observed during surveys.
<i>Symphotrichum defoliatum</i> San Bernardino aster	Perennial rhizomatous herb. Near ditches, streams, springs in cismontane woodland, coastal scrub, lower montane coniferous forest, meadows and seeps, marshes and swamps, valley and foothill grasslands (vernally mesic) at 2-2040m elevation. Southern and Central California.	Jul-Nov	Fed: None Calif: S2 CRPR: 1B.2 USFS: S BLM: S	Not expected. No or marginal suitable habitat, no documented occurrences within 5 mi., not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
<i>Symphyotrichum greatae</i> Greata's aster	Perennial herb. Mesic areas in broadleaved upland forest, chaparral, cismontane woodland, lower montane coniferous forest, riparian woodland at 300-2010m elevation. LA, San Bernardino, Ventura Co.	Jun-Oct	Fed: None Calif: S2 CRPR: 1B.3 BLM: S	Low. No or marginal suitable habitat, 4 documented occurrences within 5 mi., not observed during surveys.
<i>Thelypteris puberula</i> var. <i>sonorensis</i> Sonoran maiden fern	Perennial rhizomatous herb. Meadows, seeps/streambanks at 50-610m elevation; Coast Ranges, coastal foothills of the Santa Monica, San Gabriel, San Bernardino Mountains, desert foothills of San Jacinto Mountains; to Arizona, Baja, Sonora.	Jan-Sep	Fed: None Calif: S2 CRPR: 2B.2 USFS: S	Low. No or marginal suitable habitat, 4 documented occurrences within 5 mi., not observed during surveys.
References: CDFW (2021a, 2021c), USFWS (2021), CNPS (2021), USFWS (2021).				

