L&L ENVIRONMENTAL, INC.
REGULATORY SERVICES
BIOLOGICAL & CULTURAL INVESTIGATIONS & MONITORING

REVISED

BIOLOGICAL RESOURCES ASSESSMENT, BURROWING OWL, NESTING RAPTOR, AND CROTCH BUMBLE BEE SURVEYS, BAT HABITAT ASSESSMENT, BOTANICAL AND NARROW ENDEMIC PLANT, AND TREE SURVEYS FOR OAK VALLEY NORTH COMMERCE CENTER PROJECT 9950 AND 10300 CALIMESA BOULEVARD, CALIMESA, RIVERSIDE COUNTY, CALIFORNIA

±109.52 Acre Property, ±8.13 Acre Offsites, ±117.65+ Acres Surveyed

APNs 413-260-018, 413-280-016, 413-280-018, 413-280-021, 413-280-030, 413-280-036, 413-280-037, and 413-280-043, plus offsite areas on portions of 413-260-014, 413-260-017, 413-260-019, 413-260-020, and 413-260-052, Calimesa, Sections 24 and 25, Township 2 South, Range 2 West, USGS El Casco 7.5' Topographic Quadrangle

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Report Summary:

Biological surveys were conducted on a proposed industrial and residential/church development project in Calimesa. There is an existing vacant residence on the site. Vegetation consists of coastal sage – chaparral scrub, non-native grassland/fiddleneck fields, and disturbed/developed/ornamental areas. No listed or special status plants observed. Three special status plant species (Plummer's mariposa lily, smooth tarplant, Parry's spineflower) have moderate potential to occur but are covered under the MSHCP. Many trees on the site, mainly non-native ornamentals. No oak trees but scrub oaks present. No listed wildlife species detected; a few have potential to occur. No Crotch bumble bees observed. Five special status wildlife species observed (orange-throated whiptail, Cooper's hawk, California horned lark, great egret, wrentit); several others have potential to occur. Habitat for roosting bats present. Habitat for nesting birds, including raptors, present. No burrowing owls or owl sign observed. Ponding areas observed with potential habitat for fairy shrimp. No habitat for riparian birds. There are three drainages plus a roadside ditch with state/CDFW waters and MSHCP riverine. The site is outside of MSHCP Cells and outside of any described lands that would contribute to Proposed Constrained Linkage 23. This report includes an analysis of Project impacts and proposed mitigation.

Surveys Conducted By: Guy Bruyea, Leslie Irish, and Joshua Ball

Surveys Conducted: March to September 2022, February to August 2023

Report Date: October 2022, revised January 2023, June 2023, updated September 2023, revised December 2023, February 2024

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TABLE OF CONTENTS

ACRONYMS

AMSL	Above Mean Sea Level
APN	Assessor's Parcel Number
BGEPA	Bald and Golden Eagle Protection Act
CASSA	Criteria Area Species Survey Area
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFGC	California Fish and Game Commission
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CRPR	California Rare Plant Rank
CWA	Clean Water Act
DBESP	Determination of Biologically Equivalent or Superior Preservation
DBH	Diameter Breast Height
EO	CNDDB Element Occurrence
FESA	Federal Endangered Species Act
HCP	Habitat Conservation Plan
IPaC	Information for Planning and Consultation
L&L	L&L Environmental, Inc.
LSAA	Lake and Streambed Alteration Agreement
MBTA	Migratory Bird Treaty Act
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
NEPA	National Environmental Policy Act
OHWM	Ordinary High Water Mark
PQP	Public Quasi-Public Conserved Lands
RAWS	Remote Automated Weather Station
RCA	Western Riverside County Regional Conservation Authority
RWQCB	Regional Water Quality Control Board
TTM	Tentative Tract Map
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
UTM	Universal Transverse Mercator
WEAP	Workers Environmental Awareness Program
WGS84	World Geodetic System 1984
WoUS	Waters of the U.S.

MANAGEMENT SUMMARY

L&L Environmental, Inc. (L&L) conducted biological surveys on Birtcher Development's ±109.52-acre Oak Valley North Commerce Center Project (Project) located in the City of Calimesa in western Riverside County. The Project also includes ±8.13 acres of offsite impacts associated with road improvements. The purpose of this study was to examine the subject property to determine presence/absence of biological resources on the property and potential for state and federally listed and special status species to occur.

The site is within the area covered by the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) but is not within a Criteria Cell. Surveys are required for riparian/riverine and vernal pool habitat and associated species, burrowing owl (*Athene cunicularia*), and narrow endemic plants Marvin's onion (*Allium marvinii*) and many-stemmed dudleya (*Dudleya multicaulis*). MSHCP Conserved Lands are located about 0.5 mile to the northeast, 0.6 mile to the southwest, and about 0.8 mile to the northwest of the site. Public/Quasi-Public (PQP) Conserved Lands are also located about 0.6 mile to the southwest. MSHCP Proposed Constrained Linkage 23 is located about 0.25 mile north of the Project site.

The site has been historically disturbed by residential and agricultural uses. Vegetation on the site and offsite areas consists of non-native grasslands and wildflower fields, disturbed/developed areas with ornamental plants, and pockets of native coastal sage – chaparral scrub. There are no riparian or other sensitive vegetation communities present. Impacts to vegetation communities and associated habitat on the site would be less than significant and no mitigation is proposed.

No state or federally listed plant species were observed on the site during surveys. Listed plant species known from the region are either absent from the site or not expected to occur. The site is not within designated critical habitat for any federally listed plant species. There would be no impact to federal or state-listed plants and no mitigation is proposed.

Narrow endemic plant species Marvin's onion and many-stemmed dudleya were not observed during surveys, suitable habitat is lacking, and these species are considered absent. No impact to narrow endemic plant species would occur and no mitigation is proposed.

No special status plant species were observed on the site during surveys. Three special status plant species have a moderate potential for occurrence: Plummer's mariposa lily (*Calochortus plummerae*), smooth tarplant (*Centromadia pungens ssp. laevis*), and Parry's spineflower (*Chorizanthe parryi var. parryi*). Plummer's mariposa lily and Parry's spineflower are covered species under the MSHCP and considered adequately conserved. The MSHCP does not require

surveys for these species. Smooth tarplant is a covered species under the MSHCP. Surveys for smooth tarplant are required within the MSHCP Criteria Area Species Survey Area (CASSA) and mitigation is required if the species is present. However, the Project is not within the CASSA and surveys and mitigation are not required for smooth tarplant for the Project. Project-related impacts (if any) to these species would be a covered impact under the MSHCP and no mitigation is proposed. No impacts to special status plants other than these three species would occur and no mitigation is proposed.

A tree survey found 166 oaks and non-oak trees on the site consisting of 54 native scrub oaks (*Quercus berberidifolia*), 18 other native trees, and 94 non-native ornamental trees. A total of 29 of the trees have a diameter breast height (DBH) of 24 inches or greater. All of the scrub oaks and the 29 larger trees will be impacted and are regulated by the City of Calimesa. Most of the smaller (non-oak) trees will also be impacted but are not regulated by the City. Proposed mitigation includes planting replacement oaks and other trees with five (5) years of monitoring. Impacts to oaks and other trees regulated by the City of Calimesa would be less than significant with implementation of proposed mitigation.

No state or federally listed wildlife species were observed on the site during surveys. The site is not within designated critical habitat for any federally listed wildlife species. Listed wildlife species with moderate or high potential to occur on the site are white-tailed kite (foraging) (*Elanus leucurus*) and Stephens' kangaroo rat (*Dipodomys stephensi*). White-tailed kite and Stephens' kangaroo rat are MSHCP covered species and considered adequately conserved. The Project site is not within the boundaries of the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP). The MSHCP covers impacts to Stephens' kangaroo rat because the Project site is located within the MSHCP boundaries but is located outside of the boundaries of the SKR HCP. Project-related impacts (if any) to Stephens' kangaroo rat would be a covered impact under the MSHCP and no mitigation is proposed. However, state and federal permits issued for the MSHCP do not allow direct mortality or take of white-tailed kite. No direct mortality or take of adult white-tailed kites is anticipated and no mitigation is proposed. The MSHCP also does not provide take authorization for nesting birds, including nesting white-tailed kites (discussed below).

Crotch bumble bee (*Bombus crotchii*) is a candidate for state listing as endangered and is not a covered species under the MSHCP. Focused surveys for Crotch bumble bee were conducted in 2023. There are patches of potentially suitable habitat on the site but no Crotch bumble bee individuals or nests were observed. Proposed mitigation includes pre-construction surveys, avoidance buffers, and incidental take permitting if the species will be impacted. Impacts to Crotch bumble bee would be less than significant with implementation of proposed mitigation.

No naturally occurring vernal pools were observed on the site. However, 2023 surveys noted ponding in offsite areas along Calimesa Boulevard and Beckwith Avenue that could provide potential fairy shrimp habitat. Fairy shrimp surveys were initiated in Fall 2023 and the dry season survey found only the common versatile fairy shrimp (*Branchinecta lindahli*). Wet season surveys have also found only the common versatile fairy shrimp through February 2024. Wet season surveys will be completed in early 2024. If listed fairy shrimp species are present, proposed mitigation includes conservation of 90 percent of occupied habitat and/or purchase of credits at the Skunk Hollow / Berry Jones Mitigation Bank or a mitigation bank that is determined to be acceptable to the City of Calimesa Planning Department, USFWS, and CDFW. Impacts to listed fairy shrimp species would be less than significant with implementation of proposed mitigation.

There is no suitable habitat for riparian bird species least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), or western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) on or adjacent to the site. There would be no impact to these riparian bird species and no mitigation is proposed.

Potentially suitable habitat for burrowing owl is present on the site but no owls or owl sign were observed during focused owl surveys. Proposed mitigation includes a preconstruction survey, avoidance buffers, and other mitigation as required by the MSHCP. Impacts to burrowing owl would be less than significant with implementation of proposed mitigation.

Five (5) special status wildlife species were observed during surveys: orange-throated whiptail (*Aspidoscelis hyperythrus*), Cooper's hawk (*Accipiter cooperii*), great egret (fly over) (*Ardea alba*), wrentit (in adjacent area) (*Chamaea fasciata*), and California horned lark (*Eremophila alpestris actia*). Orange-throated whiptail, Cooper's hawk, and California horned lark are covered species under the MSHCP and considered adequately conserved. Project-related impacts (if any) to these species would be a covered impact under the MSHCP and no mitigation is proposed. However, the MSHCP does not provide take authorization for nesting birds (discussed below). Great egret and wrentit are not covered under the MSHCP. Great egret is not expected to forage on the site and would not nest there. Impacts to great egret would be less than significant and no mitigation is proposed. Wrentit has a low potential to forage or nest on the site. Impacts to wrentit (if any) would be limited to nesting birds (discussed below).

Several other special status wildlife species have not been observed on the site but have a moderate or high potential to occur. Many of these are covered species under the MSHCP and considered adequately conserved. Project-related impacts (if any) to these species would be a covered impact under the MSHCP and no mitigation is proposed. Of the special status species

that have moderate or high potential to occur, a few are not covered under the MSHCP. Project-related impacts to these species would not substantially affect regional populations or available habitat. Impacts would be less than significant and no mitigation is proposed (with the exception of nesting birds and special status bats, discussed below).

Three special status bat species, pallid bat (*Antrozous pallidus*), Townsend's big-eared bat (*Corynorhinus townsendii*), and western mastiff bat (*Eumops perotis californicus*), have a moderate potential to forage and roost on the site. These species are not covered under the MSHCP. A habitat assessment for bats was conducted in 2023 and found suitable day, night, and maternity roosting habitat in the abandoned residence and some trees on the site. Nighttime emergence surveys are planned for 2024. Proposed mitigation includes avoidance of maternity roosts, preconstruction surveys, supervision of tree removal and structure demolition by a bat biologist, exclusion devices, and installation and monitoring of artificial bat roosts to replace occupied roosts. Impacts to special status bats would be less than significant with implementation of proposed mitigation.

Habitat suitable for nesting birds (including raptors) is present within and adjacent to the site. Proposed mitigation includes pre-construction surveys and avoidance buffers. Impacts to nesting birds would be less than significant with implementation of proposed mitigation.

The site provides local movement opportunities for species that live within the site and immediately adjacent undeveloped lands. However, it is outside of the MSHCP Criteria Cells that make up Proposed Constrained Linkage 23, the connectivity area identified in the MSHCP. Therefore, Project-related impacts to wildlife corridors would be less than significant and no mitigation is proposed.

There are three (3) ephemeral drainages on the site plus a roadside ditch along Calimesa Boulevard. A total of 0.86 acre of CDFW streambed/State waters is present, of which 0.73 acre is also an MSHCP riverine resource subject to Section 6.1.2 of the MSHCP. No state wetland/MSHCP riparian habitat is present and no federal waters or wetlands are present. The roadside ditch is a manmade feature and therefore not subject to MSHCP Section 6.1.2. The delineation assumes that all of the CDFW streambed/State waters and MSHCP riverine resources on the site will be impacted.

Impacts to CDFW streambed/State waters require permits from CDFW and the Regional Water Quality Control Board (RWQCB). Impacts to MSHCP riverine resources requires preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP). A DBESP has been

prepared for separate submittal. Proposed mitigation includes regulatory permitting and compensation for impacts at a ratio of no less than 2:1. Project-related impacts to CDFW streambed/State waters and MSHCP riverine resources on the site would be less than significant with implementation of proposed mitigation.

No naturally occurring vernal pools were observed on the site. Ponding areas were observed as noted above, but no vernal pool plant species were observed. There would be no impact to naturally occurring vernal pool habitat or associated species (other than fairy shrimp, discussed above) and no mitigation is proposed.

Other proposed mitigation includes biological monitoring and clearance surveys, Workers Environmental Awareness Program (WEAP), flag or fence disturbance areas, and measures to address invasive species, wildlife hazards, and trash. Implementation of these proposed measures, in conjunction with the mitigation summarized above, would avoid and minimize impacts to sensitive biological resources.

1.0) INTRODUCTION

This report was prepared by L&L Environmental, Inc. (L&L) for Birtcher Development. It describes the results of biological surveys (including a general biological survey and habitat assessment, burrowing owl, nesting raptor, and Crotch bumble bee surveys, bat habitat assessment, botanical and narrow endemic plant surveys, tree survey, and vegetation community mapping) conducted on the site of the proposed Oak Valley North Commerce Center Project (Project), located in the City of Calimesa within western Riverside County.

The Project site consists of Assessor's Parcel Numbers (APNs) 413-260-018, 413-280-016, 413-280-018, 413-280-021, 413-280-030, 413-280-036, 413-280-037, and 413-280-043, totaling ±109.52 acres. In addition, offsite road improvements will impact portions of APNs 413-260-014, 413-260-017, 413-260-019, 413-260-020, and 413-260-052, totaling ±8.13 acres.

The assessment consisted of (1) a records search and literature review to determine the species of concern in the Project area and proximity to closest 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 (burrowing owl, nesting raptors, Crotch bumble bee, special status bats, riparian/riverine and vernal pool species, and special status and narrow endemic plants), (3) vegetation community mapping, (4) focused protocol surveys for burrowing owl, focused surveys for Crotch bumble bee, and surveys for nesting raptors, (5) focused surveys for listed, special status, and narrow endemic plants, (6) a dry season protocol fairy shrimp survey, and (7) a survey to map and measure trees. A wet season protocol fairy shrimp survey is in progress and will be completed in early 2024. A jurisdictional delineation was also conducted and is reported separately.

1.1) Project Description

The proposed Project is identified as the Oak Valley North Commerce Center and consists of a ±95.6-acre business park and light industrial area with four (4) large warehouses and parking and a high-density residential or church land use area of ±11.2 acres (up to 223 dwelling units). The balance of the acreage (3.4 acres) would be designated as roadway. An existing vacant residence and other remnant agricultural structures and equipment present on the site will be removed. The entire site will be impacted and all impacts will be permanent. A conceptual site plan is provided in Appendix I.

The offsite impact areas consist of road improvements along Calimesa Boulevard and Beckwith Avenue adjacent to the southwest and northeast Project site boundaries, respectively. A portion

of the western corner of the site and adjacent offsite areas along Calimesa Boulevard will be impacted by City road improvements that will be implemented prior to the construction of the Project (referred to in this report at the City Road Project Overlap Area).

1.2) Location

The Project site address is 9950 and 10300 Calimesa Boulevard. The Project site is within the City of Calimesa in western Riverside County, California. It is generally located immediately northeast of Interstate 10 (I-10 freeway) on the northeast side of Calimesa Boulevard about 500 feet southeast of Singleton Road and about 0.4 mile northwest of Cherry Valley Boulevard. Existing portions of Beckwith Avenue are adjacent to the northeastern boundary of the site (Figure 1).

The site is situated within Township 2 South, Range 2 West, Sections 24 and 25 as shown on the U.S. Geological Survey (USGS) El Casco 7.5' series topographic quadrangle map (Figure 2). Offsite impact areas are also located within these sections.

The site is generally bounded as follows: to the southwest by Calimesa Boulevard and the I-10 freeway with vacant lands, residential developments, and San Timoteo Canyon, the Norton Younglove Reserve, and the Badlands beyond; to the northwest by vacant lands and Singleton Road with scattered commercial/industrial, mobile home park, and residential development beyond; to the northeast by Beckwith Avenue, vacant lands, and residential development with MSHCP conserved lands beyond; to the southeast by a mobile home park, vacant and agricultural lands, and commercial/industrial development with Cherry Valley Boulevard beyond (Figure 3).

1.3) Vegetation and Setting

Vegetation on the site consists of non-native grasslands and wildflower fields, disturbed/developed areas and ornamental plants, and pockets of native coastal sage – chaparral scrub.

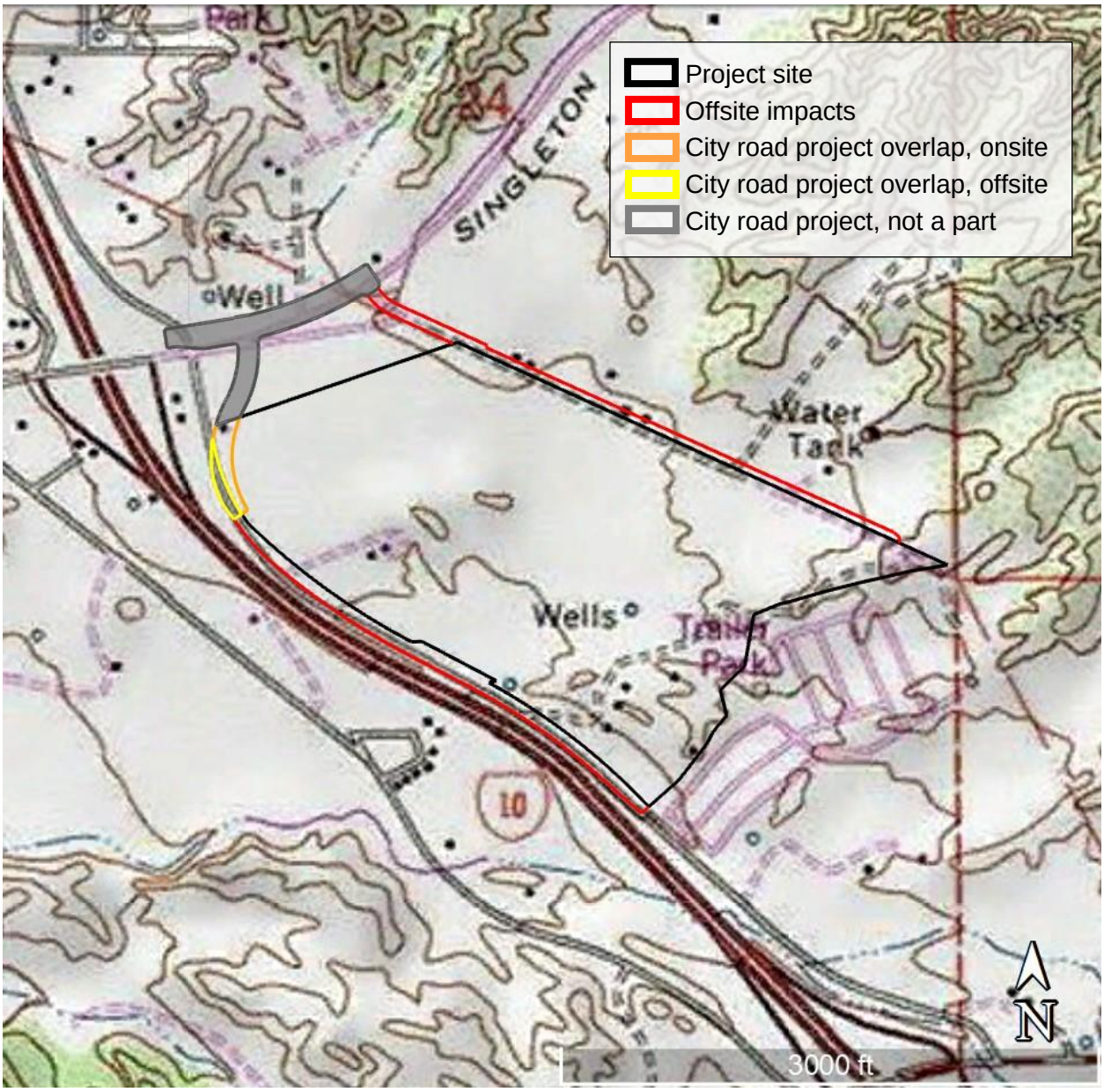
The site has been historically disturbed by residential and agricultural uses. Two unpaved driveways enter the site from Calimesa Boulevard. The northernmost driveway (identified as Roberts Road) leads to a vacant residence on a small hilltop, along with remnant foundations of other structures. The southernmost driveway (unnamed) leads to an area that previously had a number of structures (visible on 2006 aerial images) that are no longer present. Piles of old pipes and other debris are present, as well as remnants of old agricultural equipment and small structures. Fencing (mainly barbed wire) is present along portions of the site boundaries. Review

of historic aerial images (Google Earth 2023, NETRonline 2023) shows that the site has been disturbed since at least 1959 and is regularly disked for weed abatement.