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Invertebrates			
<i>Bombus crotchii</i> Crotch bumble bee	Coastal CA E to Sierra-Cascade crest & S into Mexico. Open grassland and scrub habitats. Food plant genera include <i>Antirrhinum</i> , <i>Asclepias</i> , <i>Chaenactis</i> , <i>Lupinus</i> , <i>Medicago</i> , <i>Salvia</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> . Lives in colonies that may be underground in rodent holes or above ground in rock piles, tree cavities, etc.	Fed: None Calif: CanE, S1S2	Moderate. Potentially suitable habitat and food plants in northern portion of site and southern extension, no suitable habitat in Project impact area, 3 documented occurrences within 5 mi., not observed during surveys but focused surveys not conducted.
<i>Glyptostoma gabrielense</i> San Gabriel chestnut	Terrestrial snail. Largely extirpated from developed areas and most known occurrences confined to Angeles National Forest and adjacent foothills. Rocky hillsides at relatively low elevations; under plant debris, in rock piles, wood rat nests, and spaces beneath logs, stumps, and boulders. Aestivates underground during dry season.	Fed: None Calif: SA, S2	Moderate. Potentially suitable habitat, 6 documented occurrences within 5 mi., not observed during surveys but invertebrate surveys not conducted.
<i>Gonidea angulata</i> Western ridged mussel	Aquatic, freshwater mollusk; primarily creeks and rivers, less often lakes. Originally in most of state, now extirpated from Central & Southern Calif.	Fed: None Calif: SA, S1S2	Absent. No perennial aquatic habitat, extirpated from southern California.
<i>Palaeoxenus dohrni</i> Dohrn's elegant eucnemid beetle	Montane forest. San Gabriel, San Bernardino, San Jacinto Mountains. Adults observed in May and June.	Fed: None Calif: SA, S3?	Not expected. No suitable habitat, one documented occurrence within 5 mi. (from 1903 at 5000 ft elevation on Mt. Wilson).
Fish			
<i>Catostomus santaanae</i> Santa Ana sucker	Small to medium permanent streams. LA & San Gabriel drainage, lower Santa Ana River.	Fed: THR Calif: SA, S1	Absent. No perennial aquatic habitat.
<i>Gila orcuttii</i> Arroyo chub	Slow-moving or backwater sections of warm/ cool streams with mud or sand substrates. LA, San Gabriel, San Luis Rey, Santa Ana & Santa Margarita Riv & Malibu & San Juan creeks.	Fed: None Calif: SSC, S2 USFS: S	Absent. No perennial aquatic habitat.
<i>Rhinichthys osculus</i> "subspecies 3" Santa Ana speckled dace	Endemic to Santa Ana & San Gabriel River watersheds, historic in Big Tujunga Cyn. Santa Ana River populations in lower San Bernardino Mtn. foothills & washes.	Fed: None Calif: SSC, S1 USFS: S	Absent. No perennial aquatic habitat.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Amphibians			
<i>Anaxyrus californicus</i> Arroyo toad	Washes & intermittent streams of semi-arid regions, sandy-banked rivers, riparian woodlands, & loose gravel. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range, below 4600 ft. Southern California to tip of Baja California. Desert population along Mojave River.	Fed: END Calif: SSC, S2S3	Low. No or marginal suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Rana boylei</i> Foothill yellow-legged frog	Partly-shaded, shallow streams and riffles with a rocky substrate in a variety of habitats. Needs at least some cobble-sized substrate for egg-laying. Needs at least 15 weeks to attain metamorphosis.	Fed: None Calif: END, SSC, S3 BLM: S USFS: S	Absent. No perennial aquatic habitat.
<i>Rana muscosa</i> Southern mountain yellow-legged frog	Always encountered within a few feet of water. Tadpoles may require up to 2 years to complete development.	Fed: END Calif: END, WL, S1 USFS: S	Absent. No perennial aquatic habitat.
<i>Spea hammondi</i> Western spadefoot toad	Cismontane woodland, coastal scrub, valley & foothill grassland, vernal pool. Breeds in quiet streams & vernal pools, burrows beneath sand during dry season. W CA, Central Valley to Baja California. From near sea level up to 4,500 ft elev.	Fed: None Calif: SSC, S3 BLM: S	Low. No or marginal suitable habitat, 3 documented occurrences within 5 mi. (from 1941, 1914, 1913, exact location unknown, areas have been heavily developed), not observed during surveys.
<i>Taricha torosa</i> Coast Range newt	Valley-foothill hardwood and hardwood-conifer, coastal scrub, chaparral, grassland, mixed conifer. Coast Ranges from N San Diego Co. to central Mendocino Co., southern Sierra Nevada foothills S of Kaweah River. Spends most of the year in subterranean refuges, migrates to aquatic breeding areas in the fall and returns in the spring.	Fed: None Calif: SSC, S4	Low to moderate. Potentially suitable habitat, breeding areas marginal or absent, 2 documented occurrences within 5 mi. (from 2000 along Fish Creek, from 2013 in Santa Anita Wash/Winter Creek), not observed during surveys but is secretive.
Reptiles			
<i>Anniella stebbinsi</i> (<i>Anniella pulchra pulchra</i>) Southern California legless lizard	Various habitats, mainly shrublands, <6500 ft. elev. Coast Ranges from Bay area to N Baja CA, SW Sierra Nevada, parts of the Central Valley, Transverse & Peninsular Ranges.	Fed: None Calif: SSC, S3 USFS: S	Moderate. Potentially suitable habitat, 5 documented occurrences within 5 mi., not observed during surveys but is secretive.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Arizona elegans occidentalis</i> California glossy snake	Arid scrub, rocky washes, grasslands, chaparral, often with loose or sandy soils. Patchily distributed from the eastern portion of San Francisco Bay, southern San Joaquin Valley, and the Coast, Transverse, and Peninsular Ranges, south to Baja California. Sea level to 7200' elev.	Fed: None Calif: SSC, S2	Moderate. Potentially suitable habitat, no documented occurrences within 5 mi., not observed during surveys but is nocturnal and hides underground in the daytime.
<i>Aspidoscelis tigris stejnegeri</i> Coastal whiptail	Primarily hot, dry open areas with sparse foliage, chaparral, woodland, riparian; coastal So CA, mostly west of Peninsular Ranges and south of Transverse Ranges, north into Ventura County, below ±7000' elev. and into Baja.	Fed: None Calif: SSC, S3	Moderate. Potentially suitable habitat, one documented occurrence within 5 mi., not observed during surveys.
<i>Diadophis punctatus modestus</i> San Bernardino ringneck snake	Open relatively rocky areas within valley-foothill locales, mixed chaparral/annual grasslands. Prefers moist habitats. W San Diego & Riv. Cos., SW San Bern., Vent. & LA Cos., NW Baja CA.	Fed: None Calif: SA, S2? USFS: S	Low. No or marginal potentially suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
<i>Emys marmorata</i> Western pond turtle	Perennial ponds, streams, marshes, irrigation ditches. Coastal S & cent. CA, NW Baja CA, below about 4800 ft. elev. (few higher elev. pops.)	Fed: None Calif: SSC, S3 BLM: S USFS: S	Absent. No perennial aquatic habitat.
<i>Phrynosoma blainvillii</i> Coast horned lizard	Coastal sage scrub, low elevation chaparral, annual grassland, riparian scrub and woodlands, desert wash, pinyon and juniper woodland, valley and foothill grassland, 0-2438m elevation. SW California to NW Baja California, Mexico.	Fed: None Calif: SSC, S3S4 BLM: S	Moderate. Potentially suitable habitat, 4 documented occurrences within 5 mi., not observed during surveys.
<i>Thamnophis hammondi</i> Two-striped gartersnake	Usually in or near perennial fresh water & adjacent riparian habitat, pools in streams. SW CA & NW Baja California.	Fed: None Calif: SSC, S3S4 BLM: S USFS: S	Not expected. No perennial aquatic habitat on or near the site.
Birds			
<i>Accipiter cooperii</i> Cooper's hawk	Cismontane woodland, riparian forest, riparian woodland, upper montane coniferous forest. Forages in open areas over scrublands; California, Mexico, Central America. Nests in trees, often in dense woods. Year-round resident in most of southern California range. CNDDDB only tracks nesting.	Fed: None Calif: WL, S4	Occurs (foraging), moderate (nesting). Observed during surveys, potentially suitable nesting and foraging habitat, one documented occurrence of nesting within 5 mi. (2001, Santa Fe Dam area), multiple eBird records in vicinity.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Aquila chrysaetos</i> Golden eagle	Found in a variety of habitats from sea level to 11,500 feet, rugged open habitats preferred. Large platform nests constructed on secluded cliffs, large trees, and occasionally structures (i.e., electrical transmission towers). CNDDDB tracks nesting and wintering.	Fed: BGEPA, BCC Calif: FP, WL, S3 BLM: S	Low (foraging), absent (nesting). Potentially suitable foraging habitat, nesting habitat marginal or absent, no documented occurrences (nesting, wintering) within 5 mi., few eBird records in vicinity, not observed during surveys.
<i>Athene cunicularia</i> Burrowing owl	Nests in rodent burrows, usually in grasslands. Forages in open habitat; increasingly uncomm. in S CA. Occurs through W US/Mex. Sparse in desert scrub but common around irrigated lands. CNDDDB tracks burrow sites and some wintering sites.	Fed: BCC Calif: SSC, S3 BLM: S	Not expected (foraging and nesting). No suitable habitat, no documented occurrences within 5 mi., few eBird records in vicinity, not observed during surveys.
<i>Baeolophus inornatus</i> Oak titmouse	Open pine or mixed oak-pine forest, juniper woodland, pinyon or juniper mixed with Joshua trees. Not migratory. CNDDDB only tracks nesting.	Fed: BCC Calif: SA, S4	Occurs (foraging), high (nesting). Observed (foraging) during surveys, potentially suitable nesting habitat present.
<i>Buteo swainsoni</i> Swainson's hawk	Grassland/agricultural, large trees for nesting, desert scrub with Joshua tree & Fremont cottonwood overstory, near streams & open fields. Breeds overwhelmingly in Great Basin & Central Valley of California. Seen in migration in southern California. CNDDDB only tracks nesting.	Fed: BCC Calif: THR, S3 BLM: S	Not expected (foraging), absent (nesting). No suitable habitat, outside current known breeding range, may be seen in migration, no documented occurrences (nesting) within 5 mi. several eBird records in vicinity (likely in migration), not observed during surveys.
<i>Calypte costae</i> Costa's hummingbird	Desert and coastal scrub and chaparral in desert, semi-desert and mountain foothills and seasonally in mountains, adjacent open meadows and gardens. Found in NV, UT, AZ, CA and Mexico. Year-round resident in southern CA. CNDDDB only tracks nesting.	Fed: BCC Calif: SA, S4	Occurs (foraging), moderate to high (nesting). Observed (foraging) during surveys, no documented occurrences (nesting) within 5 mi., multiple eBird records in vicinity.
<i>Chamaea fasciata</i> Wrentit	Chaparral, oak woodland, shrublands, western CA, northwestern Baja, western Oregon. Year-round resident in southern CA range. CNDDDB does not track this species.	Fed: BCC Calif: None	Occurs (foraging), high (nesting). Observed (foraging) during surveys, potentially suitable nesting habitat present.
<i>Circus hudsonius</i> (<i>C. cyaneus</i>) Northern harrier	Open habitats with hunting perches, marshes, meadows, grasslands, pastures, croplands, lake and river edges. Nests on the ground. Breeds widely but locally in North America, various portions of CA including Central Valley, central and northern coast, northeastern CA, and southern coastal CA. Does not breed in most of southern CA range. CNDDDB only tracks nesting.	Fed: None Calif: SSC, S3	Occurs (fly over), moderate (foraging), not expected (nesting). Observed flying over during surveys, potentially suitable foraging habitat, no records of nesting in LA County.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Coccyzus americanus occidentalis</i> Western yellow-billed cuckoo	Valley foothill and desert riparian. Inhabits extensive deciduous riparian thickets or forests with dense, low-level or understory foliage along slow-moving watercourses, backwaters, or seeps. Willow almost always a dominant component of the vegetation. Most of the United States (excluding the NW states) & into Baja California & northern Mexico. CNDDDB only tracks nesting.	Fed: THR, BCC Calif: END, S1 BLM: S USFS: S	Absent (foraging and nesting). No suitable foraging or nesting habitat, one documented occurrence (nesting) within 5 mi. (from 1951, San Gabriel River near El Monte, possible extirpated by development, not detected during focused surveys in 2010 and 2011), not observed during surveys.
<i>Cypseloides niger</i> Black swift	Coastal belt of Santa Cruz and Monterey counties; central & southern Sierra Nevada; San Bernardino & San Jacinto mountains. Breeds in small colonies on cliffs behind or adjacent to waterfalls in deep canyons and sea-bluffs above the surf; forages widely. CNDDDB only tracks nesting.	Fed: BCC Calif: SSC, S2	Low to moderate (foraging), not expected (nesting). Potentially suitable foraging habitat, no or marginal suitable nesting habitat, one documented nesting occurrence within 5 mi. (1970s-1986, Santa Anita Cyn, by perennial waterfall), a few eBird records in vicinity, not observed during surveys.
<i>Dryobates (Picoides) albolarvatus</i> White-headed woodpecker	Montane mixed coniferous forest dominated by pines. Sierra Nevada, Cascade, Klamath, Transverse, and Peninsular Ranges, and Warner Mts. Prefers semi-open areas with large mature trees and snags. Not tracked in the CNDDDB.	Fed: BCC Calif: none	Low (foraging and nesting). No or marginal suitable habitat, a few eBird records in vicinity, not observed during surveys.
<i>Dryobates (Picoides) nuttallii</i> Nuttall's woodpecker	Found in low elevation riparian and oak woodlands; rarely in conifers. Central Valley, Transverse and Peninsular Ranges, Coast Ranges north to Sonoma Co., lower portions of the Cascade Range and Sierra Nevada. Year-round resident throughout coastal mountains of CA. Not tracked in CNDDDB.	Fed: BCC Calif: None	Occurs (foraging), high (nesting). Observed (foraging) during surveys, potentially suitable nesting habitat present.
<i>Empidonax traillii extimus</i> Southwestern willow flycatcher	Dense riparian forests, wet mountain meadow systems with standing water for at least part of the breeding season (May to July) & with ample numbers of willow & other associated trees & shrubs. Rare & local in S CA. SW US & N Baja California. CNDDDB only tracks nesting.	Fed: END Calif: END, S1	Absent (foraging and nesting). No suitable habitat, one documented occurrence (nesting) within 5 mi. (from 1906, Pasadena area, exact location unknown), not observed during surveys
<i>Falco peregrinus anatum</i> American peregrine falcon	Near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds; also, human-made structures. Nest consists of a scrape or a depression or ledge in an open site. CNDDDB only tracks nesting.	Fed: Delisted, BCC Calif: Delisted, FP, S3S4	Low (foraging), not expected (nesting), may be seen in migration. No or marginal foraging habitat, no nesting habitat, no documented occurrences (nesting) within 5 mi., many eBird records in vicinity but may be migration.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Gymnogyps californianus</i> California condor	Resident of the semi-arid, rugged mountain ranges surrounding the southern San Joaquin Valley, including the Coast Ranges from Santa Clara Co. south to Los Angeles Co., the Transverse Ranges, Tehachapi Mts., and southern Sierra Nevada. Forages over wide areas of open rangelands, roosts on cliffs and in large trees and snags. Occurs mostly between sea-level and 2700 m (0-9000 ft), and nests from 610-1372 m (2000-6500 ft). Nests in caves, crevices, behind rock slabs, or on large ledges on high sandstone cliffs. Nonbreeding individuals move north to Kern and Tulare cos. in April, often returning south in September to winter in Tehachapi Mts., Mt. Pinos, and Ventura and Santa Barbara cos. Breeding pair remains near nesting area yearlong.	Fed: END Calif: END, FP, S1	Absent (foraging and nesting), no suitable habitat, no documented occurrences within 5 mi., no eBird records in vicinity, not observed during surveys.
<i>Haliaeetus leucocephalus</i> Bald eagle	Breed in large trees, usually near major rivers or lakes. Winters more widely. Wide but scattered distribution in N America, esp. coastal regions. CNDDDB tracks nesting and wintering.	Fed: Delisted, BGEPA, BCC Calif: END, FP, S3 BLM: S USFS: S	Not expected (foraging), absent (nesting). No suitable habitat, may be seen flying overhead, no documented occurrences (nesting, wintering) within 5 mi., a few eBird records in vicinity, not observed during surveys.
<i>Icteria virens</i> Yellow-breasted chat	Summer resident, inhabits riparian thickets of willow near watercourses, low dense riparian willow. Migrant and summer resident in CA, northern CA, central coast, eastern Central Valley, coastal southern CA, Colorado River, western US, Canada, Mexico, Central America. CNDDDB only tracks nesting.	Fed: None Calif: SSC, S3	Not expected (foraging and nesting). No suitable habitat, one documented occurrence (nesting) within 5 mi. (from 2001, Santa Fe Dam area), a few eBird records in vicinity, not observed during surveys.
<i>Melanerpes lewis</i> Lewis's woodpecker	Breeds in open forest and woodland with an open canopy and brushy understory. Requires dead trees for nest cavities. Open ponderosa pine forest, open riparian woodland, logged or burned pine forest, oak woodlands, orchards, pinyon-juniper woodland, pine and fir forest, agricultural areas. CNDDDB only tracks nesting.	Fed: BCC Calif: SA, S4	Moderate (foraging and nesting). Potentially suitable habitat, no documented occurrences (nesting) within 5 mi., several eBird records in vicinity, not observed during surveys.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Polioptila californica californica</i> Coastal California gnatcatcher	Sage scrub, also chaparral, grasslands, riparian adjacent to or mixed with sage scrub below 2500 ft elevation. S Ventura Co. to LA, Orange, Riv., San Bern., San D. Cos into Baja CA, Mexico.	Fed: THR Calif: SSC, S2	Absent (foraging and nesting). Potentially suitable habitat, 6 documented occurrences within 5 mi. (from 1903, 1906, 1928 – possibly/likely extirpated; from 1919 in quarry, highly disturbed, not found in 2011; from 2007 – 4.8 mi. SE and from 2010 – 4.0 mi. SE in San Gabriel River/Santa Fe Dam area), not detected during breeding season protocol surveys.
<i>Riparia riparia</i> Bank swallow	Riparian scrub/woodland. Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole. CNDDB only tracks nesting.	Fed: None Calif: THR, S2	Low (foraging), not expected (nesting). No or marginal suitable habitat, no documented occurrences (nesting) within 5 mi., few eBird records in vicinity, not observed during surveys.
<i>Selasphorus rufus</i> Rufous hummingbird	Breeds in open or shrubby areas, forest openings, yards and parks. Sometimes forests, thickets, swamps, meadows. Elev. range 0-6000 ft. Migrating birds can be up to 12,600 ft. Wintering birds in oak, pine, and juniper woodlands. Found in Western US and Canada. Generally migrates through southern CA during pre-breeding migratory season (mid-Feb to mid-May). CNDDB only tracks nesting.	Fed: BCC Calif: SA, S1S2	Moderate (foraging), not expected (nesting), may be seen in migration. Potentially suitable habitat, no documented occurrences (nesting) within 5 mi., many eBird records in vicinity, not observed during surveys.
<i>Selasphorus sasin</i> Allen's hummingbird	Breeds in moist coastal areas, scrub, chaparral, and forests. Winters in forest edge and scrub clearings with flowers. Breeds in and migrates through CA. Not tracked in CNDDB.	Fed: BCC Calif: None	Occurs (foraging), moderate (nesting), may be seen in migration. Potentially suitable habitat, many eBird records in vicinity.
<i>Setophaga petechia</i> Yellow warbler	Migrant and summer resident in southern CA. Riparian, including willow, cottonwood, sycamore, alder, aspen for nesting & foraging, also conifer forest. CNDDB only tracks nesting.	Fed: BCC Calif: SSC, S3S4	Occurs (foraging), not expected (nesting), may be seen in migration. No suitable riparian or conifer habitat, no documented occurrences (nesting) within 5 mi., several eBird records in vicinity.
<i>Spinus lawrencei</i> Lawrence's goldfinch	Summer breeder, may overwinter. Coastal side of southern and central CA, western edge of southern deserts, east side of Central Valley into northern CA, Colorado River, SW US and northern Mex. Valley foothill hardwood and hardwood-conifer, desert riparian, pinyon juniper, palm oasis, lower montane. Nests in oaks, conifers. CNDDB only tracks nesting.	Fed: BCC Calif: SA, S3S4	Moderate (foraging and nesting). Potentially suitable habitat, no documented occurrences (nesting) within 5 mi., several eBird records in vicinity, not observed during surveys.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Spizella atrogularis</i> Black-chinned sparrow	Chaparral, sagebrush, arid scrublands, and brushy hillsides. Present during breeding season only in California. Not tracked in the CNDDDB.	Fed: BCC Calif: None	Low (foraging and nesting). Potentially suitable habitat, few eBird records in vicinity, not observed during surveys.
<i>Strix occidentalis occidentalis</i> California spotted owl	Hardwood and mixed conifer/hardwood forests at mid to high elevations, oak and riparian woodlands at lower elevations with large old trees and snags, dense canopies, multiple canopy layers, and downed woody debris. Nests in tree cavities. Foraging habitat also includes more open stands.	Fed: BCC Calif: SSC, S3 USFS: S BLM: S	Absent (foraging and nesting). No suitable habitat, 2 pairs documented in Angeles National Forest near Mt. Wilson within 5 mi. of the site, not observed during surveys.
<i>Vireo bellii pusillus</i> Least Bell's vireo	Riparian woodlands, bottomlands. N Mex. & Baja CA into S CA & the S mid-western US. CNDDDB only tracks nesting.	Fed: END Calif: END, S2	Absent (foraging and nesting). No suitable riparian habitat, 8 documented occurrences (nesting) within 5 mi. (San Gabriel River and tributaries, Eaton Wash), not observed during surveys.
Mammals			
<i>Ammospermophilus nelsoni</i> Nelson's antelope squirrel	Western San Joaquin Valley from 200-1200 ft elev. On dry, sparsely vegetated loam soils. Digs its own burrows or uses kangaroo-rat burrows. Needs widely scattered shrubs, forbs, and grasses in broken terrain with gullies and washes.	Fed: None Calif: THR, S2S3 BLM: S	Absent. Outside current known geographic range.
<i>Antrozous pallidus</i> Pallid bat	Rock outcrops of shrublands, ≤ 6000' elevation; southwest North America to interior Oregon and Washington; hibernates in winter. Locally common at low elevations in grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Forages over open ground. Roosts in caves, crevices, mines, hollow trees, buildings. Very sensitive to disturbance of roosting sites.	Fed: None Calif: SSC, S3 BLM: S USFS: S	Low (foraging and roosting). Potentially suitable foraging habitat, potential roosting areas limited, 3 documented occurrences within 5 mi. (from 1927, 1930, 1932, exact locations unknown).
<i>Bassariscus astutus</i> Ringtail or ring-tailed cat	Nocturnal, widely distributed; various riparian habitats and brush stands of most forest and shrub habitats at low to middle elevations, usually not more than 0.6 mi. from permanent water; primarily carnivorous; rocky habitats preferred, avoids urbanized areas. Suitable habitat is a mixture of forest and shrubland in close association with rocky areas or riparian habitats. Not tracked in the CNDDDB.	Fed: None Calif: FP	Low. No riparian habitat, no perennial water within 0.6 mi.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance. Broadleaved upland forest, chaparral, chenopod scrub, Joshua tree woodland, lower and upper montane coniferous forest, meadow and seep, Mojavean and Sonoran desert scrub, riparian forest/woodland, Sonoran thorn woodland, valley and foothill grassland.	Fed: None Calif: SSC, S2 USFS: S BLM: S	Low (foraging and roosting). Potentially suitable foraging habitat, potential roosting areas limited, 1 documented occurrence within 5 mi. (from 2015, Santa Anita Dam).
<i>Eumops perotis californicus</i> Western mastiff bat	Lowlands (with rare exceptions), many open, semi-arid to arid habitats, conifer and deciduous woodlands, coastal scrub, grasslands, chaparral. Central & S CA, S AZ, NM, SW TX. Roosts in deep rock crevices, high buildings, trees, and tunnels; forages over wide area.	Fed: None Calif: SSC, S3S4 BLM: S	Low to moderate (foraging and roosting). Potentially suitable foraging habitat, potential roosting areas limited, 1 documented occurrence within 5 mi. (from 1913, Sierra Madre area, exact location unknown).
<i>Lasionycteris noctivagans</i> Silver-haired bat	Primarily a coastal and montane forest dweller, feeding over streams, ponds & open brushy areas. Roosts in hollow trees, beneath exfoliating bark, abandoned woodpecker holes, and rarely under rocks. Needs drinking water.	Fed: None Calif: SA, S3S4	Low (foraging and roosting). Potentially marginal habitat, no documented occurrences within 5 mi.
<i>Lasiurus blossevillei</i> Western red bat	Cismontane woodland, lower montane coniferous forest, riparian forest/woodland. Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges and mosaics with trees that are protected from above and open below with open areas for foraging.	Fed: None Calif: SSC, S3	Low to moderate (foraging and roosting). Potentially suitable or marginal habitat, 1 documented occurrence within 5 mi. (from 2015, Santa Anita Dam area).
<i>Lasiurus cinereus</i> Hoary bat	Broadleaved upland forest, cismontane woodland, lower montane coniferous forest, north coast coniferous forest. Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.	Fed: None Calif: SA, S4	Low to moderate (foraging and roosting). Potentially suitable or marginal habitat, 2 documented occurrences within 5 mi. (from 1928, Sierra Madre area and from 1948, Santa Anita Canyon, exact locations unknown).