There are three (3) ephemeral drainages on the site plus one manmade roadside ditch along Calimesa Boulevard. No flowing or ponded water was observed in any of the drainages during surveys.

Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Project Vicinity
Figure 1



Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Project Location

Figure 2

(USGS El Casco [2022] Quadrangle,
Township 2 South, Range 2 West, Sections 24 and 25)

Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Aerial Image

Figure 3

(Aerial obtained from Google Earth, May 2023)

1.4) Soils and Topography

Topographically, the site is a mixture of relatively flat areas and low-relief rolling hills, with elevations ranging from approximately 2,278 feet (694 meters) above mean sea level (amsl) to approximately 2,413 feet (735 meters) amsl.

Soils on the majority of the site are mapped as Hanford coarse sandy loam (2 to 8 percent slopes) and (8 to 15 percent slopes, eroded). Other soils present are Ramona sandy loam (8 to 15 percent slopes, severely eroded), Gorgonio gravelly loamy fine sand (2 to 15 percent slopes), Terrace escarpments, and Tujunga loamy sand (channeled, 0 to 8 percent slopes) (Figure 4).

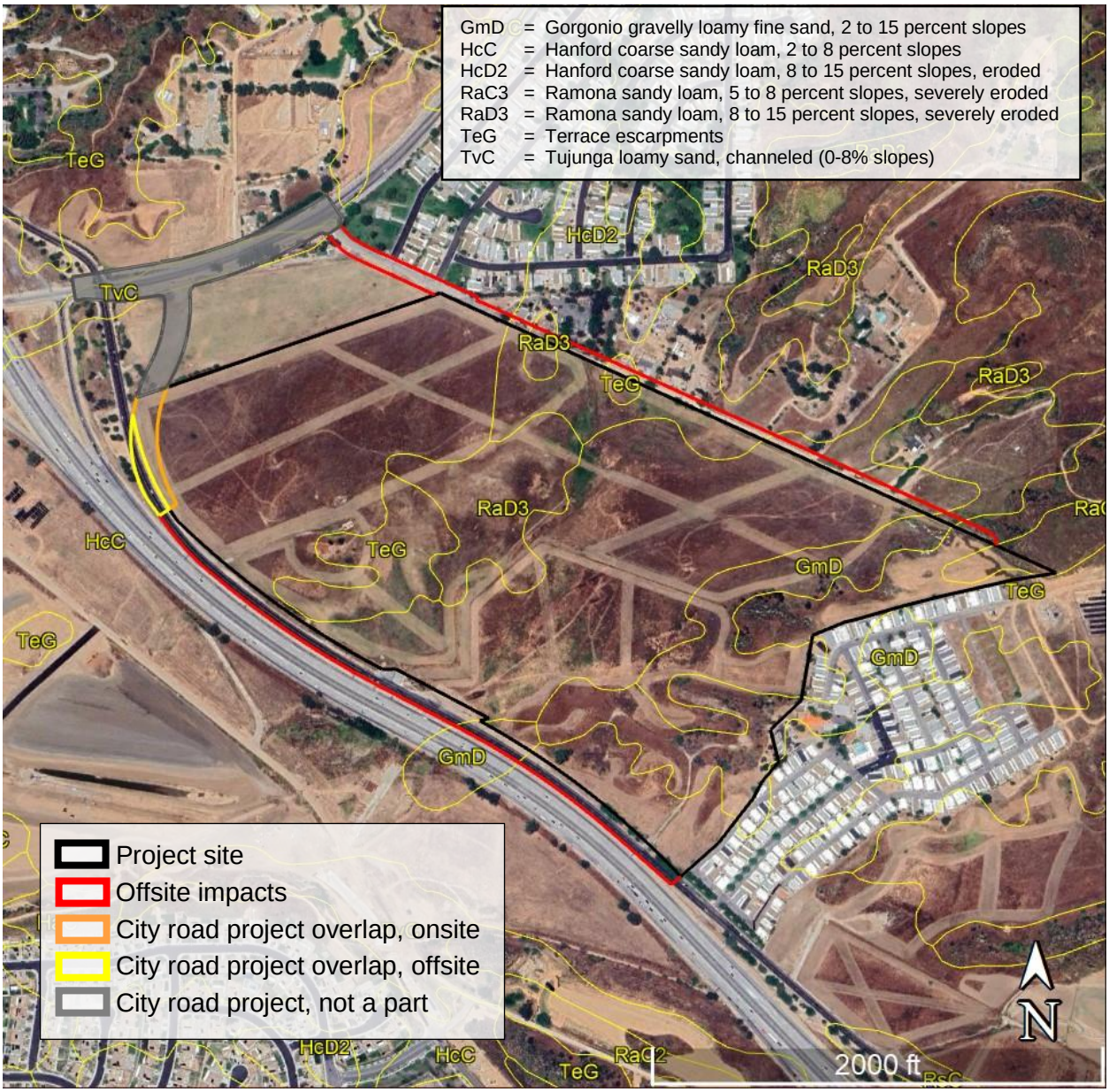
The Hanford series consists of very deep, well drained soils that formed in moderately coarse textured alluvium dominantly from granite. Hanford soils are on stream bottoms, floodplains and alluvial fans at elevations of 150 to 3,500 feet and have slopes of 0 to 15 percent. Vegetation in uncultivated areas is mainly annual grasses and associated herbaceous plants (NRCS 2023).

Ramona soils are well drained and found on terraces and fans at elevations of 250 to 3,500 feet. They formed in alluvium derived mostly from granitic and related rock sources. Uncultivated areas have a cover of annual grasses, forbs, chamise, or chaparral (NRCS 2023).

Gorgonio soils are somewhat excessively drained and found on alluvial fans at elevations of 20 to 3,000 feet. They formed in coarse textured alluvium derived from granite, granodiorite, schist, and related rocks. Principal native plants are annual grasses and forbs with a few scattered oak trees (NRCS 2023).

The Tujunga series consists of very deep, somewhat excessively drained soils that formed in alluvium from granitic sources. Tujunga soils are on alluvial fans and floodplains, including urban areas. Uncultivated areas have a cover of shrubs, annual grasses, and forbs (NRCS 2023).

Terrace escarpments are stratified sand and gravel in narrow steeply sloping areas between one terrace and another or between a terrace and the bottom lands.



Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Soils Map
Figure 4

(Aerial obtained from Google Earth, May 2023; data from NRCS [2023])

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. See the jurisdictional delineation report for details. 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 and Porter-Cologne

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, over exploitation, 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 Wildlife Code). Candidate species are those under formal review by the CDFW for listing as endangered or threatened (Section 2067). Prior to being considered for protected status, the CDFW designates a species as being of special concern. Species of Special Concern are those for which the CDFW has information indicating population decline.

2.5) California Natural Diversity Database

The California Natural Diversity Database (CNDDB) is a database that ranks overall condition of listed and special status species and sensitive vegetation communities on global (throughout its range) and state (within California) levels. The CNDDB includes documented occurrences of listed and special status species that have been reported to CDFW. 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) Information for Planning and Consultation

The U.S. Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) is a database that includes federally listed endangered or threatened species and species proposed for listing, designated critical habitat, Birds of Conservation Concern, and other federally regulated lands and biological resources.

2.8) 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.”

2.9) 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.

2.10) 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.

2.11) Western Riverside County Multiple Species Habitat Conservation Plan

The County of Riverside, including eight (8) additional land jurisdictions and 14 cities, have prepared a Multiple Species Habitat Conservation Plan (MSHCP) for western Riverside County. The MSHCP will build upon existing preserves and provide connectivity and wildlife corridors throughout the region. The MSHCP proposes to conserve approximately 500,000 acres and 146 different species.

The MSHCP was approved by the county on June 17, 2003 and an Implementation Agreement (IA) between the USFWS, the CDFW, and the County was executed and an associated USFWS Section 10(a)(1)(B) Permit (No. TE-088609) was issued on June 22, 2004. The permit grants take authorization for certain species identified in the permit as "Covered Species Adequately Conserved."

The MSHCP establishes seven (7) core reserve areas and associated linkages between proposed and existing core areas. The MSHCP divides areas into Criteria Cells using USGS coordinates and establishes conservation goals for each Cell. If a property is located in a Cell, the proponent will be required to undergo a Habitat Acquisition and Negotiation Strategy (HANS) determination with the County of Riverside.

Focused surveys are required for species identified as not adequately conserved under the MSHCP if suitable habitat is present onsite. If focused surveys are determined necessary and species identified as not adequately conserved under the MSHCP occur onsite, the proponent

may be required to undergo a Habitat Acquisition and Negotiation Strategy (HANS) determination with the County of Riverside. If a single family home or mobile home is to be placed on an existing legal lot, permitting will be reviewed according to the procedures outlined in MSHCP Section 6.1.1, *Expedited Review Process for Single-Family Homes or Mobile Homes To Be Located on an Existing Lot Within the Criteria Area*.

Section B (Species Accounts) of Volume 2 of the MSHCP (Dudek 2003) lists the following objectives for burrowing owl conservation/protection:

Objective 1

> Include within the MSHCP Conservation Area at least 27,470 acres of suitable primary habitat for the burrowing owl including grasslands.

Objective 2

> Include within the MSHCP Conservation Area at least 5 Core Areas and interconnecting linkages. Core areas may include the following: (1) Lake Skinner/Diamond Valley Lake area (Existing Core C plus Proposed Extension of Existing Cores 5, 6, 7; 29,060 acres); (2) playa west of Hemet (Proposed Noncontiguous Habitat Block 7; 1,250 acres); (3) San Jacinto Wildlife Area/Mystic Lake area including Lake Perris area (Existing Core H; 17,470 acres); (4) Lake Mathews (Existing Core C plus Proposed Extension of Existing Cores 2; 23,710 acres); and (5) along the Santa Ana River (9,670 acres). The Core Areas should support a combined total breeding population of approximately 120 burrowing owls with no fewer than five pairs in any one Core area.

Objective 3

> Include within the MSHCP Conservation Area at least 22,120 acres of suitable secondary habitat for the burrowing owl including playas and vernal pools, and agriculture outside of the Core Areas identified above. Areas where additional suitable habitat could be conserved include west of the Jurupa Mountains, near Temescal Wash (i.e., vicinity of Alberhill), near Temecula Creek, within the Lakeview Mountains, Banning, the Badlands, Gavilan Hills, and Quail Valley.

Objective 4

> Include within the MSHCP Conservation Area the known nesting locations of the burrowing owl at Lake Perris, Mystic Lake/San Jacinto Wildlife area, Lake Skinner area, the area around Diamond Valley Lake, playa west of Hemet, Lakeview Mountains, Lake Mathews/Estelle Mountain Reserve and Sycamore Canyon Regional Park.

Objective 5

> Surveys for burrowing owl will be conducted as part of the project review process for public and private projects within the burrowing owl survey area where suitable habitat is present (see Burrowing Owl Survey Area Map, Figure 6-4 of the MSHCP, Volume I). The locations of this species determined as a result of survey efforts shall be conserved in accordance with procedures described within Section 6.3.2, MSHCP, Volume I and the guidance provided below:

Burrowing owl surveys shall be conducted utilizing accepted protocols as follows. If burrowing owls are detected on the project site, then the action(s) taken will be as follows:

> If the site is within the Criteria Area, then at least 90 percent of the area with long-term conservation value will be included in the MSHCP Conservation Area. Otherwise:
>
> 1) If the site contains, or is part of an area supporting less than 35 acres of suitable habitat or the survey reveals that the site and the surrounding area supports fewer than 3 pairs of burrowing owls, then the on-site burrowing owls will be passively or actively relocated following accepted protocols.
>
> 2) If the site (including adjacent areas) supports three or more pairs of burrowing owls, supports greater than 35 acres of suitable habitat and is non-contiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite.

The survey and conservation requirements stated in this objective will be eliminated when it is demonstrated that Objectives 1 – 4 have been met.

Objective 6

Pre-construction presence/absence surveys for burrowing owl within the survey area where suitable habitat is present will be conducted for all Covered Activities through the life of the permit. Surveys will be conducted within 30 days prior to disturbance. Take of active nests will be avoided. Passive relocation (use of one-way doors and collapse of burrows) will occur when owls are present outside the nesting season.

Objective 7

Translocation sites for the burrowing owl will be created in the MSHCP Conservation Area for the establishment of new colonies. Translocation sites will be identified, taking into consideration unoccupied habitat areas, presence of burrowing mammals to provide suitable burrow sites, existing colonies and effects to other Covered Species. Reserve Managers will consult with the Wildlife Agencies regarding site selection prior to translocation site development.

Section B (Species Accounts) of Volume 2 of the MSHCP (Dudek 2003) lists the following objectives for Marvin's onion conservation/protection:

Objective 1

Include within the MSHCP Conservation Area at least 142,680 acres of suitable habitat (chaparral, coastal sage scrub and grassland below 700 m in the Riverside Lowlands and Santa Ana Mountain Bioregions) in the Plan Area, including 1,575 acres of clay soils: 190 acres of Altamont, 210 acres of Auld, 490 acres of Bosanko, 100 acres of Claypit soils and 585 acres of Porterville soils.

Objective 2

Include within the MSHCP Conservation Area at least 26 of the known occurrences of many-stemmed dudleya, including the occurrences at Estelle Mountain, Temescal Canyon, the Santa Ana Mountains, Gavilan Hills, Alberhill Creek, and Prado Basin.

Objective 3

Surveys for many-stemmed dudleya will be conducted as part of the project review process for public and private projects within the Narrow Endemic Plant Species survey area where suitable habitat is present (see Narrow Endemic Plant Species Survey Area Map, Figure 6-1 of the MSHCP, Volume I). Many-stemmed dudleya located as a result of survey efforts shall be conserved in accordance with procedures described within Section 6.1.3, MSHCP, Volume I.

Section B (Species Accounts) of Volume 2 of the MSHCP (Dudek 2003) lists the following objectives for many-stemmed dudleya conservation/protection:

Objective 1

Include within the MSHCP Conservation Area at least 1,200 acres of suitable habitat (chaparral between 760 and 1065 m in the San Bernardino Mountains Bioregion).

Objective 2

Surveys for the Yucaipa onion will be conducted as part of the project review process for public and private projects within the Narrow Endemic Plant Species survey area where suitable habitat is present (see Narrow Endemic Plant Species Survey Area Map, Figure 6-1 of the MSHCP, Volume I). Yucaipa onion located as a result of survey efforts shall be conserved in accordance with procedures described within Section 6.1., MSHCP, Volume I.

2.12) Riverside County Oak Tree Management Guidelines

The Riverside County Oak Tree Management Guidelines (Guidelines) require mapping and evaluation of oak trees with a trunk (or sum of multiple trunks) at least two (2) inches in diameter at 4.5 feet above the ground (DBH) within project areas. The evaluation must include dead or dying oak trees, as these have value for cavity nesting birds. Project development plans are required to minimize and mitigate impacts to oak trees.

Replacement of oak trees is not required by the Guidelines; however, replacement plantings may be used in addition to these guidelines when they are required by another agency or when it is determined to be biologically sound and appropriate to do so. Relocation of oak trees does not constitute mitigation under the Guidelines and is considered the same as removal.

Construction activities are not allowed within the protected zone of any oak tree except as provided for in the Guidelines. The protected zone is defined as a circle whose center is within the base of an oak tree, the radius of which is equal to an oak tree's height or 10 feet, whichever is greater. Where the outermost edge of an oak tree's dripline extends beyond this radius, that portion of the dripline shall also be included as part of that tree's protected zone. Protected zones do not apply to dead or dying oak trees, unless the tree's condition appears to be the result of human activity that indicates an intent to kill the tree.

2.13) City of Calimesa Zoning Code

The City of Calimesa Zoning Code (Chapter 18.80) requires preparation of an oak tree preservation and replacement plan and retention of no less than 75 percent of healthy oaks. This applies to heritage oak trees, protected oak trees, and protected stands of oak trees. Chapter 18.80 also regulates and sets forth criteria for the cutting, pruning, removal, relocation, or replacement of oak trees. Heritage oak trees, protected oak trees, and stands of oak trees (oak groves), are defined as follows:

- Heritage oak tree: An oak tree of the genus *Quercus*, other than a protected oak tree or scrub oak, that has a trunk measuring 12 inches or more in diameter as measured 4.5 feet from the natural grade (i.e., diameter at breast height [DBH[1]]);

- Protected oak tree: An oak tree of the genus *Quercus*, including Nuttall's scrub oak (*Quercus dumosa*), other than a heritage oak tree or scrub oak, that has a trunk measuring two inches or more in diameter as measured 4.5 feet from the natural grade (i.e., DBH); and

- Protected stand of oak trees (oak grove): A cluster of four or more oak trees of the same genus *Quercus*, including Nuttall's scrub oaks.

The Zoning Code (Section 18.70.120) also has tree preservation guidelines that require a permit, tree survey, and planting of replacement trees, as well as specific requirements for avoidance of impacts to trees that will be retained. This applies to all species of trees, except oaks regulated under Chapter 18.80. This section also outlines regulations for the removal of five or more healthy, shade-providing, aesthetically valuable trees within a 36-month period.

[1] DBH = Diameter breast height, diameter of the trunk or sum of multiple trunks measured at 4.5 feet above ground level on the uphill side of the tree.

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 ±109.52-acre property plus additional offsite impact areas of ±8.13 acres for a total of ±117.65 acres. The survey area included the entire 109.52-acre property and offsite areas along Calimesa Boulevard and Beckwith Avenue plus any buffers required by protocol. Portions of offsite areas along Beckwith Avenue were not identified until after the 2022 surveys had been completed and were surveyed in 2023. Focused surveys included only the portions of the site with suitable habitat for the species, plus any buffers required by protocol.

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 2023a, 2023b) and a search of the California Natural Diversity Database (CNDDB; CDFW 2023c) and the California Native Plant Society Inventory of Rare and Endangered Plants (CNPS 2023) for the El Casco quad and adjacent quads (Redlands, Yucaipa, Forest Falls, Sunnymead, Beaumont, Perris, Lakeview, and San Jacinto). A search of the Information for Planning and Consultation database (IPAC; USFWS 2023a) was also conducted for the Project site. Survey data collected on the site by L&L in 2020 was also reviewed.

Potentials 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 CNDDB 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 2023). Scientific names of animals follow Stebbins (1985), Jameson and Peeters (1988), Cornell (2023), Sibley (2000), and Arnett (2000) with updates from academic sources. Current conservation status of plant and wildlife species determined from CDFW (2023a, 2023b). Vegetation community classifications follow Sawyer et al. (2009) with updates from CDFW (2023d). State ranks (S ranks) for vegetation communities are from CDFW (2023d).

3.2) Biological Survey Methods

Biological surveys conducted in 2022 consisted of a general biological survey to identify plants and wildlife on the site, an MSHCP habitat assessment, focused surveys for narrow endemic and special status plants, an inventory of oak and non-oak trees, vegetation community mapping, a survey for nesting raptors and potential raptor nesting habitat, and protocol breeding season surveys for burrowing owl. The general biological survey and habitat assessment were conducted concurrently with the other surveys, described below.

Portions of offsite impact areas along Beckwith Avenue were not identified until after the 2022 surveys had been completed. Biological surveys conducted in 2023 consisted of focused surveys for narrow endemic and special status plants (only on the portions of the site that were not included in 2022 surveys), a focused survey for Crotch bumble bee (on the entire site), and a habitat assessment for special status bats. The 2023 botanical and Crotch bumble bee surveys were generally conducted concurrently. The biological survey area is shown in Figure 5.

A jurisdictional delineation was also conducted in 2022 and that report is provided under separate cover. Results of the jurisdictional delineation are summarized in this report.

A reconnaissance survey of the site was conducted by L&L field biologist Guy Bruyea on April 4 and 5, 2020 and data from that survey is included in this report as appropriate. The 2020 survey also included a habitat assessment for burrowing owl. In this report, the "survey" refers to the 2022/2023 survey unless otherwise specified.

3.2.1) Botanical Survey and Vegetation Community Mapping Methods

L&L biologist Guy Bruyea conducted botanical surveys of the site from March to September 2022 and February to August 2023. In 2022, approximately 57.5 person-hours were spent walking over the entire site in a meandering pattern to assure sufficient coverage. An additional 43 person-hours were spent in 2023 (Table 1). Due to fencing/private property, some offsite areas were surveyed with binoculars. All field surveys were conducted during daylight hours. Digital

photographs were taken to record site conditions during the survey. The botanical survey area is shown in Figure 5.

In 2022, Mr. Bruyea also spent an additional 3.5 hours visiting reference sites to determine if special status and narrow endemic plants were flowering and identifiable. Reference sites were visited for Marvin's onion, many-stemmed dudleya, Plummer's mariposa lily (*Calochortus plummerae*), Parry's spineflower (*Chorizanthe parryi* var. *parryi*), and smooth tarplant (*Centromadia pungens ssp. laevis*). In 2023, an additional 4.25 hours were spent visiting reference sites for these species.

The methodology used is consistent with recommendations by the California Native Plant Society (CNPS 2001), CDFW (2018), and USFWS (2000). Botanical surveys were floristic in nature, meaning that every plant taxon observed was identified to the taxonomic level necessary to determine conservation status. 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 listed and special status plants (if any) were documented using GPS. Plants of uncertain identity were collected and subsequently identified from keys, descriptions, and illustrations in Baldwin et al. (2012), Abrams (1923, 1944, 1951), Abrams and Ferris (1960), Munz (1974), and Parker (1999).

Vegetation community mapping of the site was also conducted in 2022 utilizing aerial images and field observations. All vegetation communities onsite were visited on foot. Vegetation communities correspond to the California Natural Community List (CDFW 2023d) and Sawyer et al. (2009). Offsite areas that were not included in 2022 surveys (see Section 3.2) were mapped using aerial images and verified in 2023.

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

Date	Time	Weather	Wind Speed (mph)
03.09.2022	1130-1500	Clear, 58-67ºF	1-4
03.16.2022	1300-1700	Clear, 79-84ºF	3-7
03.25.2022	1030-1430	Clear, 74-89ºF	1-4
04.03.2022	1130-1530	Partly Cloudy, 65-75ºF	1-3
04.16.2022	1000-1400	Clear, 65-72ºF	1-5
04.21.2022	0630-1130	Partly Cloudy, 57-66ºF	0-2
04.29.2022	0830-1130	Clear, 57-68ºF	1-5
05.07.2022	0645-1100	Clear, 67-79ºF	0-4
05.13.2022	0700-1200	Clear, 68-85ºF	0-2
05.16.2022	0600-0945	Clear, 59-67ºF	1-3
05.23.2022	0700-1100	Marine Layer/Clear, 58-72ºF	0-4
05.29.2022	0945-1230	Clear (Hazy), 68-78ºF	1-2
06.20.2022	0630-1130	Marine Layer/Clear, 70-80ºF	2-3
07.16.2022	0730-0930	Clear, 75-81ºF	1-2
08.10.2022	0730-0915	Clear, 74-79ºF	0-1
09.04.2022	0630-0800	Clear, 79-85ºF	0-1
02.21.2023	1100-1300	Cloudy, 48-53ºF	1-4
03.08.2023	1200-1430	Partly Cloudy, 55-61ºF	2-6
03.25.2023	1100-1600	Partly Cloudy, 54-65ºF	1-5
04.13.2023	0930-1500	Mostly Cloudy, 54-60ºF	1-7
04.21.2023	1130-1500	Clear, 83-88ºF	1-5
05.05.2023	0800-1330	Cloudy, 54-65ºF	0-3
05.11.2023	1200-1500	Marine Layer/Clear, 68-75ºF	1-5
05.22.2023	1100-1400	Clear, 70-76ºF	0-3
06.02.2023	1100-1500	Marine Layer/Clear, 65-77ºF	2-8
06.17.2023	0900-1300	Clear, 72-86ºF	0-5
07.18.2023	0800-1100	Clear, 79-91ºF	1-3
08.13.2023	0745-0945	Partly Cloudy, 70-75ºF	0-2

Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Biological Survey Area
Figure 5
(Aerial obtained from Google Earth, May 2023)

3.2.2) Tree Survey Methods

To address potential impacts to oak species covered under Sections 18.70 and 18.80 of the City of Calimesa Zoning Code and trees protected by Section 18.70.120 of the Zoning Code (see Section 2.13), a tree survey was conducted to inventory oaks and other tree species. In compliance with the City of Calimesa requirements, the survey identified all native and non-native trees with a DBH of two inches or greater. All oak species were included in the survey, including scrub oak. The tree survey area is shown in Figure 5.

A tree survey was conducted on February 15 and 24, March 1 and 3, April 5, and May 31, 2022 by L&L field assistant Joshua Ball. Trees were identified, marked with metal tree tags, and measured. Data collected included estimated height, diameter breast height (DBH), and health rating (Table 2).

Table 2. Tree Health Ratings

Rating	Criteria
5 (excellent)	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 (good)	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 (fair)	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 (poor)	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 (dying)	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 (dead)	Tree dead or apparently dead.

3.2.3) Burrowing Owl Survey Methods

L&L field biologist Guy Bruyea visited the Project site during April, May, and June 2022 to conduct protocol breeding season burrowing owl surveys (Table 3). Mr. Bruyea has extensive experience with surveys for burrowing owl and nesting birds.

The burrowing owl assessment for suitable habitat was conducted consistent with MSHCP Burrowing Survey Instructions (RCA 2006), including a Step I habitat assessment conducted on April 21, 2022. Once suitable habitat was determined present, Step II-A, a focused burrow survey, was triggered, conducted on April 21, 2022. Because small mammal burrows or other potentially suitable burrows were found, a focused burrowing owl survey was conducted consistent with Step II-B. This survey requires four separate visits, conducted on April 21, May 7, May 23, and June 20, 2022 (Table 3).

Table 3. Burrowing Owl Survey Dates, Times, and Weather Conditions

Date	Time	Sunrise*	Weather	Wind (mph)
04.21.2022	0630-1130	0614	Partly Cloudy, 57-66º F	0-2
05.07.2022	0645-1100	0557	Clear, 67-79º F	0-4
05.23.2022	0700-1100	0546	Marine Layer/Clear, 58-72º F	0-4
06.20.2022	0630-1130	0541	Marine Layer/Clear, 70-80º F	2-3

*sunrise times from www.timeanddate.com

A total of about 18.25 person-hours were spent onsite during burrowing owl surveys. The site was examined for suitable burrow sites and for signs of occupation by burrowing owl, including pellets, feathers, whitewash, prey remains, and eggshell fragments, as well as individual owls. A search for potentially suitable burrows within dirt, wood, and rock debris piles, artificially created berms, and other locations was conducted during the surveys.

The surveys were concentrated in areas identified as potential burrowing owl habitat, including open areas onsite and areas where California ground squirrel and other small mammal activity (i.e., suitable burrows) was expected. An additional 150-meter (500-foot) buffer area surrounding the site was visually inspected, where possible, in areas identified as potential burrowing owl habitat (Figure 6). Any developed areas were visually surveyed with binoculars due to trespassing concerns on private property. Portions of the site lacking suitable burrowing owl habitat were not surveyed. Offsite areas that were not identified prior to surveys (see Section 3.2) were included in the burrowing owl survey buffer.

Transects were walked throughout the property where suitable habitat is present. Coupled with binocular surveys of any restricted areas, this allowed for complete visual ground coverage of the survey area. Distance between transects was approximately 15 to 20 meters.

The surveys were conducted in accordance with the Burrowing Owl Survey Instructions for the MSHCP (RCA 2006). MSHCP Burrowing Owl Survey Instructions require four (4) daylight surveys on separate days conducted during the breeding season from March 1 to August 31. The instructions specify that surveys should be conducted during weather conditions that are

conducive to detecting owls and owl sign. Surveys are not acceptable if they are conducted during rain, high winds (> 20 mph), dense fog, or temperatures over 90° F. The survey was conducted during suitable weather conditions, as summarized in Table 3.

3.2.4) Nesting Raptor Survey Methods

Concurrently with other 2022 biological surveys, the site was examined to determine the possible presence/absence of nesting raptors on the property. This survey primarily focused on examining trees onsite and within 500 feet of the site for evidence of raptor nesting. The nesting raptor survey area is shown in Figure 6. Offsite areas that were not identified prior to 2022 surveys (see Section 3.2) were included in the survey buffer.

3.2.5) Crotch Bumble Bee Survey Methods

There is no established survey protocol for Crotch bumble bee. Survey methods followed the U.S. Fish and Wildlife Service (USFWS) survey protocol for the rusty patched bumble bee (*Bombus affinis*) (USFWS 2019), adjusting for the biology of the Crotch bumble bee as appropriate. CDFW issued guidance for Crotch bumble bee surveys (CDFW 2023f) after the survey was underway.

L&L biologist Guy Bruyea visited the project site from March to August 2023 to evaluate the site for the presence of suitable habitat for Crotch bumble bee and to conduct a focused visual survey for Crotch bumble bee (Table 4).

Mr. Bruyea has extensive experience with invertebrate surveys including the establishment of field trials, malaise, flight intercept, pan and pitfall trapping methods, reintroduction programs, mark/recapture studies, host/predator relationships, and literature and museum record searches. Mr. Bruyea currently holds federal scientific take (Section 10-A) permits for two federally endangered insects, the quino checkerspot butterfly (Euphydryas editha quino) and the Delhi sands flower-loving fly (*Rhaphiomidas terminatus abdominalis*). Mr. Bruyea recently held permits for the federally endangered El Segundo blue butterfly (*Euphilotes battoides allyni*) and Palos Verdes blue butterfly (*Glaucopsyche lygdamus palosverdesensis*), which are now updated on a project-specific basis. He has previously identified Crotch bumble bee at various locations in Riverside, San Bernardino, and San Diego Counties.

Table 4. Crotch Bumble Bee Survey Dates, Times, and Weather Conditions.

Date	Time	Sunrise*	Sunset*	Weather	Wind Speed (mph)
03.08.2023	1200-1430	0612	1755	Partly Cloudy, 55-61ºF	2-6
03.25.2023	1100-1600	0650	1908	Partly Cloudy, 54-65ºF	1-5
04.13.2023	0930-1500	0624	1922	Mostly Cloudy, 54-60ºF	1-7
04.21.2023	1130-1500	0614	1929	Clear, 83-88ºF	1-5
05.05.2023	0800-1330	0559	1939	Cloudy, 54-65ºF	0-3
05.11.2023	1200-1500	0554	1944	Marine Layer/Clear, 68-75ºF	1-5
05.22.2023	1100-1400	0547	1952	Clear, 70-76ºF	0-3
06.02.2023	1100-1500	0542	2000	Marine Layer/Clear, 65-77ºF	2-8
06.17.2023	0900-1300	0541	2006	Clear, 72-86ºF	0-5
07.18.2023	0800-1100	0554	0803	Clear, 79-91ºF	1-3
08.13.2023	0745-0945	0613	1942	Partly Cloudy, 70-75ºF	0-2

*Sunrise/sunset from timeanddate.com, adjusted for Daylight Savings Time.

A total of about 41 person-hours were spent onsite. All field surveys were conducted during daylight hours. Digital photographs were taken to document suitable habitat and observed bees (if any).

The survey area for the habitat assessment included the entire Project site. Areas of potentially suitable habitat were assessed and the presence of preferred plant foraging species was noted. Areas determined to support suitable habitat for Crotch bumble bee were included in the focused survey. Due to trespassing concerns on adjacent private land, no offsite buffer areas were surveyed.

Four (4) surveys were conducted during the bee's activity period, with the greatest survey effort during the early spring when many plants are in bloom. Surveys were generally conducted at least 2 hours after sunrise and 3 hours before sunset with temperatures above 60°F and wind speeds less than 8 mph. Surveys were not conducted during rain or overcast conditions.

Flight/forage and nest search surveys were conducted by Mr. Bruyea (qualified biologist). After the initial habitat assessment, focused surveys covered no more than 50 acres per biologist per day and consisted of meandering transects through the identified suitable habitat. Surveys focused on areas with blooming native plants to search for nectaring bumble bees.

If bumble bees were observed using any animal burrow entrances, the biologist blocked/covered any burrow entrance with a sandbag/jar/vial (or similar) of appropriate size and returned in 30 minutes to determine if the bees were potential Crotch bumble bee and if a potential nest was present. If bumble bees were observed using bunch grasses, thatched annual grasses, brush piles, old bird nests, dead trees, or hollowed logs, the resource area was flagged and monitored by the biologist for 15 minutes to determine if a potential nest could be present.

No bees were captured or handled during the survey. Visual inspection and identification methods were used to determine the species of observed bumble bees. The survey included counts or estimates of the number of Crotch bumble bees observed (if any) and GPS coordinates of observations. Representative bees (if any) were photographed.

Floral species utilized by Crotch bumble bee were recorded and areas of utilized habitat (if any) were mapped and photographed. Representative areas of potentially suitable habitat and floral resources were also photographed and GPS coordinates recorded. If any colonies of Crotch bumble bee were observed, the colony and surrounding area were photographed and GPS coordinates recorded.

Other bumble bee species observed (if any) were also identified and photographed and numbers estimated. If colonies of bumble bee species other than Crotch bumble bee were observed, the colonies and surrounding area were photographed and GPS coordinates recorded.

Other state or federally listed or special status species observed during Crotch bumble bee surveys were noted. Species, date, GPS coordinates, count, and behavior or other relevant information was recorded.

The survey conformed to the CDFW guidance issued in June 2023 (CDFW 2023b). This guidance is not a mandatory protocol but recommends a habitat assessment to include foraging and nesting resources, at least three focused surveys spaced two to four weeks apart during the species active period (April to August) and peak bloom.3.2.6) Bat Habitat Assessment Methods

A habitat assessment for special status bats was conducted by LSA Associates in February 2023. The assessment was conducted to determine if suitable roosting habitat is present in structures and trees that will be impacted by the Project. Additional details can be found in the report provided in Appendix J.

3.2.7) Fairy Shrimp Survey Methods

Habitat Assessment

Biologist Garrett Huffman (TE-20186A-3.2) of Huffman Environmental conducted an assessment of the Project site in October 2023 to determine habitat suitability for supporting fairy shrimp. Additional details can be found in the dry season fairy shrimp report provided in Appendix K.

Dry Season

Dry season soil samples were collected from the Project site on October 13, 2023, in accordance with the USFWS Survey Guidelines for Listed Large Branchiopods (USFWS 2017). Dry sample collections were conducted by Garrett Huffman.

Soil samples were collected when the soil (substrate) was dry. A hand spade was used to collect the sample at each feature taking from the top 1 to 3 centimeters of pool sediment. The USFWS Survey Guidelines provide a formula recommending the number of samples collected per feature based on the approximate size of the feature in square meters. Six ponding features were estimated to be between 2.5 and 24 square meters (0.005 acres), requiring a minimum of 10 collected soil samples for each. Four features were estimated to be between 25 and 235 square meters (0.05 acres), requiring a minimum of 25 collected soil samples. Regardless of feature size, all samples were collected in volumes of 50 to 100 milliliters each. Each sample was collected from the lowest topographic areas within the pool to maximize the potential detection of cysts.

Biologist Charles Black (TE-835549-8) of Ecological Restoration Service conducted dry sample processing and cyst hatching. Soils were processed and examined for cyst presence. Project samples were hydrated for approximately 1-2 hours in tap water and then washed through a set of sieves. The material was passed through a Number 45 (.0139") USA Standard Testing Sieve, A.S.T.M.E.-11 specification, and caught on a Number 70 (.0083") sieve. The filtered material was then rinsed into a container with approximately 50 millimeters of a saturated brine solution to float organic material, including fairy shrimp cysts. The material floating on the brine was decanted onto a paper filter on a filter funnel, and water was removed through the filter paper by vacuum suction. A 6.3-570x power Olympus SZX9 Zoom Stereo Microscope was used to examine the remaining material. Distinctive fairy shrimp cysts, if present, were individually counted (if less than approximately 50) or estimated (for larger numbers) by examining ¼ or ½ subsections of the filter and multiplying the subset by the appropriate factor. The presence and number of ostracod shells and cladoceran ephippia (if any) were also noted in samples.

Cysts were then cultured for identification. Individual Project samples were combined by pool number and hydrated in approximately 500 ml of Arrowhead Mountain Spring water. Plastic culture tubs were placed in a shady location in a San Diego outdoor location (night low temperatures in the low to mid-60s, daily highs in the low 70s to high 80s). Two days after hydration, cultures were fed with several ml of a yeast culture produced by dissolving a gram of table sugar and a gram of instant dry yeast in 50 ml 95 F degree filtered water. Water was added daily to tubs to replace water lost to evaporation. Mature shrimp were removed periodically from each culture as they became large enough to identify and examined under an Olympus Zoom dissecting microscope.

Additional details can be found in the dry season fairy shrimp report provided in Appendix K.

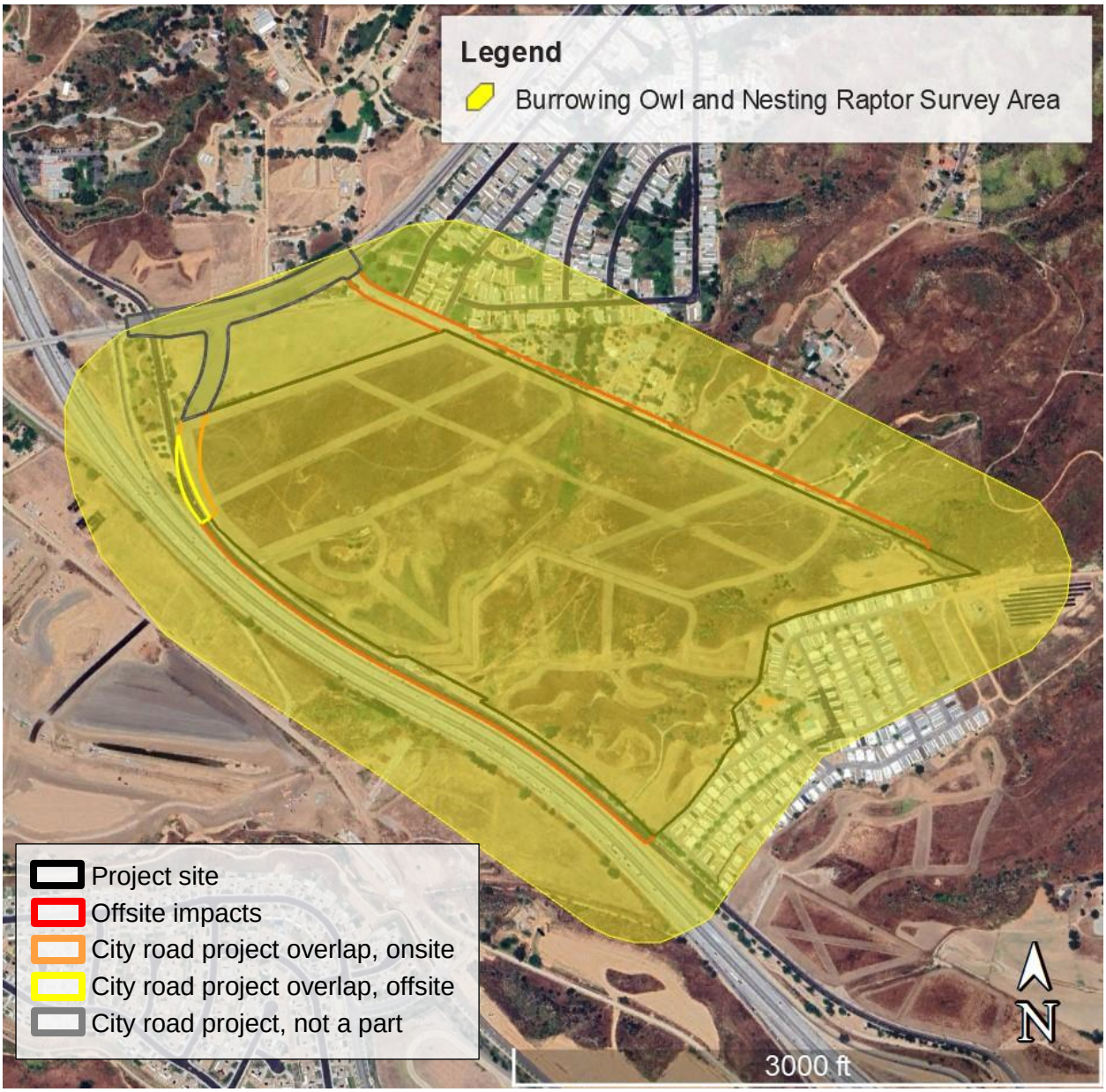
Wet Season

Wet season protocol surveys for fairy shrimp are in progress and will be completed in early 2024. Wet season surveys are being conducted by Garrett Huffman in accordance with the USFWS Survey Guidelines for Listed Large Branchiopods (USFWS 2017).