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Lasiurus xanthinus</i> Western yellow bat	Valley foothill riparian, desert riparian, desert wash, palm oasis. Roosts in trees, particularly palms. Forages over water and among trees. Desert regions of the SW US. Distributed in S CA, AZ, NM, & TX, into Mexico.	Fed: None Calif: SSC, S3	Not expected (foraging and roosting). No suitable habitat, no documented occurrences within 5 mi.
<i>Lepus californicus bennettii</i> San Diego black-tailed jackrabbit	Chaparral, coastal, or Riversidean sage scrub with adjacent open grassland. Los Angeles Co. S to San Quintin, Baja California, Mexico.	Fed: None Calif: SSC, S3S4	Low. No open grassland habitat, one documented occurrence within 5 mi. (from 2001, Santa Fe Dam area), not observed during surveys.
<i>Myotis thysanodes</i> Fringed myotis	Found in a wide variety of habitats, optimal habitats are pinyon-juniper, valley foothill hardwood & hardwood-conifer. Uses caves, mines, buildings or crevices for maternity colonies and roosts.	Fed: None Calif: SA, S3 BLM: S USFS: S	Low (foraging and roosting). Potentially suitable foraging habitat, potential roosting areas limited, no documented occurrences within 5 mi.
<i>Myotis volans</i> Long-legged myotis	Upper montane coniferous forest. Most common in woodland and forest habitats above 4000 ft. Trees are important day roosts; caves and mines are night roosts. Nursery colonies usually under bark or in hollow trees, but occasionally in crevices or buildings.	Fed: None Calif: SA, S3	Not expected (foraging and roosting). No suitable habitat, no documented occurrences within 5 mi.
<i>Neotamias speciosus speciosus</i> Lodgepole chipmunk	Summits of isolated Piute, San Bernardino, & San Jacinto mountains. Usually found in open-canopy forests. Habitat is usually lodgepole pine forests in the San Bernardino Mts & chinquapin slopes in the San Jacinto Mts.	Fed: None Calif: SA, S2S3	Absent. No suitable habitat, outside current known geographic range.
<i>Nyctinomops femorosaccus</i> Pocketed free-tailed bat	Deserts & arid lowlands, pinyon juniper woodlands, desert scrub, riparian scrub, Joshua tree woodland, rocky areas with high cliffs. E Riverside & San Diego Cos. and Imperial Co., through SW US, Baja California, mainland Mexico. Roost mainly in crevices of high cliffs. Few records in So CA. Prefers rocky desert areas with high cliffs or rock outcrops. Feeds over ponds, streams, and arid desert.	Fed: None Calif: SSC, S3	Not expected (foraging and roosting). No suitable habitat, no documented occurrences within 5 mi.
<i>Nyctinomops macrotis</i> Big free-tailed bat	Low-lying arid areas in Southern California. Needs high cliffs or rocky outcrops for roosting sites. Feeds principally on large moths.	Fed: None Calif: SSC, S3	Low (foraging), not expected (roosting). Potentially suitable foraging habitat, potential roosting areas limited or absent, no documented occurrences within 5 mi.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
<i>Onychomys torridus ramona</i> Southern grasshopper mouse	Nocturnal, active year-round. Desert scrub, coastal scrub, mixed chaparral, sagebrush, especially scrub habitats with friable soil, prefers low to moderate shrub cover. LA through San Diego counties and northwest Baja.	Fed: None Calif: SSC, S3	Low to moderate. Potentially suitable habitat, no documented occurrences within 5 mi.
<i>Ovis canadensis nelsoni</i> Desert bighorn sheep	Desert mountains of SE California, SW US and Mex. Rocky, steep terrain, scrub and grassland.	Fed: None Calif: FP, S3 USFS: S	Absent. No suitable habitat, outside of current known geographic range.
<i>Puma concolor</i> Mountain lion	Various habitats, large home ranges. Natal dens often in rocky outcrops or dense vegetation. Not tracked in the CNDDB.	Fed: None Calif: CAN	Moderate. Potentially suitable habitat, recent news accounts in the Monrovia area. Observed on site by residents. No sign observed during surveys.
<i>Taxidea taxus</i> American badger	Mountains, deserts, interior valleys where burrowing animals are available as prey & soil permits digging. Throughout Central & W North America.	Fed: None Calif: SSC, S3	Low. Potentially suitable habitat, no documented occurrences within 5 mi., no burrows, diggings, or other sign observed during surveys.