Per the USFWS (2017) Guidelines, the wet season generally occurs in California between October and June. Wet season surveys commence once appropriate habitat has become inundated. Appropriate habitat is considered to be inundated when it holds greater than 3 centimeters of standing water 24 hours after a rain event.

All potential habitat must be adequately sampled at 7-day intervals after initial inundation of habitat. Sampling will continue within each potential habitat until it dries or a minimum of 120 consecutive days of inundation has occurred. Sampling will be reinitiated within 7 days of an individual habitat drying and inundating during the same wet season.

At each wet season visit, representative portions of the bottom, edges, and vertical water column of the feature shall be adequately sampled using a seine, dip net or aquarium net appropriate for the size of the feature. Data collected for the feature includes average and maximum water depth, water and air temperature, length, width, degree and form of disturbance, presence of fairy shrimp, and observations of any other benthic macroinvertebrates. Vouchering of the species collected will be conducted and delivered to the LA History Museum per USFWS Protocol Guidelines. Survey visits will be discontinued after the features go dry for the season.



Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Burrowing Owl and Nesting Raptor Survey Area
Figure 6

(Aerial obtained from Google Earth, May 2023)

4.0) RESULTS

4.1) Literature Review Results

The Project site is within the area covered by the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The Project is subject to the MSHCP because the City of Calimesa is a Permittee and is required to demonstrate consistency with the MSHCP on all discretionary projects. An MSHCP Consistency Analysis, including an Urban Wildlands Interface Analysis, has been prepared for separate submittal.

The site is not located in a Criteria Cell; therefore, the Project is not subject to the Reserve Assembly requirements of the MSHCP or the Joint Project Review process. However, the Project is subject to review consistent with MSHCP Section 6.1.2 (Riparian and Riverine, Vernal Pools, and Fairly Shrimp), Section 6.1.3 (Narrow Endemic Plant Species), and Section 6.3.2 (Additional Survey Needs and Procedures). The Project site is located in an MSHCP Section 6.3.2 designated survey area for burrowing owl and an MSHCP Section 6.1.3 designated survey area for narrow endemic plant species, specifically Marvin's (Yucaipa) onion and many-stemmed dudleya, where suitable habitat and soils are present.

Under these sections, the MSHCP requires an assessment of potential habitat for burrowing owl, narrow endemic plants Marvin's onion and many-stemmed dudleya, and riparian/riverine resources, vernal pools, and associated species. If suitable habitat is present, focused surveys are required (RCA 2023).

The MSHCP mapped vegetation layer (1994 baseline) depicts the site as mainly grassland with areas of developed/disturbed land along the southeastern side. There is a small area of coastal sage scrub mapped in the easternmost corner. No riparian or Riversidean alluvial fan sage scrub is mapped on the parcel in the 1994 baseline (RCA 2023).

MSHCP conserved lands are located about 0.5 mile northeast, about 0.6 mile southwest, and about 0.8 mile northwest of the site. The conserved lands to the northeast and northwest are identified as Western Riverside County Regional Conservation Authority (RCA) Conserved Lands. Conserved lands to the southwest are identified as MSHCP Conserved Lands and Public Quasi-Public (PQP) Conserved Lands managed by the Rivers and Lands Conservancy (formerly the Riverside Land Conservancy) (RCA 2023). There are no other PQP or MSHCP Conserved Lands within a mile of the site.

Additional conserved lands associated with the Norton Younglove Reserve are located further to the southwest, about 1.6 miles from the Project site. The Reserve is owned and managed by the Riverside County Regional Park and Open Space District. Figure 7 shows the Project site in relation to MSHCP core areas and linkages.

The proposed Project includes offsite road improvements to Calimesa Boulevard and Beckwith Avenue. Calimesa Boulevard runs along the southwestern boundary of the site and is identified on the MSHCP Information Map as a covered major road. Beckwith Avenue runs along a portion of the northeastern boundary of the site and is not an MSHCP covered road.

The Project site is within Subunit 2: Badlands/San Bernardino National Forest of the MSHCP Pass Area Plan (Dudek 2003). The Biological Issues and Considerations for this subunit are:

- Provide a connection in the Cherry Valley area from the Badlands to Bogart Park, providing opportunities inside and outside of the Plan Area to San Bernardino County. It is recognized that this connection traverses an urban area, however Conservation of existing natural Habitat and incorporation of ditches or other drainage features into reserve design will assist in providing this contiguous connection.
- Maintain a wetland connection via Noble Creek. It is recognized that this creek is improved in some areas.
- Determine presence of potential linkage area for bobcat (*Lynx rufus*).
- Determine presence of potential Core Area for Los Angeles pocket mouse (*Perognathus longimembris brevinasus*) in tributaries to San Timoteo Creek.
- Maintain Core Area for San Bernardino mountain kingsnake (*Lampropeltis zonata [parvirubra]*).

MSHCP Proposed Constrained Linkage 23 is located about 0.25 mile north of the Project site. Proposed Constrained Linkage 23 is an upland linkage located in the vicinity of Cherry Valley, which provides a connection to Bogart County Park and San Timoteo Creek for certain species. This linkage is constrained by surrounding existing urban and rural residential development in the City of Calimesa. Planning species for which habitat is provided within this linkage include Bell's sage sparrow, Los Angeles pocket mouse, and San Bernardino mountain kingsnake. This linkage likely also provides for movement of common mammals such as bobcat (Dudek 2003).

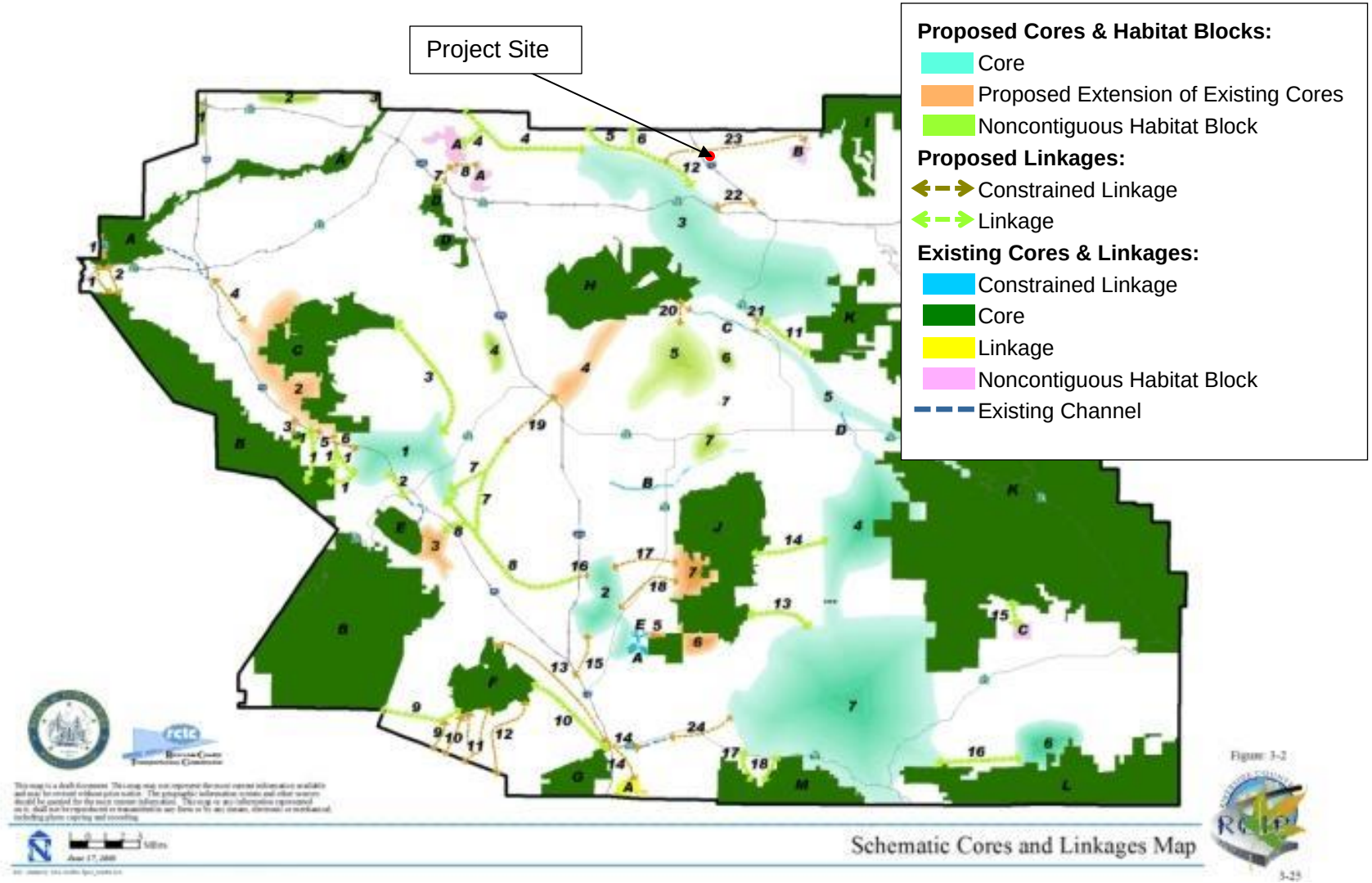
MHSCP Proposed Core 3 (Badlands/Potrero) is located about 1.6 miles southwest of the Project site. This Core consists mainly of private lands but also contains a few Public/Quasi-Public parcels. The Core is connected to Proposed Linkage 12 (north San Timoteo Creek), Proposed

Linkage 4 (Reche Canyon), Proposed Constrained Linkage 22 (east San Timoteo Creek), Existing Core H (Lake Perris), Existing Core K (San Jacinto Mountains), Proposed Linkage 11 (Soboba/Gilman Springs), and Proposed Constrained Linkage 21. The Core also functions as a Linkage, connecting the San Bernardino National Forest to the southwest with San Bernardino County and other conserved areas to the north of the Core. Within the Core, important live-in and movement habitat is provided for Bell's sage sparrow (*Artemisiospiza belli belli*), loggerhead shrike (*Lanius ludovicianus*), cactus wren (*Campylorhynchus brunneicapillus*), Stephens' kangaroo rat (*Dipodomys stephensi*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), and mountain lion (*Puma concolor*), which have key populations in the Badlands (Dudek 2003).

MSHCP Proposed Linkage 12 is located about 1.6 miles southwest of the Project site. Proposed Linkage 12 is comprised of riparian habitats associated with San Timoteo Creek. Planning Species which use this Linkage include yellow warbler (*Setophaga petechia*), white-tailed kite (*Elanus leucurus*), yellow-breasted chat (*Icteria virens*), least Bell's vireo (*Vireo bellii pusillus*), and Los Angeles pocket mouse. This Linkage likely provides for movement of common mammals such as bobcat connecting to San Bernardino County and Core Areas in the Badlands (Dudek 2003).

The Project site is not located within or immediately adjacent to existing or proposed MSHCP Conservation Areas. However, flows leaving the Project site are likely hydrologically connected to San Timoteo Creek within Public/Quasi-Public (PQP) Conserved Lands, located approximately 2.2 miles south of the site, and ultimately flowing to the Santa Ana River. Thus, the Project is subject to MSHCP Section 6.1.4, Urban Wildland Interface Guidelines. An MSHCP Consistency Analysis, including an Urban Wildlands Interface Analysis, has been prepared for separate submittal.

Review of historic aerial images (Google Earth 2023, NETRonline 2023) shows that the site has been disturbed since at least 1959 and is regularly disked for weed abatement.



Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

MSHCP Cores and Linkages
Figure 7

4.1.1) Precipitation Data

Available precipitation data from the Beaumont and Cranston Remote Automated Weather Stations (RAWS) are provided in Appendix G and summarized in Tables 4a through 4c (WRCC 2023). Data is presented for "water years" (October 1 through September 30).

The Beaumont RAWS is located 4.0 miles southeast of the site at an elevation of 2,604 feet (794 meters). The Cranston RAWS is located 19.6 miles southeast of the site at an elevation of 1,950 feet (594 meters).

Average annual precipitation for Beaumont and Cranston RAWS for water years 2012 through 2022 is 12.35 inches and 11.17 inches, respectively (Table 5a). Average annual precipitation for the region (1981 to 2010) is 15 to 20 inches (WRCC 2018).

Precipitation during the 2022 water year[2] was 9.14 inches at the Beaumont RAWS and 6.97 inches at the Cranston RAWS with the majority of precipitation falling from December through April (Table 5b). Precipitation during the 2023 water year (as of August 31) was 25.96 inches at the Beaumont RAWS and 20.83 inches at the Cranston RAWS (Table 5c). Strong winter storms during early 2023 and a tropical storm in August 2023 created unusually high rainfall totals.

[2] A water year is October through September. The 2022 water year includes October 2021 through September 2022.

Table 5a. Precipitation Data Summary

Water Year	Precipitation (inches)	
	Beaumont RAWS	Cranston RAWS
2012	12.36	11.75
2013	9.71	6.31
2014	8.67	9.59
2015	14.64	14.00
2016	11.79*	9.25*
2017	19.04	16.35*
2018	7.24	6.20
2019	19.76	19.83*
2020	16.46	15.89
2021	7.05	6.75
2022	9.14	6.97
2023	25.96**	20.83**
Average (2012-2022)	**12.35***	**11.17***

*missing data, as of August 31**.

Table 5b. Monthly Precipitation 2022 Water Year

Month	Precipitation (inches)	
	Beaumont RAWS	Cranston RAWS
10.2021	0.88	0.99
11.2021	0	0*
12.2021	5.87	3.41*
01.2022	0.03	0.16
02.2022	0.49	0.83
03.2022	1.22	0.94
04.2022	0.19	0.36
05.2022	0.03	0.02
06.2022	0	0
07.2022	0	0
08.2022	0	0
09.2022	0.43	0.26
Total	**9.14**	**6.97***

*missing data.

Table 5c. Monthly Precipitation 2023 Water Year

Month	Precipitation (inches)	
	Beaumont RAWS	Cranston RAWS
10.2022	0.55	1.55
11.2022	1.68	2.09
12.2022	1.63	1.17
01.2023	8.11	5.83
02.2023	3.03	2.47
03.2023	7.20	6.16
04.2023	0.16	0.04
05.2023	0.51	0.30
06.2023	0.55	0.09
07.2023	0	0
08.2023	2.54	1.13
09.2023	--	--
Total	**25.96****	**20.83****

*missing data, **as of August 31.

4.2) Vegetation Communities

The site has been historically disturbed by residential and agricultural uses. Vegetation on the site and offsite areas consists of non-native grasslands and wildflower fields, disturbed/developed areas with ornamental plants, and pockets of native coastal sage – chaparral scrub. There are no riparian or other sensitive vegetation communities present on the site. Vegetation communities are mapped on Figures 8a and 8b, acreages of each community are provided in Table 6, and representative photos are included in Appendix E. The City Road Project Overlap Area is calculated separately and is a subset of the total Project acreage.

Table 6. Vegetation communities present

Vegetation Community	Area Present (acres)					
	Project Site			City Road Project Overlap Area		
	Onsite	Offsite	Total	Onsite	Offsite	Total
Non-native Grasslands and Fields	100.18	0	100.18	0.70	0.21	0.91
Coastal Sage – Chaparral Scrub	3.91	0.22	4.13	0	0	0
Disturbed/Developed/Ornamental	5.43	7.91	13.34	0	0.47	0.47
Total	**109.52**	**8.13**	**117.65**	**0.70**	**0.68**	**1.38**

4.2.1) Non-native Grasslands and Wildflower Fields

Much of the site consists of former agricultural fields. Some areas are densely vegetated with mostly non-native grasses and other weedy annuals, while other areas have been recently disked. Non-native grassland is dominated by non-native grass species, but may include native, as well as non-native herbs and forbs. The native species common fiddleneck (*Amsinckia intermedia*) is tolerant of disturbed places and is abundant throughout much of the site.

Plants commonly observed in these areas of the site include non-native species ripgut brome (*Bromus diandrus*), red brome (*Bromus rubens*), hare barley (*Hordeum murinum*), wild oats (*Avena fatua*), common bindweed (*Convolvulus arvensis*), and winter vetch (*Vicia villosa*), as well as native species western sunflower (*Helianthus annuus*) and common fiddleneck.

The non-native grasslands and fields on the site are best classified as a mixture of non-native brome grasslands (*Bromus species* Semi-Natural Herbaceous Stands), wild oats grasslands (*Avena species* Semi-Natural Herbaceous Stands), and native fiddleneck fields (*Amsinckia intermedia* Herbaceous Alliance). Fiddleneck fields are ranked by CDFW as S4 (apparently secure, uncommon but not rare) and are not considered sensitive. Brome and wild oats grasslands are not ranked (CDFW does not assign an S rank to non-native vegetation communities) and are not considered sensitive.

4.2.2) Coastal Sage – Chaparral Scrub

Pockets of disturbed coastal sage – chaparral scrub are found in the southeastern portion of the site. Conspicuous perennials observed in these areas include blue elderberry (*Sambucus mexicana*), scrub oak (*Quercus berberidifolia*), California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), chamise (*Adenostoma fasciculatum*), and deerweed (*Acmispon glaber*). Native species observed within open patches in these areas include vinegar

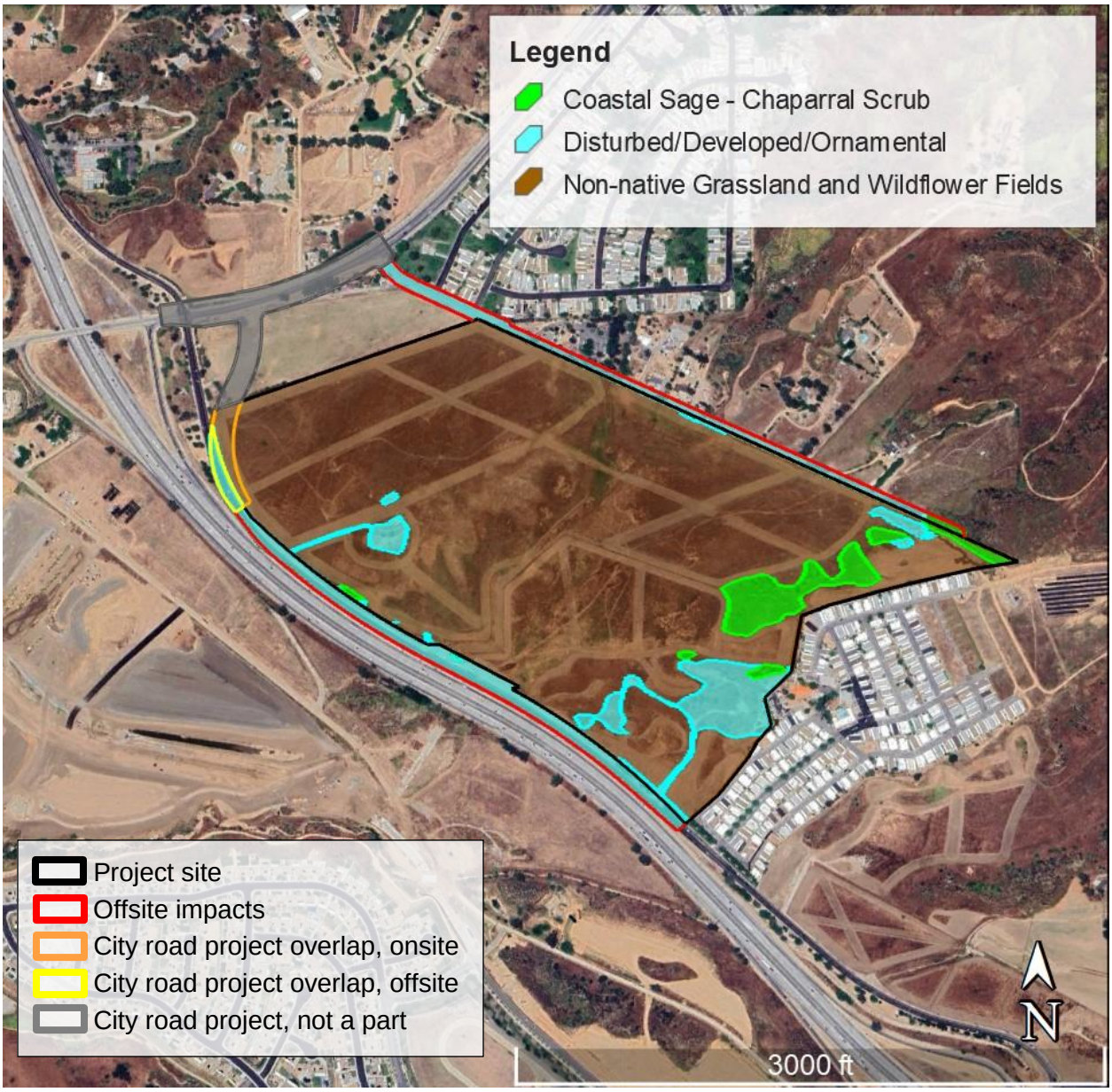
weed (*Trichostema lanceolatum*), slender wild buckwheat (*Eriogonum gracile*), California sun cup (*Camissoniopsis bistorta*), slender pectocarya (*Pectocarya linearis*), and dove lupine (*Lupinus bicolor*). Non-native grasses dominate the understory in most areas.

This vegetation community is best classified as a mix of California sagebrush – California buckwheat scrub (*Artemisia californica – Eriogonum fasciculatum* Shrubland Alliance) and scrub oak chaparral (*Quercus berberidifolia* Shrubland Alliance). CDFW ranks both California sagebrush – California buckwheat scrub and scrub oak chaparral as S4 (apparently secure, uncommon but not rare) and they are not considered sensitive.

4.2.3) Disturbed/Developed/Ornamental

Developed and disturbed areas onsite include existing structures, foundations or remnants of structures, roads/driveways, and other areas that have been disturbed by human activities. Non-native ornamental trees are present in association with current and former onsite residences and other structures. Non-native/ornamental trees and shrubs observed in these areas include ornamental pine (*Pinus species*), ornamental fir (*Abies species*), olive (*Olea europea*), Cootamundra wattle (*Acacia baileyana*), Brazilian pepper tree (*Schinus terebinthifolius*), Chinese elm (*Ulmus parviflora*), firethorn (*Pyrocantha coccinea*), and other ornamentals. Native California fan palms (*Washingtonia filifera*) are also present, but were likely planted on the site.

Disturbed areas of the site, particularly along site margins or roads, have many non-native plant species including (but not limited to) Mediterranean grass (*Schismus barbatus*), redstem filaree (*Erodium cicutarium*), long-beak filaree (*Erodium botrys*), tocalote (*Centaurea melitensis*), mustards (*Brassica*, *Hirschfeldia,* and *Sisymbrium species*), common groundsel (*Senecio vulgaris*), common sow thistle (*Sonchus oleraceus*), prickly lettuce (*Lactuca serriola*), pineapple weed (*Matricaria discoidea*), Russian thistle (*Salsola tragus*), and cheeseweed (*Malva parviflora*). A few native plant species found in disturbed areas include common fiddleneck, doveweed (*Croton setiger*), horseweed (*Erigeron canadensis*), and telegraph weed (*Heterotheca grandiflora*).

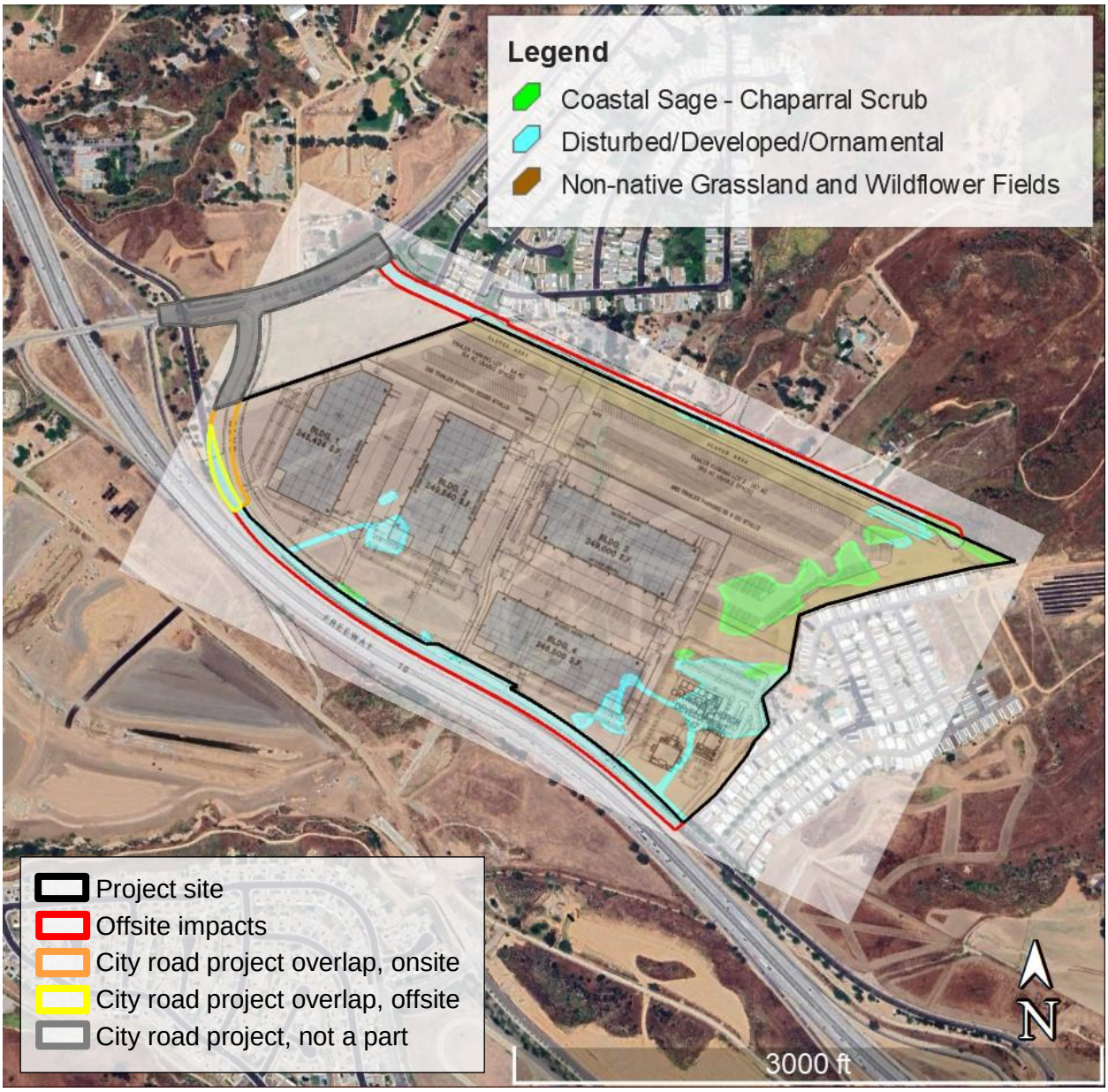


Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Vegetation Communities

Figure 8a

(Aerial obtained from Google Earth, May 2023)



Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Vegetation Communities with Site Plan

Figure 8b

(Aerial obtained from Google Earth, May 2023)

4.3) Plant Species

A total of 109 plant species were observed onsite during surveys conducted in 2020, 2022, and 2023, plus one or more unidentified ornamental species. Of these, at least 64 (59 percent) are non-native or ornamental species. A list of all plant species observed during surveys is included in Appendix A.

No state or federally listed plant species were observed on the site during surveys. Listed plant species known from the region are either absent from the site or not expected to occur. The site is not within designated critical habitat for any federally listed plant species (USFWS 2023b).

No narrow endemic or special status plant species were observed on the site during surveys. Three special status species (Plummer's mariposa lily, smooth tarplant, and Parry's spineflower) were not observed but have a moderate or low to moderate potential for occurrence, as described below. An analysis of the potential for occurrence of listed and special status plant species is provided in Appendix C.

4.3.1) Narrow Endemic Plant Species

The Project site is located in an MSHCP Section 6.1.3 designated survey area for narrow endemic plant species, specifically Marvin's (Yucaipa) onion and many-stemmed dudleya, where suitable habitat and soils are present.

<u>Marvin's Onion</u>

Marvin's (Yucaipa) onion (*Allium marvinii*) is a perennial bulb-forming herb in the Alliaceae (Onion) family. It flowers from April through May and is found in openings within chaparral on clay soils. The species' elevation range is 2,500 to 3,500 feet. It is found only in Riverside and San Bernardino Counties (CNPS 2023). Marvin's onion may not flower in dry years; without flowers, the plant is difficult to locate and identify (Dudek 2003).

The species is not state or federally listed; it has a California Rare Plant Rank (CRPR) of 1B.2 (rare, threatened, or endangered in California and elsewhere; moderately threatened in California). Under the MSHCP, Marvin's onion is considered adequately conserved, but surveys are required in certain areas.

There are three (3) documented occurrences of Marvin's onion in the CNDDB within five (5) miles of the Project site. The first is Element Occurrence (EO) #1 located about 3.6 miles northeast of

the site. This occurrence was found in a clay soil opening in chamise chaparral and was observed in 1993, 2001, and 2005. About 1,000 plants were observed in 2005.

The second and third documented occurrences are EO #43 and #44. EO #43 consisted of 19 plants and was found along a transmission line corridor in 2017. It is located about 0.6 mile south of the site. EO #44 was observed in 2013 within sparse Riversidean sage scrub with relatively abundant non-native bromes. Soils were noted as gravelly loamy with possible clay inclusion. This occurrence is located 1.0 mile east of the site.

Marvin's onion was not observed on the site during 2022 surveys conducted during the flowering period for this species. Precipitation was below average in 2022. However, a reference site for Marvin's onion was visited on April 5, 2022 at Bogart Regional Park in the Cherry Valley area (approximately 4.8 miles west-northwest of the Project site at an elevation of 3,200 feet) and the plants were found to be flowering and identifiable.

Marvin's onion was not observed on the offsite areas (Figure 5) during 2023 surveys conducted during the flowering period for this species. Precipitation was well above average in 2023. The reference site for Marvin's onion at Bogart Regional Park was visited on April 21, 2023 and the plants were found to be flowering and identifiable.

Based on disturbances associated with current and past land use, most of the site does not provide potentially suitable habitat for Marvin's onion. Remnant chaparral habitat onsite has a thick understory of non-native grasses. Clay soils have not been mapped onsite and none were observed during surveys.

Based on long-term and ongoing disturbance of the site, lack of clay soils, thick growth of non-native grasses in remnant chaparral habitat, and negative survey results, suitable habitat to support Marvin's onion is not present onsite and this species is considered absent.

Many-stemmed Dudleya

Many-stemmed dudleya (*Dudleya multicaulis*) is a perennial herb in the Crassulaceae (Stonecrop) family. It flowers from April through July and is found in chaparral, coastal scrub, and valley and foothill grassland, often on clay soils. The species elevation range is 50 to 2,600 feet above mean sea level. It is found in coastal southern California (CNPS 2022).

Many-stemmed dudleya is associated with openings and thinly vegetated areas in chaparral, coastal sage scrub, and grasslands underlain by clay and cobbly clay soils of the Altamont, Auld,

Bosanko, Claypit, and Porterville series. In western Riverside County the majority of known populations are from Temescal Canyon, Gavilan Hills, and Alberhill areas and the Santa Ana Mountains (Dudek 2003).

Many-stemmed dudleya is typically associated with clay soils in barrens, rocky places, and ridgelines as well as thinly vegetated openings in chaparral, coastal sage scrub, and southern needlegrass grasslands on clay soils. Most populations are associated with coastal sage scrub (Dudek 2003).

The species is not state or federally listed; it has a CRPR of 1B.2 (rare, threatened, or endangered in California and elsewhere; moderately threatened in California). Under the MSHCP, many-stemmed dudleya is considered adequately conserved, but surveys are required in certain areas.

There are no CNDDB documented occurrences of many-stemmed dudleya within five (5) miles of the site. The nearest occurrence is about 25 miles to the southwest.

Many-stemmed dudleya was not observed on the site during 2022 surveys conducted during the flowering period for the species. Precipitation was below average in 2022. However, a reference site for many-stemmed dudleya was visited on May 2, 2022 in Temescal Canyon (about 28 miles southwest of the Project site at an elevation of about 1,040 feet) and the plants were found to be flowering and identifiable.

Many-stemmed dudleya was not observed on the offsite areas (Figure 5) during 2023 surveys conducted during the flowering period for this species. Precipitation was well above average in 2023. The reference site for many-stemmed dudleya in Temescal Canyon was visited on April 24, 2023 and the plants were found to be flowering and identifiable.

Based on disturbances associated with current and past land use, most of the site does not provide potentially suitable habitat for many-stemmed dudleya. The site has thick growth of non-native grasses throughout. Clay soils have not been mapped onsite and none were observed during surveys.

Based on long-term and ongoing disturbance of the site, lack of clay soils, thick growth of non-native grasses, absence of documented occurrences in the Project vicinity, and negative survey results, suitable habitat to support many-stemmed dudleya is not present onsite and this species is considered absent.

4.3.2) Special Status Plant Species

No special status plant species were found onsite during 2020, 2022, or 2023 surveys. Three special status plant species have a moderate or low to moderate potential to occur:

- Plummer's mariposa lily (*Calochortus plummerae*),
- Smooth tarplant (*Centromadia pungens ssp. laevis*),
- Parry's spineflower (*Chorizanthe parryi var. parryi*).

Plummer's Mariposa Lily

Plummer's mariposa lily is a perennial bulb-forming herb in the Liliaceae (Lily) family. It flowers from May through July and is found on granitic or rocky soils in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grasslands. The species' elevation range is 330 to 5,580 feet. It is found in Riverside, San Bernardino, Los Angeles, Orange, San Diego, and Ventura Counties (CNPS 2022).

This species has a California Rare Plant Rank (CRPR) of 4.2 (limited distribution, moderate degree of threat) and is covered under the MSHCP and considered adequately conserved (RCA 2022). The MSHCP does not require focused surveys for this species.

There are eight (8) CNDDB documented occurrences of Plummer's mariposa lily within five (5) miles of the Project site. The closest is from 1978 and is located immediately south of the Project site at the Cherry Valley exit off the I-10 freeway. It was not found at that location during a 2003 survey.

Plummer's mariposa lily was not observed on the site during 2022 surveys conducted during the flowering period for the species. Rainfall levels in 2022 were well below average. A reference site for Plummer's mariposa lily was visited on May 22, 2022 near the City of Glendora (about 45 miles west-northwest of the Project site at an elevation of 1,254 feet) and the plants were found to be flowering and identifiable.

Plummer's mariposa lily was not observed on the offsite areas (Figure 5) during 2023 surveys conducted during the flowering period for this species. Precipitation was well above average in 2023. The reference site for Plummer's mariposa lily near Glendora was visited again on June 14, 2023 and the plants were flowering and identifiable.

This is a perennial species that grows from a bulb, but plants may not sprout or flower every year. Plummer's mariposa lily blooms abundantly after fires, with flowering decreasing substantially within ten years after the fire. Growth and flowering are also affected by rainfall levels and bulbs may remain dormant during dry years. Herbivory may also remove the above-ground biomass and make the plants undetectable (Williams et al. 2021). If plants do not produce flowers, they cannot be detected by surveys.

It is unknown when the Project site last burned in a fire. Field surveys did not note any evidence of a recent burn and Google Earth images for the past ten years also do not show any evidence of a recent burn. Given the available evidence, Plummer's mariposa lily cannot be determined to be absent and it has a moderate potential to occur on the site.

Smooth Tarplant

Smooth tarplant is an annual herb in the Asteraceae (Aster) family. It flowers from April through September and is found on alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grasslands, and disturbed sites. The species' elevation range is 0 to 2,100 feet. It is found in Riverside, San Bernardino, Los Angeles, and San Diego Counties (CNPS 2022, Jepson 2022). This species is considered facultative, meaning it can be found in wetland or non-wetland areas and can grow in hydric, mesic, or xeric habitats (USACE 2020). Unlike many other rare species, smooth tarplant is tolerant of disturbance (Dudek 2003).

This species has a CRPR of 1B.1 (rare or endangered in California and elsewhere, seriously threatened in California). Smooth tarplant is a covered species under the MSHCP. Surveys for smooth tarplant are required within the MSHCP CASSA and mitigation is required if the species is present in the CASSA. However, the Project is not within the CASSA and surveys and mitigation are not required for smooth tarplant for the Project.

There are six (6) CNDDB documented occurrences of smooth tarplant within five (5) miles of the Project site, mainly in San Timoteo Canyon about 1.6 miles southwest of the site.

Smooth tarplant was not observed on the site during 2022 surveys conducted during the flowering period for the species. A reference site for smooth tarplant was visited on May 4, 2022 along Warren Road in Hemet (about 14 miles south of the Project site at an elevation of 1,510 feet) and the plants were found to be flowering and identifiable.

Smooth tarplant was not observed on the offsite areas (Figure 5) during 2023 surveys conducted during the flowering period for this species. Precipitation was well above average in 2023. The

reference site for smooth tarplant in Hemet was visited again on April 28, 2023 and the plants were flowering and identifiable.

Smooth tarplant is an annual species that may experience yearly fluctuations in population size due to environmental conditions, including rainfall levels. Rainfall levels in 2022 were well below average. Given the available evidence, smooth tarplant cannot be determined to be absent and it has a low to moderate potential to occur on the site.

Parry's Spineflower

Parry's spineflower is an annual herb in the Polygonaceae (Buckwheat) family. It flowers from April through June and is found in openings in chaparral, cismontane woodland, coastal scrub, and valley and foothill grasslands. It is sometimes found on rocky or sandy soils. The species' elevation range is 900 to 4,005 feet. It is found in Riverside, San Bernardino, and Los Angeles, Counties (CNPS 2022).

This species has a CRPR of 1B.1 (rare or endangered in California and elsewhere, seriously threatened in California) and is covered under the MSHCP and considered adequately conserved (RCA 2022). The MSHCP does not require focused surveys for this species.

There are five (5) CNDDB documented occurrences of Parry's spineflower within five (5) miles of the Project site. The closest is from 2005 and is about 2.6 miles southeast of the Project site.

Parry's spineflower was not observed on the site during 2022 surveys conducted during the flowering period for the species. A reference site for Parry's spineflower was visited on May 2, 2022 at Bogart Regional Park in the Cherry Valley area (approximately 4.8 miles west-northwest of the Project site at an elevation of 3,200 feet) and the plants were found to be flowering and identifiable.

Parry's spineflower was not observed on the offsite areas (Figure 5) during 2023 surveys conducted during the flowering period for this species. Precipitation was well above average in 2023. The reference site for Parry's spineflower at Bogart Regional Park was visited again on May 10, 2023 and the plants were flowering and identifiable.

Parry's spineflower is an annual species that may experience yearly fluctuations in population size due to environmental conditions, including rainfall levels. Rainfall levels in 2022 were well below average. Given the available evidence, Parry's spineflower cannot be determined to be absent and it has a low to moderate potential to occur on the site.

4.3.3) Trees

The 2022 tree survey found a total of 166 oaks and non-oak trees on the site consisting of 54 scrub oaks (*Quercus berberidifolia*), ten (10) blue elderberries (*Sambucus mexicana*), eight (8) California fan palms (*Washingtonia filifera*), and 94 non-native ornamental trees of various species (Table 7). Tree survey data is provided in Appendix D.

The survey found 54 scrub oaks on the site. Some have a DBH of less than two inches but are in a cluster (oak grove) with other scrub oaks (Figures 9a and 9b). No other oak species are present and no heritage oaks (as defined by the City of Calimesa Zoning Code) are present. All of the scrub oaks are regulated under Chapter 18.80 of the City of Calimesa Zoning Code (see Section 2.13).

The survey found 18 non-oak native trees and 94 non-oak ornamental trees on the site (Figures 10a, 10b, and 10c). Of these, 29 have a DBH of 24 inches or greater (Table 7). These trees are regulated under Chapter 18.70.120 of the City of Calimesa Zoning Code (see Section 2.13).