References: CDFW (2021b, 2021c), USFWS (2021); BNA (2021); eBird (2021)

"Documented occurrences" refers to species occurrences in the California Natural Diversity Database (CNDDDB) unless otherwise noted. For plant species that are not tracked in the CNDDDB, records from the Consortium of California Herbaria (CCH) may be used. eBird (eBird.org) is an online database of bird distribution and abundance sponsored by the Cornell Laboratory of Ornithology and compiled from observations submitted by citizen scientists. eBird records of bird observations are noted but should be interpreted with caution. eBird records "in vicinity" is defined as records within about a 5-mile radius of the site.

Federal designations: (Federal Endangered Species Act, U.S. Fish and Wildlife Service):

- END: Federally listed, endangered; an animal or plant in danger of extinction within the foreseeable future throughout all or a significant portion of its range.
- THR: Federally listed, threatened; an animal or plant which is likely to become an Endangered species within the foreseeable future throughout all or a significant portion of its range.
- Cand: Candidate for federal listing as threatened or endangered; species that has been studied by the U.S. Fish and Wildlife Service, and the Service has concluded that it should be proposed for addition to the Federal Endangered and Threatened species list.
- Prop: Proposed for federal listing as Endangered or Threatened under Section 4 of the Endangered Species Act.
- Delisted: Previously federally listed as endangered or threatened, but is no longer listed (e.g., due to recovery).
- None: The species has no federal conservation status.
- BGEPA: Federal Bald and Golden Eagle Protection Act; protects bald and golden eagles.
- BCC: USFWS Bird of Conservation Concern; migratory and non-migratory bird species (beyond those already designated as Federally threatened or endangered) that represent USFWS highest conservation priorities.

State designations: (California Endangered Species Act, California Dept. of Fish and Wildlife)

- END: State listed, endangered; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease.
- CanE: Candidate Endangered; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of endangered species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of endangered species.
- CanF: Candidate Threatened; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the Fish and Game Commission has formally noticed as being under review by the Department of Fish and Wildlife for addition to the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to the list of threatened species.
- THR: State listed, threatened; a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that, although not presently threatened with extinction, is likely to become an endangered species in the foreseeable future in the absence of special protection and management efforts.
- RARE: State listed as rare: a native plant species, subspecies, or variety when, although not presently threatened with extinction, it is in such small numbers throughout its range that it may become endangered if its present environment worsens (Native Plant Protection Act of 1977).
- SSC: CDFW Species of Special Concern; vertebrate species of concern due to declining population levels, limited ranges, and/or continuing threats that have made them vulnerable to extinction.
- FP: Fully Protected; California Fish and Game Code states that Fully Protected species "...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected" species, although take may be authorized for necessary scientific research.
- Delisted: Previously state listed as threatened or endangered, but no longer listed (e.g., due to recovery).
- SA: CDFW Special Animal; wildlife of state conservation concern.
- SH: All California sites are historical, still some hope of rediscovery.

- SX: All California sites are historical, presumed extirpated.
PFB: Protected Fur-bearing Mammal under Title 14 of the California Code of Regulations.
None: The species has no state conservation status.

State Rank (S Rank): A reflection of the condition and imperilment of an element (plant, animal, vegetation community) throughout its range within the state. The S ranks are determined through a combination of rarity, threat, and trend factors, weighted more heavily on the rarity factors. Where correct category is uncertain, the S rank includes two categories or a question mark. Older ranks, which need to be updated, may still contain a decimal "threat" rank of .1, .2, or .3, where .1 indicates very threatened status, .2 indicates moderate threat, and .3 indicates few or no current known threats.

- S1: Critically imperiled; imperiled in the state because of extreme rarity or some factor(s) making it especially vulnerable to extirpation from the state.
S2: Imperiled; imperiled in the state because of rarity due to very restricted range, very few populations, steep declines, or other factors making it very vulnerable to extirpation from the state or nation.
S3: Vulnerable; vulnerable in the state due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation.
S4: Apparently secure; uncommon but not rare, some cause for long-term concern due to declines or other factors.
S5: Secure; common, widespread, and abundant in the state.
SH: Possibly extirpated; species or community occurred historically in the state, and there is some possibility that it may be rediscovered. The element has not been seen for at least 20 years, but suitable habitat still exists.
SX: Presumed extirpated; species or community is believed to be extirpated from the state.

California Rare Plant Rank (CRPR): The *California Rare Plant Ranks* are a ranking system originally developed by the California Native Plant Society (CNPS) to better define and categorize rarity in California's plants. These ranks were previously known as the CNPS lists but were renamed to the *California Rare Plant Ranks* to better reflect the joint effort among the CNPS, the CDFW, and a wide range of botanical experts, who work together to assign a rarity ranking.