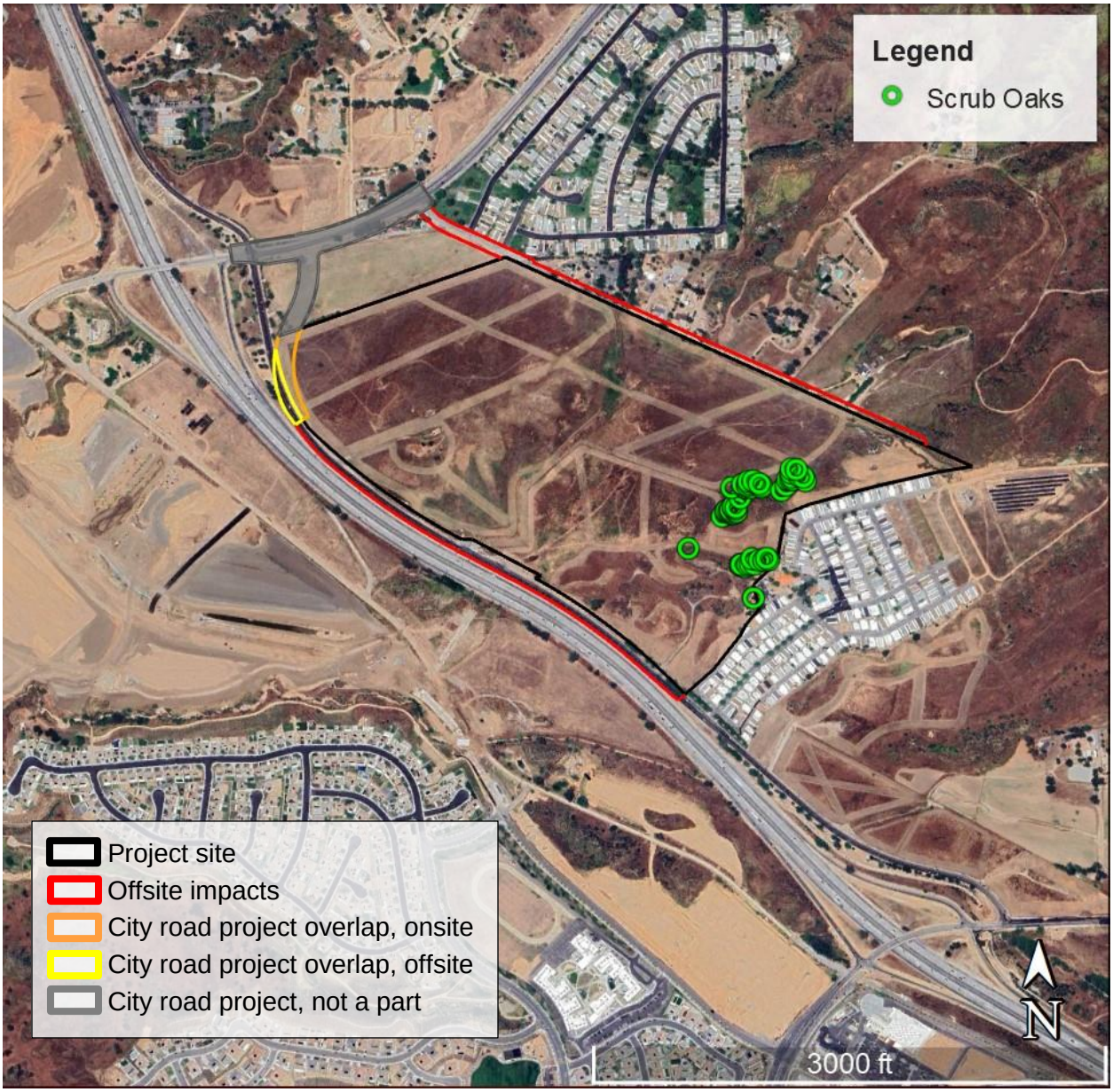
Five of the non-native tree species identified on the site are considered invasive (Cal-IPC 2023). These species are black locust (*Robinia pseudoacacia*), Brazilian pepper (*Schinus terebinthifolius*), Cootamundra wattle (*Acacia baileyana*), olive (*Olea europaea*), and tree of heaven (*Ailanthus altissima*). The unidentified palm may be a Mexican fan palm (*Washingtonia robusta*), which is also an invasive species. African sumac (*Searsia lancea*) is considered an invasive species in Arizona but is not currently on the invasive species inventory for California (Cal-IPC 2023). The unidentified ornamentals may also be invasive species.

Black locust, Brazilian pepper, Cootamundra wattle, olive, retama (Mexican) palo verde (*Parkinsonia aculeata*), and tree of heaven are also on Table 6-2 of the MSHCP, which lists plants that should be avoided adjacent to an MSHCP Conservation Area.

Table 7. Summary of Tree Survey Data

Common Name	Scientific Name	Total Number Present on Site	Number with DBH ≥ 24 inches
Natives			
Blue Elderberry	*Sambucus mexicana*	10	1
California Fan Palm	*Washingtonia filifera*	8	4
Scrub Oak	*Quercus berberidifolia*	54	0
	Subtotal (natives)	**72**	**5**
Non-native Ornamentals			
African Sumac	*Searsia lancea*	1	0
Aleppo Pine	*Pinus halepensis*	1	0
Almond	*Prunus amygdalus*	1	0
Black Locust*	*Robinia pseudoacacia*	2	0
Brazilian Pepper*	*Schinus terebinthifolius*	4	0
Chinese Elm	*Ulmus parvifolia*	8	0
Cootamundra Wattle*	*Acacia baileyana*	7	0
Deodar Cedar	*Cedrus deodara*	6	3
Gum Bumelia	*Sideroxylon lanuginosum*	4	0
Olive*	*Olea europaea*	31	10
Ornamental Juniper	*Juniperus species*	1	0
Ornamental Palm	*Washingtonia species*	1	0
Ornamental Pine/Fir	*Pinus/Abies species*	2	1
Retama Palo Verde	*Parkinsonia aculeata*	1	0
Tree of Heaven*	*Ailanthus altissima*	11	0
Unidentified Ornamental	--	13	10
	Subtotal (non-natives)	**94**	**24**
	Grand Total	**166**	**29**

*invasive species (Cal-IPC 2023)

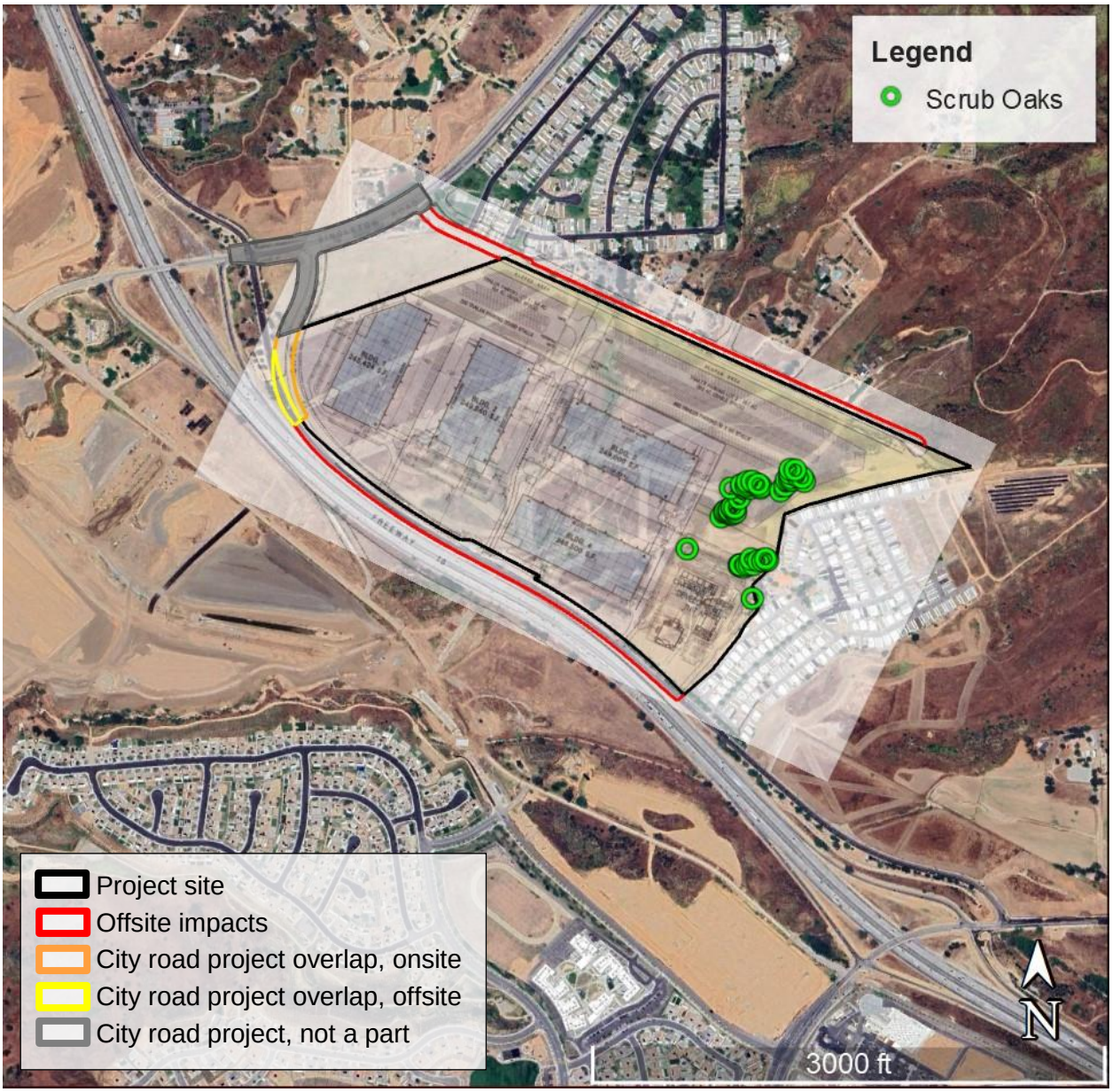


Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Scrub Oaks

Figure 9a

(Aerial obtained from Google Earth, May 2023)

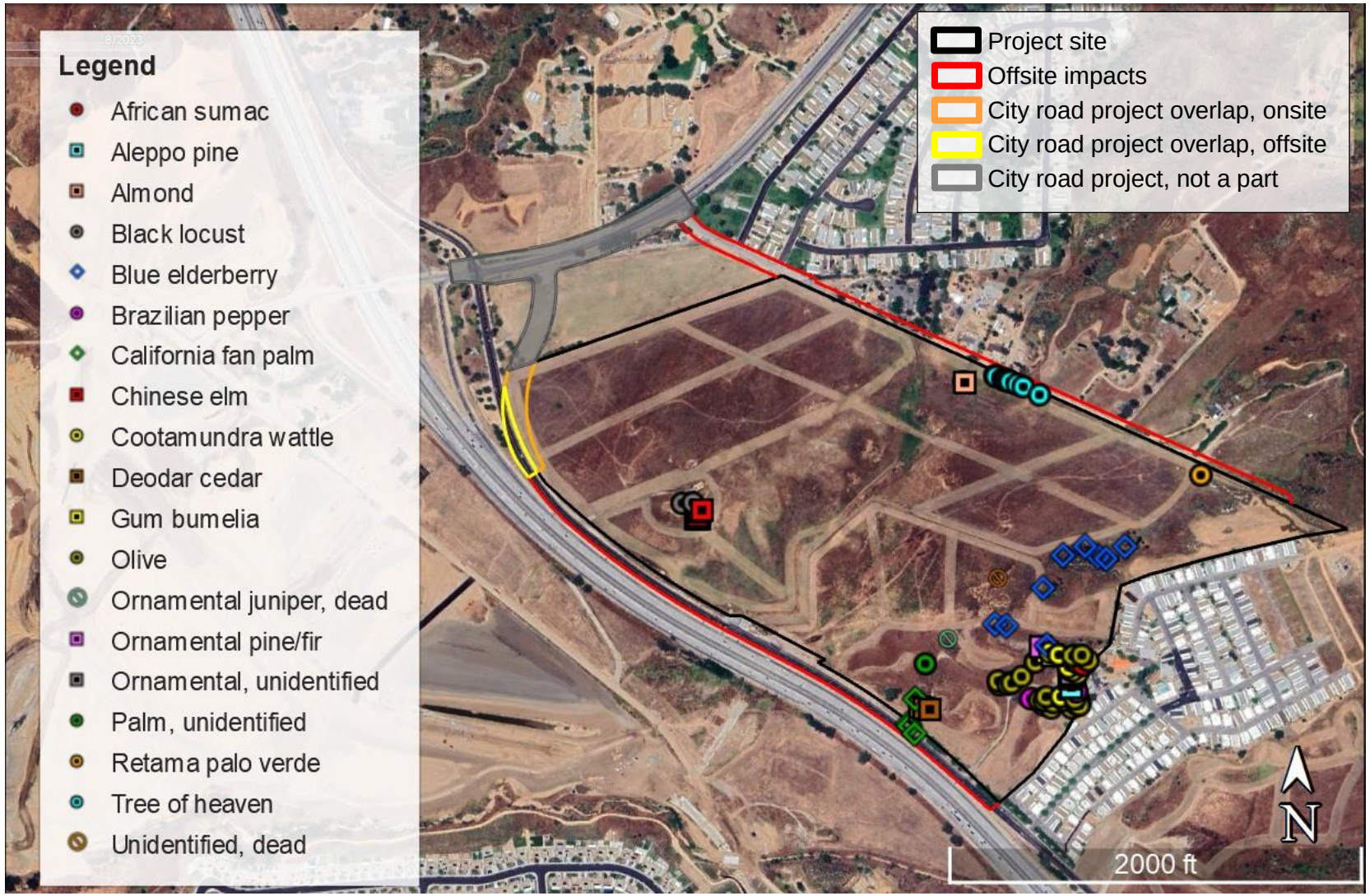


Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

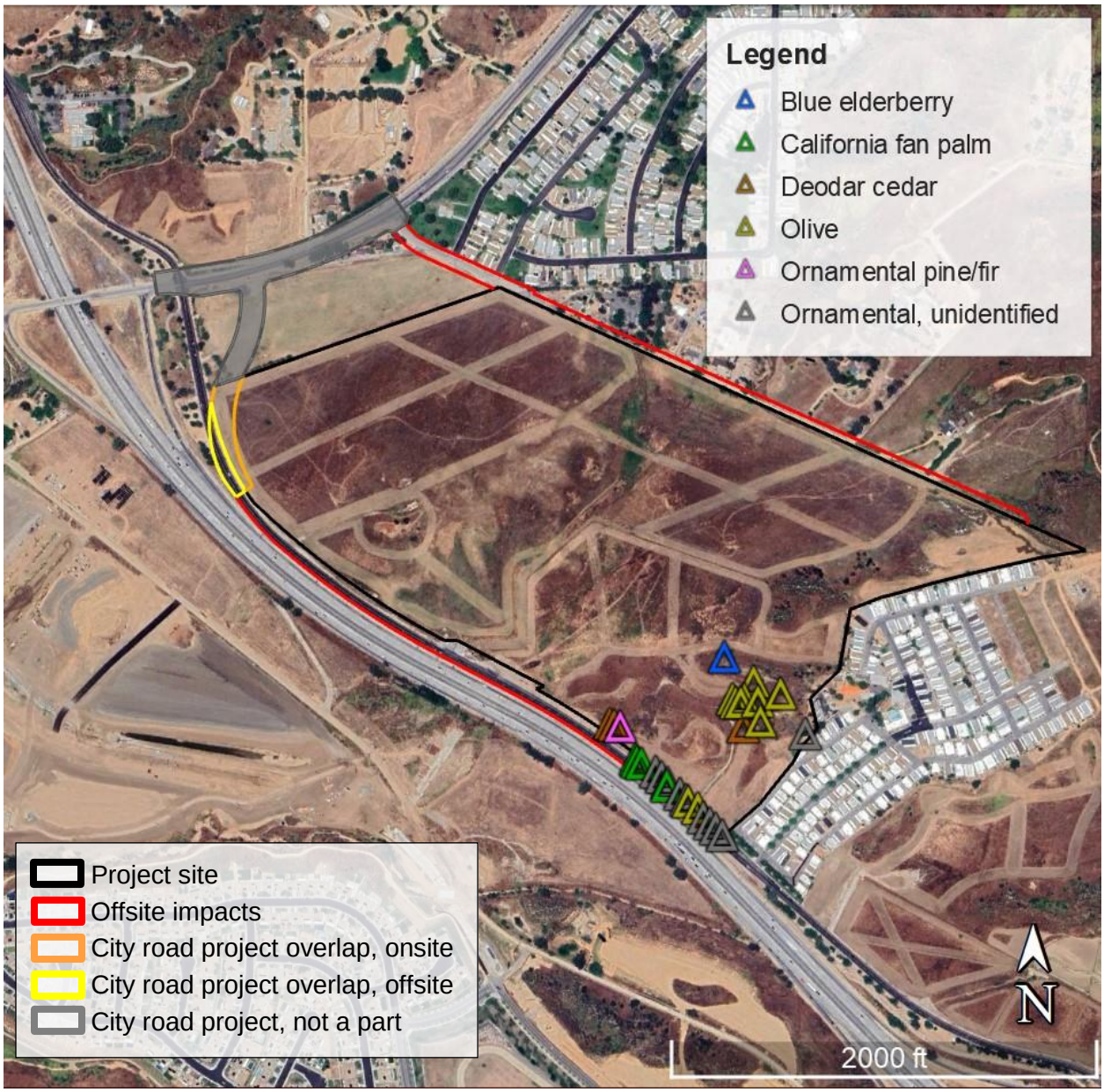
Scrub Oaks with Site Plan

Figure 9b

(Aerial obtained from Google Earth, May 2023)



Non-Oak Trees with DBH Less Than 24 Inches
Figure 10a
(Aerial obtained from Google Earth, May 2023)

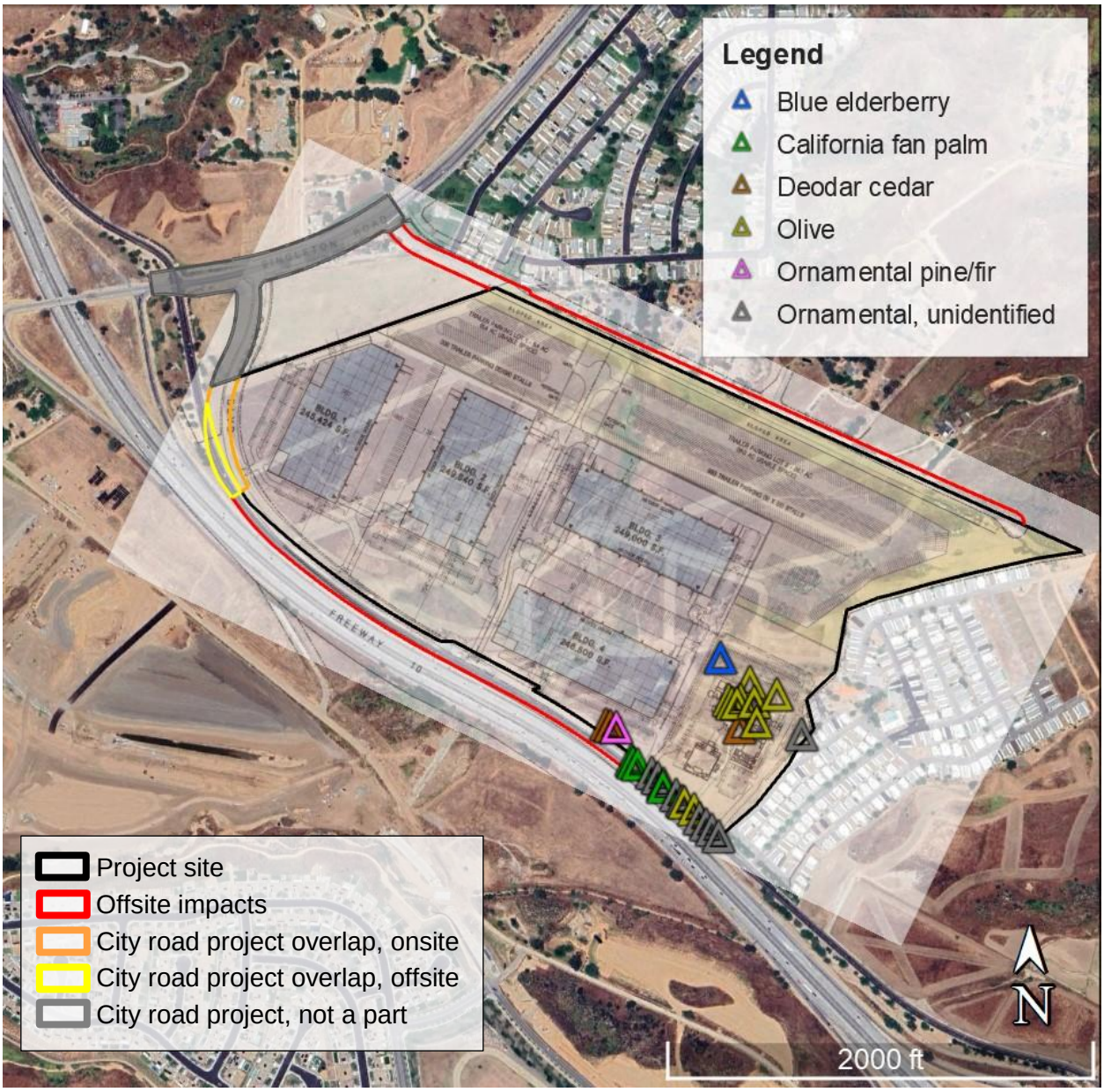


Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Non-Oak Trees with DBH of 24 Inches or Greater

Figure 10b

(Aerial obtained from Google Earth, May 2023)



Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Non-Oak Trees with DBH of 24 Inches or Greater and Site Plan
Figure 10c

(Aerial obtained from Google Earth, May 2023)

4.4) Wildlife Species

A total of 46 vertebrate wildlife species (mostly birds) were detected onsite during surveys conducted during 2020, 2022, and 2023. A list of all wildlife species detected is provided in Appendix A.

No federal or state-listed or fully protected wildlife species were observed during surveys. The site is not located within USFWS designated critical habitat for any federally listed wildlife species.

Five special status wildlife species were observed on the site, as well as habitat for nesting birds, described below. Locations of special status wildlife species are provided in Appendix B and mapped on Figures 12a and 12b. CNDDB forms are included in Appendix F. An analysis of potentials for occurrence of special status wildlife species is provided in Appendix C.

4.4.1) Listed and Fully Protected Wildlife

No state or federally listed wildlife species were observed on the site during surveys. The site is not within designated critical habitat for any federally listed wildlife species (USFWS 2023b).

Fairy Shrimp

Soil types mapped on the site are not consistent with an alkali playa or vernal pool complex (Bauder et al 2011). Pools or depressions characteristic of naturally occurring vernal habitat were not observed on the site and no wetland or vernal pool plant species were present. No evidence of ponding (i.e., cracked soils, tire ruts, etc.) was observed on the site during surveys in 2020 or 2022. However, surveys in 2023 observed ponded water in offsite areas along Calimesa Boulevard and Beckwith Avenue.

No MSHCP species listed for protection associated with riparian/riverine areas and vernal pools were observed. No fairy shrimp were noted during the general biological survey, but potential fairy shrimp habitat was observed during 2023 surveys. Focused fairy shrimp surveys were initiated in Fall 2023. A habitat assessment found ten features within the Project site with evidence of ponding water suitable to support fairy shrimp. These features consist of tire ruts and tracks, low-lying areas within dirt roads, and drainage ditches (Figure 11). A dry season survey was conducted in October 2023. Examination of the dry season samples found fairy shrimp cysts in samples from two of the features (OV-4 and OV-5). The cysts were cultured and the resulting nauplii (larval fairy shrimp) were raised to the point where they had matured sufficiently to be identified to species. Only the common versatile fairy shrimp was found in the dry season

samples. Additional details regarding the dry season survey results can be found in the dry season fairy shrimp survey report in Appendix K.

Wet season surveys are in progress at this time (February 2024) and have been consistent with the dry season surveys. Only the common versatile fairy shrimp has been identified. Surveys will be completed at the end of the wet season in early 2024. This report will be updated when the wet season surveys have been completed to include the wet season survey results.

Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Fairy Shrimp Dry Season Survey Results
Figure 11

Riparian Birds

Least Bell's vireo (*Vireo bellii pusillus*) is state and federally listed as endangered. It is a covered species under the MSHCP and considered adequately conserved, but surveys are required in suitable habitat as described in MSHCP Section 6.1.2 and mitigation is required if the species is present. This species is migratory and breeds in California, arriving in March and departing by September or October. Males establish and defend territories in riparian woodlands and riparian scrub. Territory size ranges from 0.5 to 7.5 acres (USFWS 1998). Dense shrub cover is required for nesting.

There is one CNDDB documented occurrence of nesting least Bell's vireo within five (5) miles of the site. This occurrence was observed from 1978 to 2013 and is located in riparian habitat in San Timoteo Canyon, about 1.4 miles southwest of the Project site. There is no riparian habitat on or adjacent to the site and no suitable habitat for least Bell's vireo.

Southwestern willow flycatcher (*Empidonax traillii extimus*) is state and federally listed as endangered. It is a covered species under the MSHCP and considered adequately conserved, but surveys are required in suitable habitat as described in MSHCP Section 6.1.2 and mitigation is required if the species is present. This species inhabits dense riparian forests with ample numbers of willows and other associated trees and shrubs.

There are two CNDDB documented occurrences of nesting southwestern willow flycatcher within five (5) miles of the site. Both occurrences are from 2004 in riparian habitat along Cooper's Creek, about 3.0 and 3.3 miles south-southeast of the Project site. There is no riparian habitat on or adjacent to the site and no habitat for southwestern willow flycatcher.

Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) is federally listed as threatened and state listed as endangered. It is a covered species under the MSHCP and considered adequately conserved, but surveys are required in suitable habitat as described in MSHCP Section 6.1.2 and mitigation is required if the species is present. This species inhabits extensive riparian thickets or forests with dense, low-level or understory foliage and abutting on slow-moving watercourses, backwaters, or seeps.

There are no CNDDB documented occurrences of nesting western yellow-billed cuckoo within five (5) miles of the site. There is no riparian habitat on or adjacent to the site and no habitat for western yellow-billed cuckoo.

There is no suitable habitat for least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo on or adjacent to the site and these species are considered absent.

Crotch Bumble Bee

Crotch bumble bee was formerly on the CDFW list of Special Animals with a rank of S1S2 (imperiled to critically imperiled) but was made a candidate for state listing as endangered on June 12, 2019. This status was challenged in court and a trial court decision temporarily removed its candidacy in February 2021. A State Supreme Court ruling reversed this judgement and reinstated its candidacy on September 30, 2022 (Supreme Court Case S275412). The latest information from CDFW indicates that Crotch bumble bee is a candidate for state listing as endangered (CDFW 2023e). Under the California Endangered Species Act, candidates for listing receive the same protections as listed species. Crotch bumble bee is not a covered species under the MSHCP.

The following description is summarized from Xerces et al. (2018) and CDFW (2019).

Crotch bumble bee occurs in open grassland and scrub habitats and primarily nests underground, often using abandoned rodent burrows, but may also use rock piles, tree cavities, etc. Crotch bumble bee has a very short tongue, and thus is best suited to forage at open flowers with short corollas. Food plants include *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, *Salvia*, and others. The range of this species includes all of California from the northern border south to Mexico, and into Baja, Mexico and southwestern Nevada. In California, the majority of records are south of San Francisco along the coast and western desert into southern California.

Crotch bumble bees are typically active between March and September, with peak activity coinciding with peak forage blooming periods. The flight period for Crotch bumble bee queens in California is from late February to late October, peaking in early April, with a second pulse in July. The flight period for workers and males in California is from late March through September; worker and male abundance peak in early July.

Bumble bee queens emerge from hibernation in the early spring and immediately start foraging for pollen and nectar and begin to search for a nest site. Nests are often located underground in abandoned holes made by ground squirrels, mice, and rats, or occasionally abandoned bird nests. Some species nest on the surface of the ground (in tufts of grass) or in empty cavities. Other sheltered areas, such as downed wood, rock walls, brush piles, etc., may also be used for nesting. Colonies typically consist of between 50 and 500 workers at their peak along with the queen. However, the size of Crotch bumble bee colonies has not been well documented.

Based on the habitat assessment, there is potentially suitable habitat for Crotch bumble bee on the site, mainly associated with patches of native coastal sage – chaparral scrub in the eastern and southeastern areas.

Potential food plants for Crotch bumble bee observed on the site are dove lupine (*Lupinus bicolor*), white chick lupine (*Lupinus microcarpus var. densiflorus*), California burclover (*Medicago polymorpha*), leafy California wild buckwheat (*Eriogonum fasciculatum var. foliolosum*), slender wild buckwheat (*Eriogonum gracile*), and possibly others such as deerweed (*Acmispon glaber*), California-aster (*Corethrogyne filaginifolia var. filaginifolia*), California sun cup (*Camissoniopsis bistorta*), and wild hyacinth (*Dichelostemma capitatum*). A plant species list for the site is included in Appendix A.

There are five CNDDB records (CDFW 2023b) of Crotch bumble bee within five (5) miles of the Project site. The closest observation of this species is from a specimen collected on April 22, 1975 (EO #181). The area is recorded as Calimesa. The exact location is unknown but mapped by the CNDDB approximately 1.0 mile northwest of the Project site. Two Crotch bumble bees were observed on April 14, 2020 (EO #220) about 2.2 miles southwest of the site. Another record (EO #180) is east of Yucaipa. The exact location is unknown but mapped by the CNDDB about 2.6 miles northeast of the site. A Crotch bumble bee was collected at this location on April 20, 1977. One bee was observed on May 5, 2020 (EO #278) about 3.7 miles south-southeast of the Project site. Bees were observed at a location about 4.2 miles southwest of the site in 1958, 1966, and April 2020 (EO #199).

Bumble Bee Watch (BBW) is a community science project through the partnership of The Xerces Society, the University of Ottawa, Wildlife Preservation Canada, BeeSpotter, The Natural History Museum in London, and the Montreal Insectarium. Bumble bee sightings/photos are submitted by individuals and verified by bumble bee experts (BBW 2023). There is one additional sighting of Crotch bumble bee within about five (5) miles of the Project site in BBW records (# Bee-84388). One female was observed foraging on larkspur (*Delphinium species*) in a residential area on May 3, 2021 about 4.9 miles southeast of the site.

Although there are patches of native habitat and potential forage plants present on the site, the 2023 focused survey found no Crotch bumble bee individuals or nests on the site. Also, no other bumble bee species were observed during the survey.

Other Listed or Fully Protected Wildlife

Other listed or fully protected wildlife species that have not been observed on the site but have a low to moderate or high potential to occur are:

- White-tailed kite (*Elanus leucurus*),
- Stephens' kangaroo rat (*Dipodomys stephensi*).

White-tailed kite is a state fully protected species. This species has a low to moderate potential to forage on the site and a low potential to nest there. White-tailed kite is a covered species under the MSHCP and considered adequately conserved. However, the MSHCP does not provide take authorization for nesting birds and state and federal permits issued for the MSHCP do not allow direct mortality or take of white-tailed kite[3].

Stephens' kangaroo rat is federally listed as endangered and state listed as threatened. This species has a high potential to occur on the site. The Project site is not within the boundaries of the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP). The MSHCP covers impacts to Stephens' kangaroo rat because the Project site is located within the MSHCP boundaries but is located outside of the boundaries of the SKR HCP. Stephens' kangaroo rat is a covered species under the MSHCP and considered adequately conserved. The MSHCP does not require trapping surveys for Stephens' kangaroo rat.

No other listed or fully protected wildlife species have a low to moderate, moderate, or high potential to occur. An analysis of potentials for occurrence of listed and fully protected wildlife species is provided in Appendix C.

4.4.2) Special Status Wildlife

Five (5) special status wildlife species were observed during surveys:

- Orange-throated whiptail (*Aspidoscelis hyperythrus*),
- Cooper's hawk (*Accipiter cooperi*),
- Great egret (fly over) (*Ardea alba*),
- Wrentit (in adjacent area) (*Chamaea fasciata*),

[3] USFWS Special Terms and Conditions for Permit TE-088609-0, Attachment 2 (issued for the MSHCP) does not allow for any direct mortality to adult white-tailed kite. The CDFW Natural Community Conservation Plan (NCCP) (issued for the MSHCP) Finding 3.5.11 states that, "Take of this state listed fully protected species [white-tailed kite] is not authorized by the NCCP Permit and is prohibited by the CDFG [Fish and Game] Code except in certain limited situations (see Fish and Game Code Sections 3511, 4700, 5050, and 5515)."

- California horned lark (*Eremophila alpestris actia*).

Orange-throated whiptail (lizard) is a CDFW Watch List species. CDFW maintains a Watch List consisting of taxa that either do not meet the criteria for CDFW Species of Special Concern or were previously designated as Species of Special Concern but no longer merit that status. There is concern for the long-term viability of Watch List species and a need for additional information to clarify their status. One adult whiptail was observed in the coastal sage – chaparral scrub habitat in the southeastern end of the site. Orange-throated whiptail is a covered species under the MSHCP and considered adequately conserved. The MSHCP does not require surveys for this species.

Cooper's hawk is a CDFW Watch List species. One adult Cooper's hawk was observed perching in an ornamental tree along the north-central boundary of the site both in 2020 and 2022 (may be the same bird). No nesting activity was observed but the species has a moderate potential to nest on or adjacent to the site. Cooper's hawk is a covered species under the MSHCP and considered adequately conserved. However, the MSHCP does not provide take authorization for nesting birds.

Great egret is a CDFW Special Animal. One individual was observed flying over the site during 2023 surveys. There is no suitable nesting habitat for this species on the site and no or marginal foraging habitat. Great egret is not a covered species under the MSHCP.

Wrentit is a USFWS Bird of Conservation Concern. One individual was detected (by song) in an adjacent area near the northeastern corner of the site during 2023 surveys. There is no or marginal foraging and nesting habitat for this species on the site. Wrentit is not a covered species under the MSHCP.

California horned lark is a CDFW Watch List species. A total of about 25 horned larks were observed on five different survey days in 2022. The species was also present in 2023 with about four to six individuals observed on each of three different survey days. Observations were all in the grasslands in the central area of the site. No nesting activity was observed but this species has a high potential to nest on the site. California horned lark is a covered species under the MSHCP and considered adequately conserved. However, the MSHCP does not provide take authorization for nesting birds.

Burrowing Owl

Burrowing owl (*Athene cunicularia*) is protected under the federal Migratory Bird Treaty Act and California Fish and Game Code as a CDFW Species of Special Concern. Under the MSHCP, surveys for burrowing owl are required in certain areas and mitigation is required as described in Section 2.11.

Burrowing owl is a small, ground-dwelling owl found in open dry grassland, desert, or shrubland areas and in uncultivated agricultural areas, rangelands, and other open areas with low-growing vegetation. Burrows are an essential element of burrowing owl habitat. Although the burrowing owl is capable of excavating its own burrows in soft soils, it typically modifies and inhabits abandoned burrows of small burrowing mammals, such as ground squirrels and pocket gophers. Burrowing owls have also been known to use man-made structures such as cement culverts, debris piles, and other artificial burrows.

Occupancy of burrowing owl habitat can be verified at a site by observation of at least one (1) owl or owl sign (molted feathers, cast pellets, prey remains, eggshell fragments, or excrement) at or near a burrow entrance. A site is considered occupied if at least one (1) owl has been identified onsite in the past three (3) years, because (if undisturbed) burrowing owls exhibit high site fidelity (CDFG 2012, CBOC 1993).

There are no CNDDB documented occurrences of burrowing owl within five (5) miles of the site, but there are two eBird records (eBird 2023). Observations at eBird are submitted by "citizen scientists" and should be interpreted with caution. The closest of these is located at Noble Creek Park about 3.3 miles southeast of the site. This observation is from July 2018 and consists of a breeding pair and five (5) juveniles in a field adjacent to the park. This observation includes clear photographs of two adult burrowing owls and three (3) juveniles. The second observation is near Redlands, about 4.8 miles northeast of the site. This observation is from March 2021 and consists of one burrowing owl.

Burrowing owl habitat assessments were conducted in 2020 and 2022 and protocol breeding season surveys were conducted in 2022. Potentially suitable habitat and small mammal burrows are present on the site and in undeveloped areas of the buffer. No burrowing owls, occupied burrows, or burrowing owl sign (pellets, excrement, feathers, tracks, etc.) were observed on the site or in the buffer during surveys. No burrowing owls or owl sign were incidentally observed during biological surveys in 2023.

Other Special Status Wildlife

Other special status wildlife species that have not been observed on the site, but have a high, moderate to high, moderate, or low to moderate potential to occur are:

- Southern California legless lizard (*Anniella stebbinsi*; CDFW Species of Special Concern),
- Coast horned lizard (*Phrynosoma blainvillii*; CDFW Species of Special Concern),
- Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*; CDFW Watch List species),
- Ferruginous hawk (*Buteo regalis*; USFWS Bird of Conservation Concern, CDFW Watch List species),
- Nuttall's woodpecker (*Dryobates nuttallii*; USFWS Bird of Conservation Concern),
- Loggerhead shrike (*Lanius ludovicianus*; USFWS Bird of Conservation Concern, CDFW Species of Special Concern),
- Allen's hummingbird (*Selasphorus sasin*; USFWS Bird of Conservation Concern),
- Lawrence's goldfinch (*Spinus lawrencei*; USFWS Bird of Conservation Concern, CDFW Special Animal),
- Pallid bat (*Antrozous pallidus*; CDFW Species of Special Concern),
- Dulzura pocket mouse (*Chaetodipus californicus femoralis*; CDFW Species of Special Concern),
- Northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*; CDFW Species of Special Concern),
- Townsend's big-eared bat (*Corynorhinus townsendii*; CDFW Species of Special Concern),
- Western mastiff bat (*Eumops perotis californicus*; CDFW Species of Special Concern),
- San Diego black-tailed jackrabbit (*Lepus californicus bennettii*; CDFW Special Animal),
- Los Angeles pocket mouse (*Perognathus longimembris brevinasus*; CDFW Species of Special Concern).

Coast horned lizard, southern California rufous-crowned sparrow, ferruginous hawk, loggerhead shrike, northwestern San Diego pocket mouse, San Diego black-tailed jackrabbit, and Los Angeles pocket mouse are covered species under the MSHCP and considered adequately conserved. However, the MSHCP does not provide take authorization for nesting birds. The MSHCP does not require surveys for any of these species on the Project site.

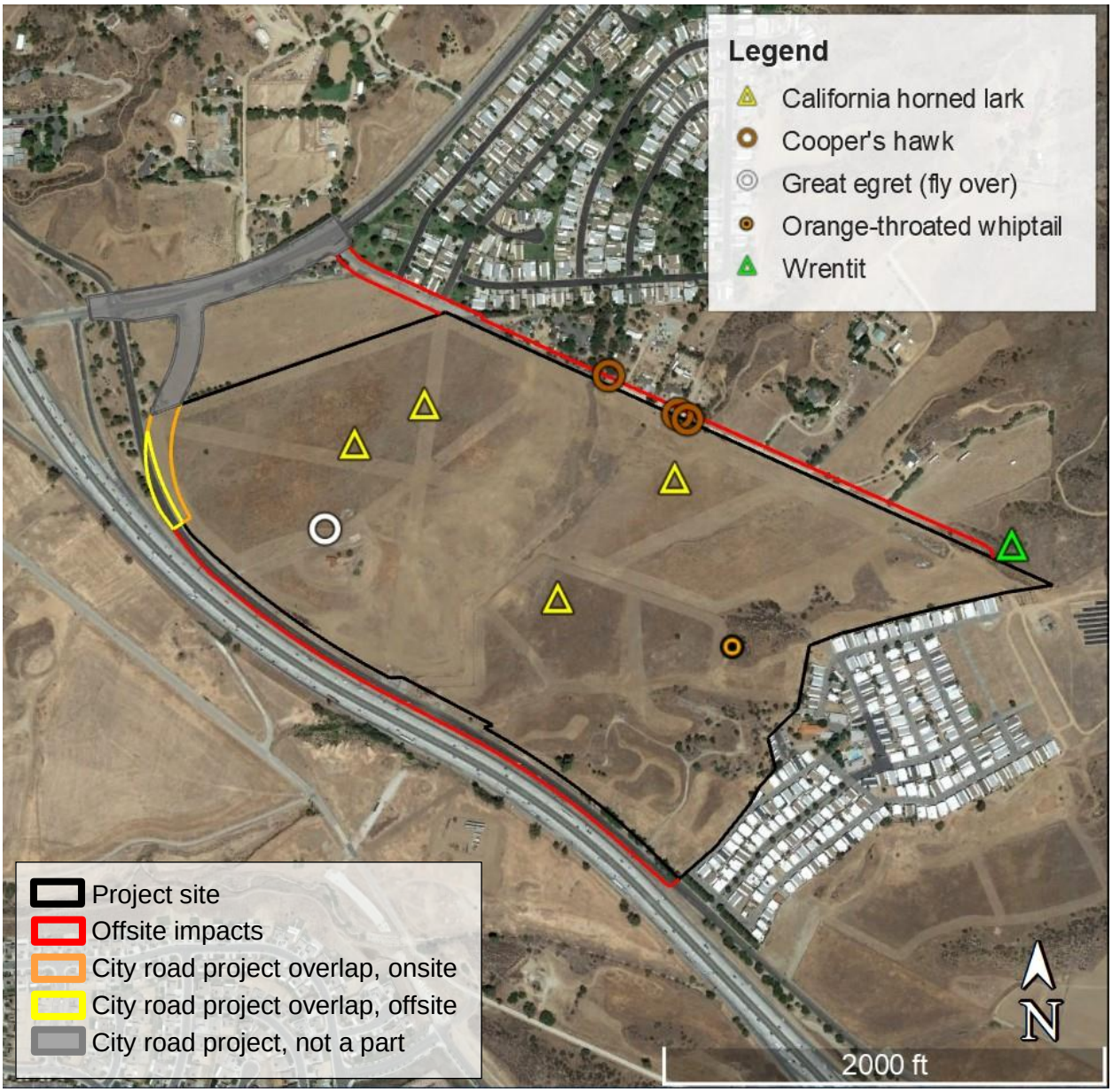
The remaining species (Southern California legless lizard, Nuttall's woodpecker, Allen's hummingbird, Lawrence's goldfinch, pallid bat, Dulzura pocket mouse, Townsend's big-eared bat, and mastiff bat) are not covered under the MSHCP. See Appendix C for details.