- 1A: Plants presumed extinct in California and rare/extinct elsewhere.
1B: Plants rare, threatened, or endangered in California and elsewhere.
2A: Plants presumed extirpated in California, but more common elsewhere.
2B: Plants rare, threatened, or endangered in California but more common elsewhere.
3: Plants about which we need more information.
4: Plants of limited distribution.
X.1: Extension to CRPR (e.g., 1B.1); seriously threatened in California.
X.2: Extension to CRPR (e.g., 1B.2); fairly threatened in California.
X.3: Extension to CRPR (e.g., 1B.3); not very threatened in California.
CBR: Considered but rejected.

U.S. Forest Service (USFS) designation:

- S: Sensitive; plant and animal species identified by a regional forester that are not listed or proposed for listing under the Federal Endangered Species Act for which population viability is a concern, as evidenced by significant current or predicted downward trends in population numbers or density, or significant current or predicted downward trends in habitat capability that would reduce a species' existing distribution.

Bureau of Land Management (BLM designation:

- S: Sensitive; plant and animal species requiring special management consideration to promote their conservation and reduce the likelihood for future listing under the Federal Endangered Species Act. Includes species designated as sensitive by the BLM State Director and all Federal Candidate species and Federal delisted species in the 5 years following delisting. Sensitive species are managed as special status species.

Definitions of occurrence probability:

These definitions provide general guidance. Classifications for individual species may be modified based on biologists' experience and expert opinion.

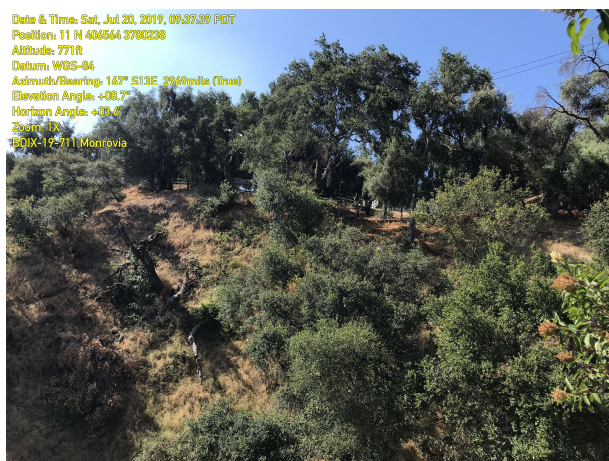
- Occurs:* Species was detected during surveys or previously documented on the Project site or adjacent areas.
- High:* Species documented in the vicinity (i.e., within 5 miles) of the Project site and suitable habitat is present, but species not detected during surveys.
- Moderate:* Species documented in the vicinity of the Project site or suitable habitat present and site is within geographic and elevational range of the species.
- Low:* Species not documented in the vicinity of the Project site or suitable habitat is marginal.
- Not Expected:* Species not documented in the vicinity of the Project site and suitable habitat marginal or absent, or site is not within geographic and elevational range of the species.
- Absent:* No potential for the species to occur due to lack of habitat, geographic or elevation range, species life history, survey results, etc.
- Unknown:* No focused surveys have been performed in the region, and the species' distribution and habitat are poorly known.

APPENDIX D: SITE PHOTOGRAPHS

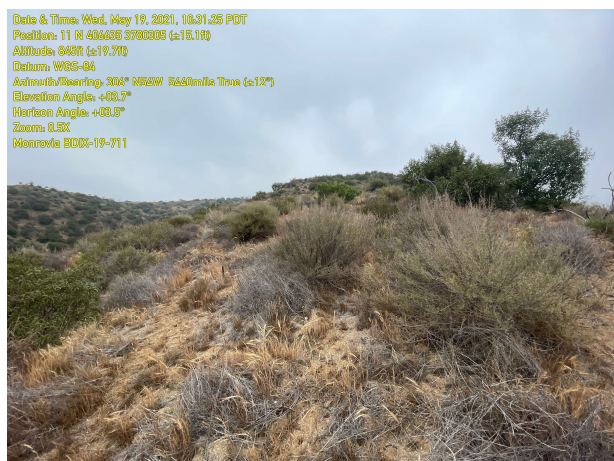
Note that GPS proved unreliable within the canyon and coordinates and bearings printed on photos may not be accurate.



Coast live oak woodland on a north-facing slope above an existing outbuilding in the southwestern area of the site, facing southwest (07.20.2019).



Coast live oak woodland on a north-facing slope in the south-central area of the site, facing south (07.20.2019).



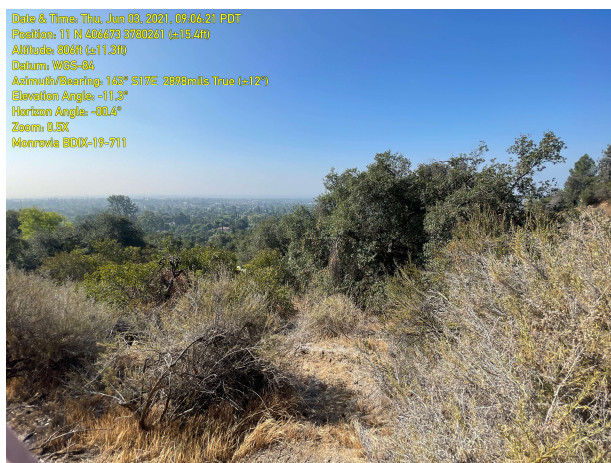
Laurel sumac scrub (burned) in northern area of site, facing northwest (05.19.2021).



Laurel sumac scrub (burned) in northwest area of site, facing northwest (06.03.2021).



Laurel sumac scrub (unburned) in northeastern corner of site, facing northwest (06.03.2021).



Laurel sumac scrub (unburned) in northeastern corner of site, facing south (06.03.2021).



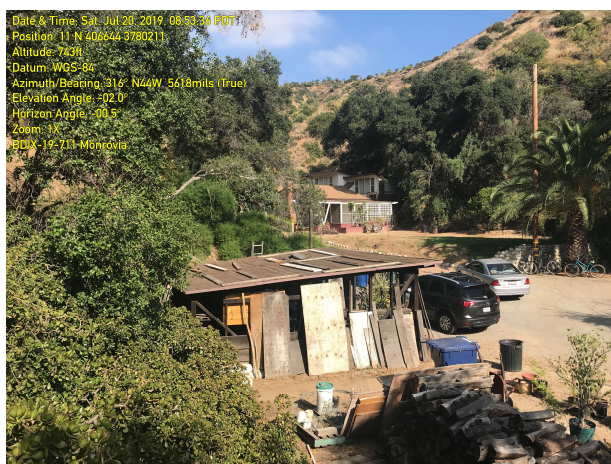
Disturbed/developed/ornamental area in west end of canyon, looking northeast. Outbuilding in foreground and residence in background (07.20.2019).



Residence in disturbed/developed/ornamental area in central portion of canyon, looking east (07.20.2019).



Residence and driveway in disturbed/developed/ornamental area in central area of canyon, looking northwest (06.03.2021).



Disturbed/developed/ornamental area in central portion of canyon, looking northwest. Outbuilding in foreground and residence in background (07.20.2019).



Walkway by residence, disturbed/developed/ornamental area in central portion of canyon, looking east (07.20.2019).



Recent clearing within disturbed/developed/ornamental area in east end of canyon adjacent to driveway, facing southeast (06.03.2021).



Retention basin in west end of canyon, facing northeast (06.03.2021).



APPENDIX E: CNDDDB FORMS

A CNDDDB form is provided for the Braunton's milk-vetch observed at the reference site. Southern California black walnut and San Gabriel oak are not tracked in the CNDDDB and a CNDDDB form is not required. The CNDDDB only tracks nesting for Cooper's hawk, northern harrier, yellow warbler, and Costa's hummingbird. No nesting was observed so a CNDDDB form is not required. Oak titmouse, Nuttall's woodpecker, wrentit, and Allen's hummingbird are not tracking in the CNDDDB and a CNDDDB form is not required.

Mail to:
California Natural Diversity Database
California Dept. of Fish & Wildlife
P.O. Box 944209
Sacramento, CA 94244-2090
CNDDDB@wildlife.ca.gov

For Office Use Only

Source Code: _____ Quad Code: _____
Elm Code: _____ Occ No.: _____
EO Index: _____ Map Index: _____

Date of Field Work (mm/dd/yyyy): 05/14/2021

Clear Form

California Native Species Field Survey Form

Print Form

Scientific Name: Astragalus brauntonii

Common Name: Braunton's milk-vetch

Species Found? ☒ Yes ☐ No If not found, why?
Total No. Individuals: 1 Subsequent Visit? ☐ Yes ☒ No
Is this an existing NDDDB occurrence? 4 ☐ No ☐ Unk.
Yes, Occ. #
Collection? If yes: _____
Number _____ Museum / Herbarium _____

Reporter: Guy Bruyee / L&L Environmental, Inc.

Address: 700 E. Redlands Blvd. Suite U-351

Redlands, CA 92373

E-mail Address: cwakeman@lleviroinc.com

Phone: 909.335.9897

Plant Information

Phenology:

100
% vegetative % flowering % fruiting

Animal Information

adults # juveniles # larvae # egg masses # unknown
☐ wintering ☐ breeding ☐ nesting ☐ rookery ☐ burrow site ☐ lek ☐ other

Location Description (please attach map AND/OR fill out your choice of coordinates, below)

County: Orange

Landowner / Mgr: Chino Hills State Park

Quad Name: Black Star Canyon

Elevation: 604 ft

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H ☐ M ☐ S ☐ Source of Coordinates (GPS, topo. map & type): GPS

T _____ R _____ Sec _____, _____ 1/4 of _____ 1/4, Meridian: H ☐ M ☐ S ☐ GPS Make & Model: Theodolite app

DATUM: NAD27 ☐ NAD83 ☐ WGS84 ☐ Horizontal Accuracy: 15.4 ft meters/feet

Coordinate System: UTM Zone 10 ☐ UTM Zone 11 ☒ OR Geographic (Latitude & Longitude) ☐

Coordinates: 436497 3747474

Habitat Description (plants & animals) plant communities, dominants, associates, substrates/soils, aspects/slope:

Animal Behavior (Describe observed behavior, such as territoriality, foraging, singing, calling, copulating, perching, roosting, etc., especially for avifauna):

Please fill out separate form for other rare taxa seen at this site.

Site Information Overall site/occurrence quality/viability (site + population): ☐ Excellent ☐ Good ☐ Fair ☐ Poor

Immediate AND surrounding land use: _____

Visible disturbances: _____

Threats: _____

Comments: Search of polygons associated with Element Occurrence #4 and adjacent areas found only one plant.

Determination: (check one or more, and fill in blanks)

- ☐ Keyed (cite reference): _____
☐ Compared with specimen housed at: _____
☐ Compared with photo / drawing in: _____
☐ By another person (name): _____
☐ Other: _____

Photographs: (check one or more)

Plant / animal ☐ Slide ☐ Print ☒ Digital
Habitat ☐ ☐ ☐ ☐
Diagnostic feature ☐ ☐ ☐ ☐





May we obtain duplicates at our expense? ☒ yes ☐ no






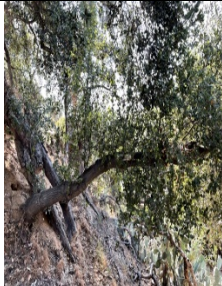
CDPWBED/1747 Rev. 7/3/2018















APPENDIX F: TREE SURVEY DATA







Tree health ratings are defined in Table 2 and are summarized as 5-excellent, 4-very good, 3-moderate, 2-poor, 1-dying, 0-dead. N/A = not available. Tree tag numbers start at 45. Tree species are coast live oak (*Quercus agrifolia*), ornamental juniper (*Juniperus* species), hibiscus (*Hibiscus* species), avocado (*Persea americana*), Italian cypress (*Cupressus sempervirens*), olive (*Olea europaea*), date palm (*Phoenix dactylifera*), apricot (*Prunus* species), jacaranda (*Jacaranda mimosifolia*), southern California black walnut (*Juglans californica*), sapote (*Casimiroa* species).







Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
45	Juniper	20'	37" (Multi-trunk)	4	34.158068 N -118.011989 W	690			Measurement includes any branch over 4"
46	Hibiscus	24'	14"	4	34.158085 N -118.012059 W	690			





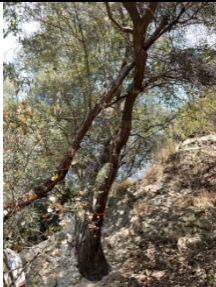
Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
47	Coast Live Oak	30'	26"	5	34.158111 N -118.012084 W	692			
48	Avocado	17'	33" (Multi-trunk)	5	34.158389 N -118.012410	707			
49	Coast Live Oak	10'	10"	5	34.158534 N -118.012285 W	720			Projects from hillside




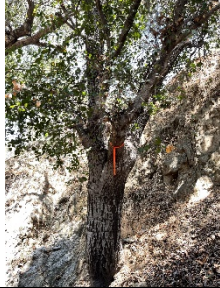
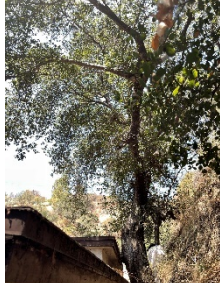
Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
50	Italian Cypress	30'	17"	4	34.158533 N -118.012566 W	716			Branches excluded
51	Italian Cypress	31'	9"	5	34.158543 N -118.012567 W	722			Branches excluded
52	Italian Cypress	30'	7"	4	34.158554 N -118.012577 W	722			Branches excluded






Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
53	Italian Cypress	30'	8"	5	34.158567 N -118.012587 W	722			Branches excluded
54	Italian Cypress	30'	7"	4	34.158585 N -118.012591 W	719			Branches excluded
55	Italian Cypress	32'	7"	5	34.158605 N -118.012598 W	720			Branches excluded



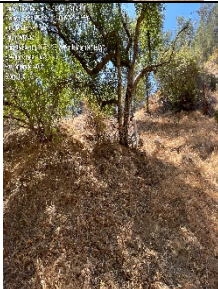


Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
56	Italian Cypress	32'	7"	5	34.158615 N -118.012599 W	721			Branches excluded
57	Italian Cypress	35'	8"	5	34.158628 N -118.012601 W	721			Branches excluded
58	Italian Cypress	35'	8"	5	34.158642 N -118.012602 W	722			Branches excluded




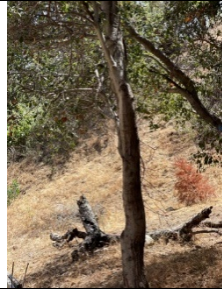



Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
59	Coast Live Oak	25'	14"	5	34.158720 N -118.012533 W	732			Medium sized nest, no access
60	Coast Live Oak	15'	9.5"	4	34.158811 N -118.012646 W	739			20' overhang
61	Olive	15'	35" (Multi-trunk)	5	34.158822 N -118.012869 W	733			






Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
62	Date Palm	30'	36"	4	34.158877 N -118.012955 W	741			
63	Date Palm	20'	34"	4	34.158865 -118.013024	737			
64	Coast Live Oak	30'	24"	5	34.158955 N -118.013201 W	757	N/A		







Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
65	Olive	15'	37"	2	34.158921 N -118.013195 W	749			
66	Coast Live Oak	30'	20"	4	34.158966 N -118.013272 W	761			
67	Coast Live Oak	40'	53"	4	34.158975 N -118.013359 W	765	N/A		







Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
68	Coast Live Oak	12'	6"	5	34.158866 N -118.013546 W	756			
69	Coast Live Oak	35'	24"	5	34.158905 N -118.013914 W	770			
70	Coast Live Oak	35'	11"	5	34.158752 N -118.013747 W	777	N/A		







Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
71	Coast Live Oak	30'	10"	5	34.158762 N -118.013719 W	773			
72	Coast Live Oak	20'	31"	5	34.158759 N -118.013678 W	771	N/A		
73	Coast Live Oak	25'	25"	5	34.158833 N -118.013735 W	764			

Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
74	Coast Live Oak	30'	15"	5	34.158760 N -118.013577 W	761			
75	Coast Live Oak	22'	7"	3	34.158790 N -118.013557 W	755			
76	Coast Live Oak	30'	20"	5	34.158805 N -118.013346 W	751			
77	Coast Live Oak	35'	22"	4	34.158751 N -118.013248 W	748	N/A		

Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
78	Coast Live Oak	40'	27"	4	34.158747 -118.013181	744	N/A		
79	Juniper	15	27	5	34.158006 -118.012064	688			Measurement includes any branch over 4"
80	Avocado	15	28" (Multi-trunk)	4	34.158108 -118.012126	693			Two trunks, bark damage

Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
81	Apricot	10	34"	2	34.15815 -118.012271	700			Bark and heart rot, termite infested
82	Jacaranda	50	56" (Multi-trunk)	5	34.158292 118.012395	704			
83	Coast live oak	22	10"	5	34.158403 -118.012558	713			

Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
84	Coast live oak	25	14"	5	34.158490 -118.012647	722			
85	Southern California Black Walnut	12	12	5"	34.158505 -118.012642	721			Measured trunks over 4"
86	Coast live oak	40	41" (Multi-trunk)	5	34.158578 -118.012682	726			

Tree #	Species	Estimated Height (feet)	Trunk Diameter (inches)	Health Rating (0 to 5)	GPS Coordinates	Approx Base Elevation (feet)	Photo 1	Photo 2	Notes
87	Coast live oak	25	18"	5	34.158674 -118.012761	728			
88	Coast live oak	23	14"	5	34.158687 -118.012771	727			
89	Sapote	20	17"	5	34.158748 -118.012717	727			

APPENDIX G: PRECIPITATION DATA

Precipitation data from the Santa Fe Dam RAWS for October 2009 through June 2021, by water year (October 1 through September 30) (WRCC 2021).

Water Year	Precipitation (inches)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
2010	0.86	0.02	3.15	6.23*	5.19	0.74	1.32	0	0	0	0	0	17.51*
2011	1.62	1.19	11.39	0.81	3.86	2.98	0.01	0.26	0	0	0.07	0.01	22.20
2012	1.57	1.63	0.68	0.93	1.19	2.16	2.60	0.07	0*	0*	0	0	10.83*
2013	0.53	1.05	2.91	1.15	0.53	0.52	0.02	0.64	0	0	0	0	7.35
2014	0.06	0.76	0.46	0.09	3.02	0.90	0.41	0	0	0	0.09	0	5.79
2015	0.07	0.75	4.47	0.70	1.20	0.40	0.41	0.75	0	1.29	0	1.39	11.43
2016	0.28	0.42	0.73	4.61	0.66*	2.35	0.78	0.95	0	0	0	0*	10.78*
2017	0.11*	0.84	4.99	18.25	3.79	**	0.02	1.04	0	0	0.02	0.10	29.16*
2018	0.02	0.02	0	2.33	0.31	4.21	0.01	0.48	0	0	0	0	7.38
2019	0.64	1.80	2.30	6.38	8.29	2.51	0.10	1.19	0.18	0	0	0	23.39
2020	0	2.73	4.53	0.17	0.15	4.41	3.73	0.27	0.04	0	0	0	16.03
2021	0	0.12	1.70	2.69	0.17	1.58	0.14	0.10	0	*	*	*	6.50***
Average for Water Years 2010 – 2020													14.71*

*missing data; **anomalous data; ***through June

Precipitation data from the Henninger Flats RAWs for October 2009 through June 2021, by water year (October 1 through September 30) (WRCC 2021).

Water Year	Precipitation (inches)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
2010	*	*	4.71	8.16	6.07	1.28	2.58	0.12	0.02	0	0	5.63	28.57*
2011	4.41	1.67	16.34	0.87	5.61	5.69	0.28	0.75	0.15	0	0	0.09	35.86
2012	1.31	2.13	0*	1.11*	0.86	3.30	3.13	0.71	0	0.01	0.07	0.01	12.64*
2013	1.00	1.38	**	2.15	0.70	1.20	0.29	1.40	0.01	0	0	0.01	8.14*
2014	0.46	1.15	0.55	0.19	3.19	0.83	0.55	0	0	0	0.01	0.14	7.07
2015	0.32	0.85	4.66	0.88	1.84	0.45	0.50	1.67	0.15	1.31	0*	0*	12.63*
2016	0.17	0.23	1.13	5.15	0.89*	2.66	2.42	0.60	0.12	0	**	0.13*	13.50*
2017	0.40	1.19	5.09	11.55*	5.71	0.84	0.15	0	0	0	0	0	24.93*
2018	0	0	0	2.60	0.46	6.80	0.03	1.75	0	0	0	0	11.64
2019	0.84	2.54	2.83	9.29	9.98	2.94*	0.56	2.82	0.36	0.04	0	0.43	32.63*
2020	0	2.40	7.42	0.23	0.13	5.19	5.95	0.38	0.27	0	0	0	21.97
2021	0	0.26	1.38	3.18	0.12	1.50	0.48	0.35	0.04	*	*	*	7.31***
Average for Water Years 2010 – 2020													19.05*

*missing data; **anomalous data; ***through June

APPENDIX H: CERTIFICATION

Certification: I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

DATE: December 16, 2021

SIGNED: _____


Leslie Irish, Principal, L&L Environmental, Inc.
909-335-9897

1) Fieldwork Performed By:

Guy Bruyea
Name

2) Fieldwork Performed By:

Leslie Irish
Name

I certify that the information in this survey report and attached exhibits
fully and accurately represents my work.



Guy Bruyea, USFWS Permit TE-837439-8

July 20, 2021

Date

APPENDIX I: CONCEPTUAL GRADING PLAN

APPENDIX J: LOT LINE ADJUSTMENT