A habitat assessment for bats was conducted in 2023 and found suitable day, night, and maternity roosting habitat in the abandoned residence and some trees on the site (see Appendix J). Nighttime emergence surveys are planned for 2024.

4.4.3) Nesting Birds

Habitat suitable for nesting birds (including raptors) protected by the Migratory Bird Treaty Act and California Fish and Game Code is present within and adjacent to the site. Birds may nest in trees, shrubs, and other vegetation, in tree cavities, holes in bluffs, in burrows (e.g., burrowing owl), on open ground, or on structures and other surfaces. Active nests of common species northern mockingbird (*Mimus polyglottos*) and Anna's hummingbird (*Calypte anna*) as well as inactive nests of other unidentified songbird species were observed during the 2022 surveys.

Large trees (mainly ornamental and non-native) are present on the site and adjacent areas (i.e., within 500 feet). These include tree of heaven (*Ailanthus altissima*), ornamental fir (*Abies* species), ornamental pine (*Pinus* species), and other species. Some of these are large enough to provide suitable habitat for nesting raptors. Several red-tail hawks (*Buteo jamaicensis*) were observed flying over the site during surveys, but no active raptor nest sites were observed on or adjacent to the site.

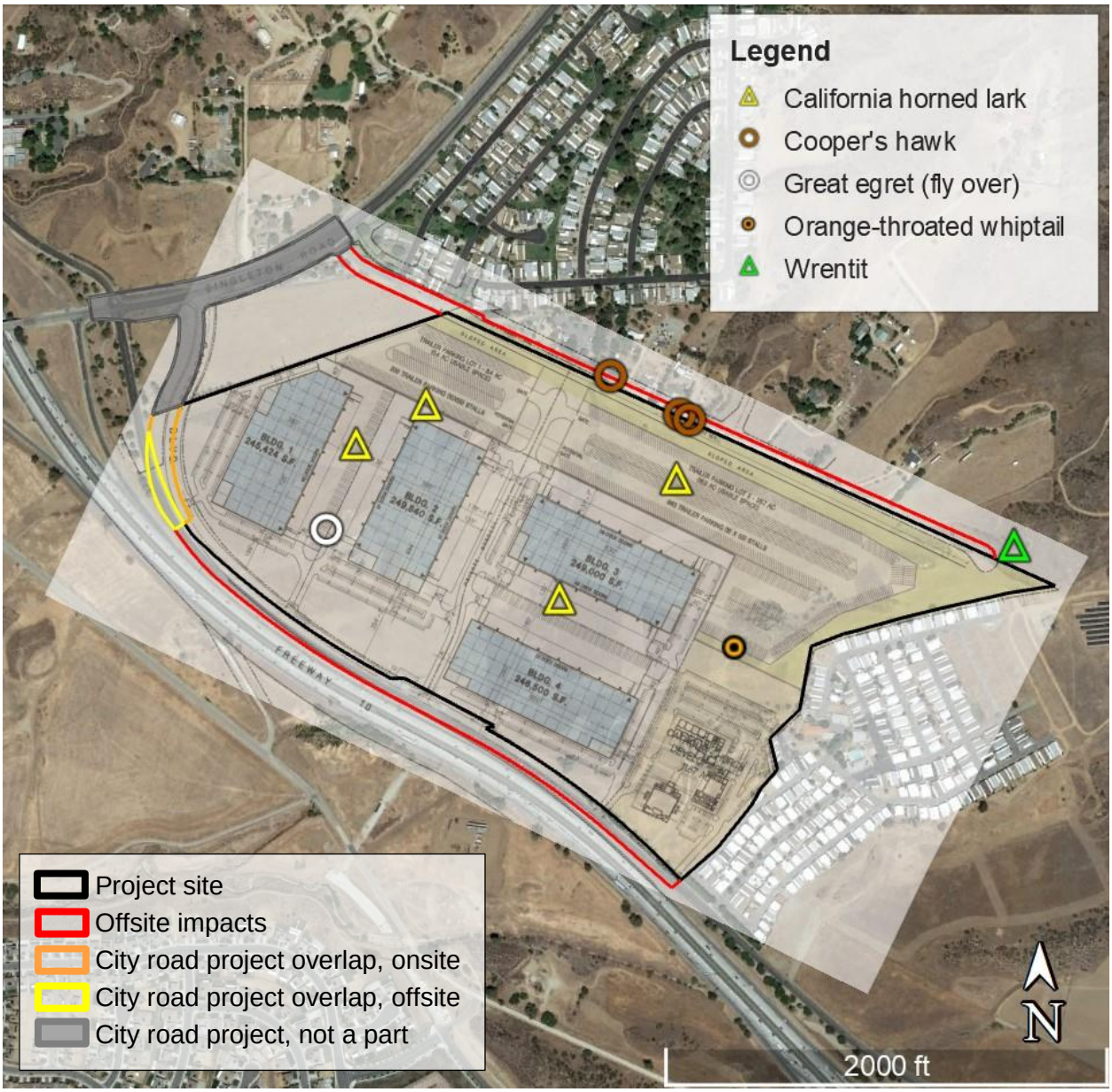


Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Special Status Wildlife Observations

Figure 12a

Aerial obtained from Google Earth, August 2021.



Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

Special Status Wildlife Observations with Site Plan

Figure 12b

Aerial obtained from Google Earth, August 2021.

4.4.4) 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).

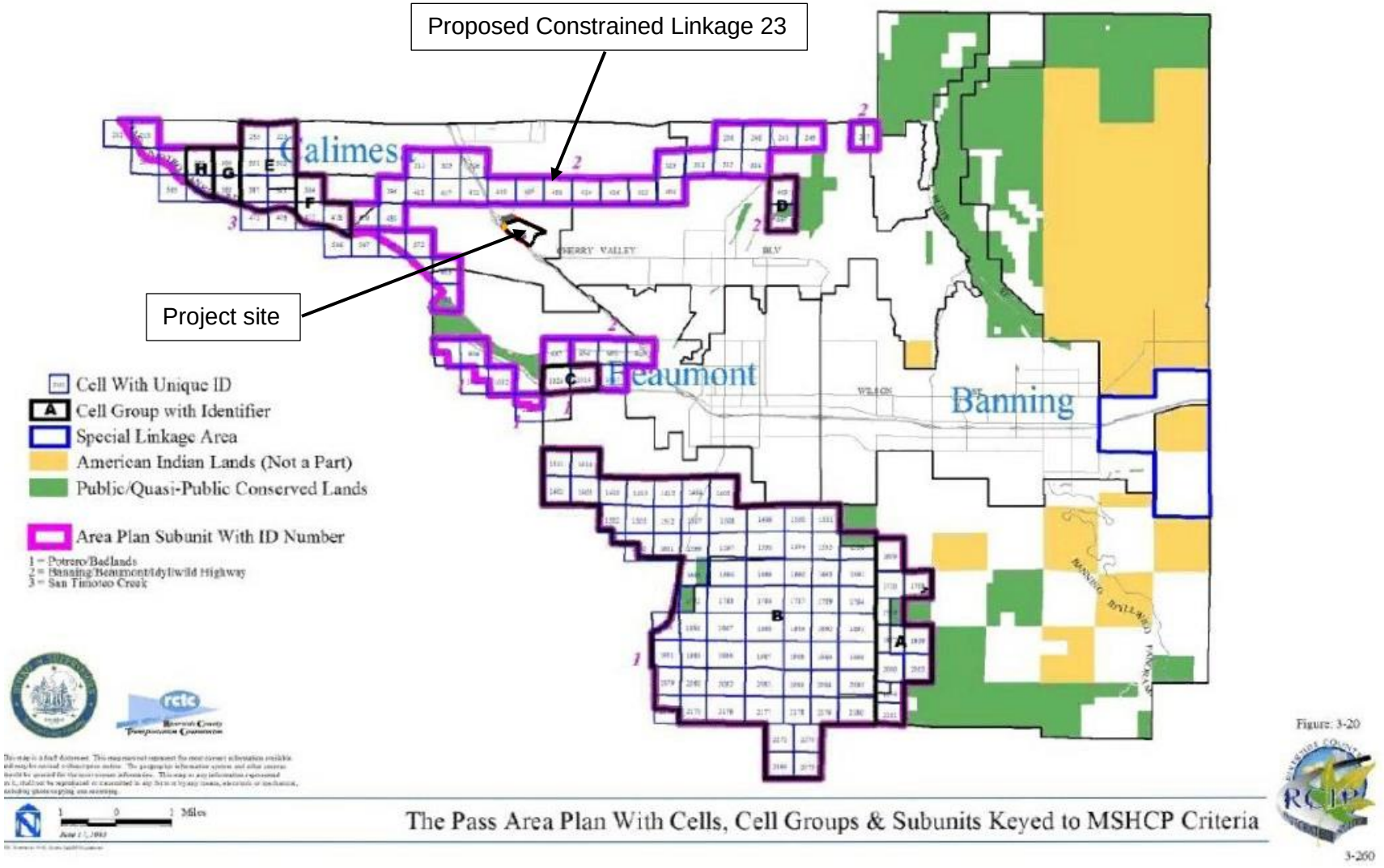
To the west and east of the Project site are large areas of undeveloped land, including MSHCP Conserved Lands and PQP Lands. However, immediately to the west of the Project site is Calimesa Boulevard, the I-10 freeway, and a large area of disturbed land, which would limit terrestrial connectivity to the west.

MSHCP Proposed Constrained Linkage 23 is about 0.25 mile to the north of the site (Figure 13). The MSHCP defines a constrained linkage as "a constricted connection expected to provide for movement of identified Planning Species between Core Areas, where options for assembly of the connection are limited due to existing patterns of use."

The MSHCP describes Proposed Constrained Linkage 23 as "an upland Linkage located in the vicinity of Cherry Valley, which provides a connection to Bogart County Park and San Timoteo Creek for certain species. This Linkage is constrained by surrounding existing urban and rural residential Development in the City of Calimesa. Planning Species for which Habitat is provided

within this Linkage include Bell's sage sparrow, Los Angeles pocket mouse, and San Bernardino mountain kingsnake. Maintenance of a contiguous connection is important for these species. Barriers, including roadways and fencing constructed as part of adjacent Development, may result in fragmentation of the Linkage and affect movement through the Linkage by mammals such as bobcats."

The site provides local movement opportunities for species that live within the site and immediately adjacent undeveloped lands. The Project site is outside of the MSHCP Criteria Cells that make up Proposed Constrained Linkage 23.



Pass Area Plan
Figure 13

(Source: Dudek [2003], Figure 3-20 of the MSHCP)

4.5) Waters and Wetlands

Under MSHCP Volume 1, Section 6.1.2, areas associated with wetland and streambed systems must be evaluated for consideration as riparian/riverine or vernal pool habitat. Riparian/riverine areas are defined within the MSHCP as:

> ". . . lands which contain Habitat dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby fresh water source; or areas with fresh water flow during all or a portion of the year."

Vernal pools are defined within the MSHCP as:

> ". . . seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season. Obligate hydrophytes and facultative wetlands plant species are normally dominant during the wetter portion of the growing season, while upland species (annuals) may be dominant during the drier portion of the growing season. . ."

A jurisdictional delineation was conducted in 2022 and that report is provided under separate cover. Results of the jurisdictional delineation are summarized below.

There are three (3) ephemeral drainages on the site plus a roadside ditch (Figures 14a, 14b, and 14c). No flowing or ponding water was observed in any of the drainages during surveys.

A total of 0.86 acre of CDFW streambed/State waters is present, of which 0.73 acre is also MSHCP riverine resources subject to Section 6.1.2 of the MSHCP. No state wetlands/MSHCP riparian habitat is present and no federal waters or wetlands are present. An analysis of topographical information and historic aerial images finds that the roadside ditch (Drainage 3) was not present until 2006. It is oriented perpendicular to the natural flow and is not part of any current or previously occurring natural streambed. The roadside ditch (Drainage 3) is a manmade feature and therefore not subject to MSHCP Section 6.1.2.

All of the CDFW streambed/State waters and MSHCP riverine resources on the site will be impacted. Impacts to CDFW streambed/State waters require permits from CDFW and the Regional Water Quality Control Board (RWQCB). Impacts to MSHCP riverine resources require

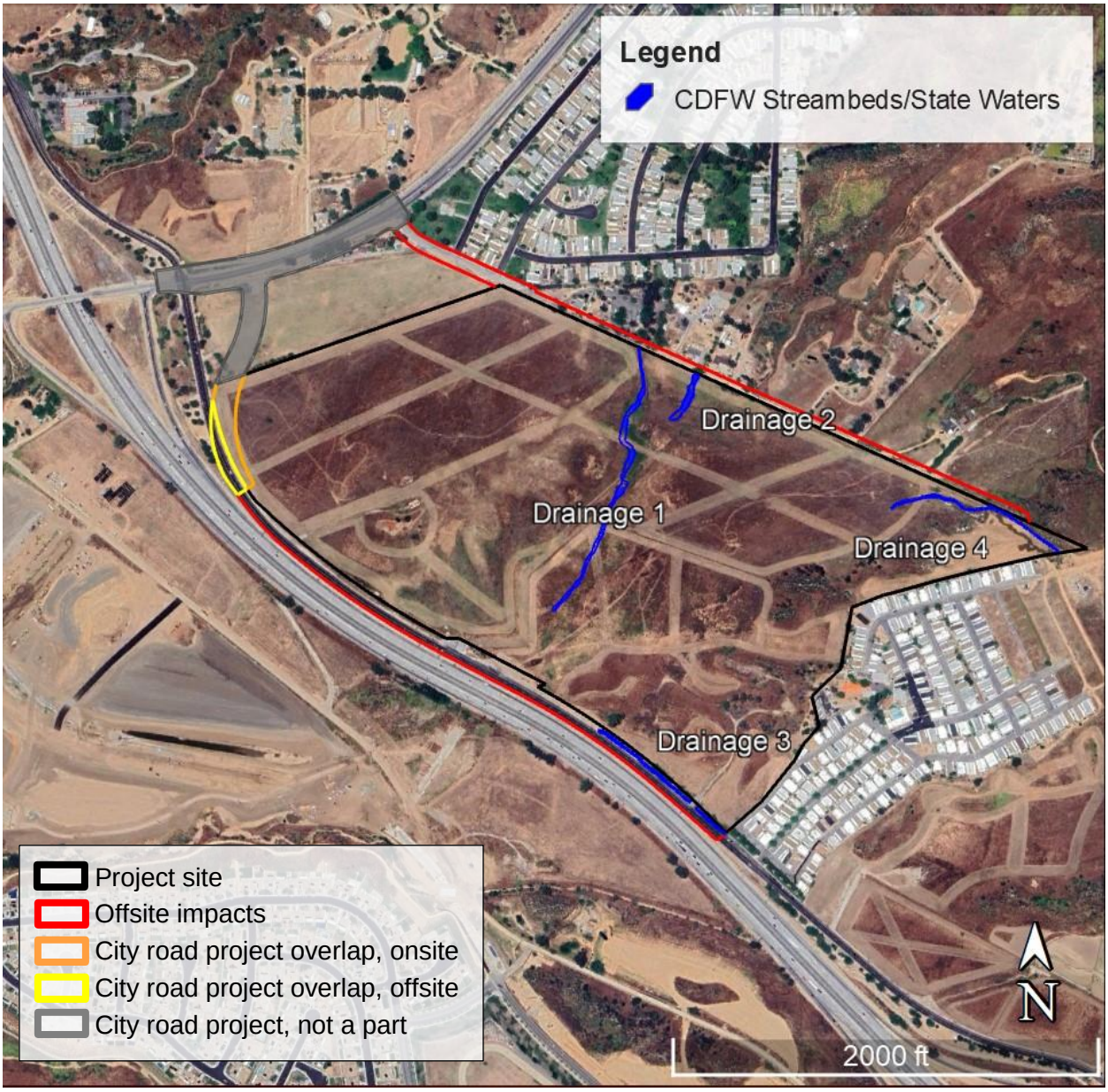
preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP). A DBESP has been prepared for separate submittal.

4.5.1) Vernal Pools

Soil types mapped on the site are not consistent with an alkali playa or vernal pool complex (Bauder et al 2011). Naturally occurring vernal pool depressions or associated native vernal pool vegetation were not observed on the site.

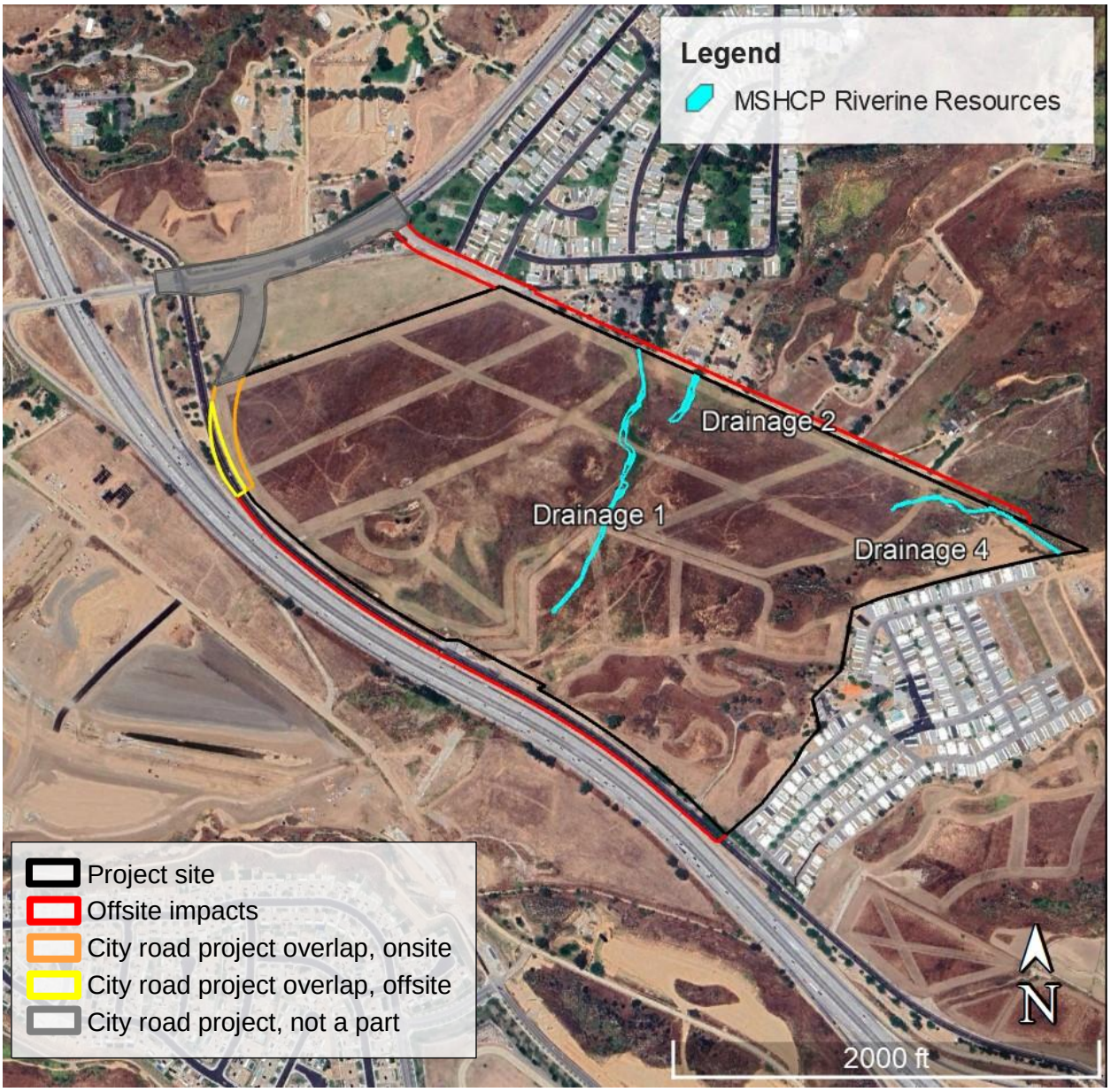
Pools or depressions characteristic of naturally occurring vernal habitat were not observed on the site and no wetland or vernal pool plant species were present. Ponded water was observed in offsite area along Calimesa Boulevard and Beckwith Avenue during 2023 surveys.

No MSHCP species listed for protection associated with riparian/riverine areas and vernal pools were observed. Potential fairy shrimp habitat was observed in offsite areas during 2023 surveys. Fairy shrimp surveys were initiated in Fall 2023 and the dry season survey found only the common versatile fairy shrimp (see Section 4.4.1). Wet season surveys are in progress and have also found only the common versatile fairy shrimp through February 2024. Wet season surveys will be completed in early 2024.



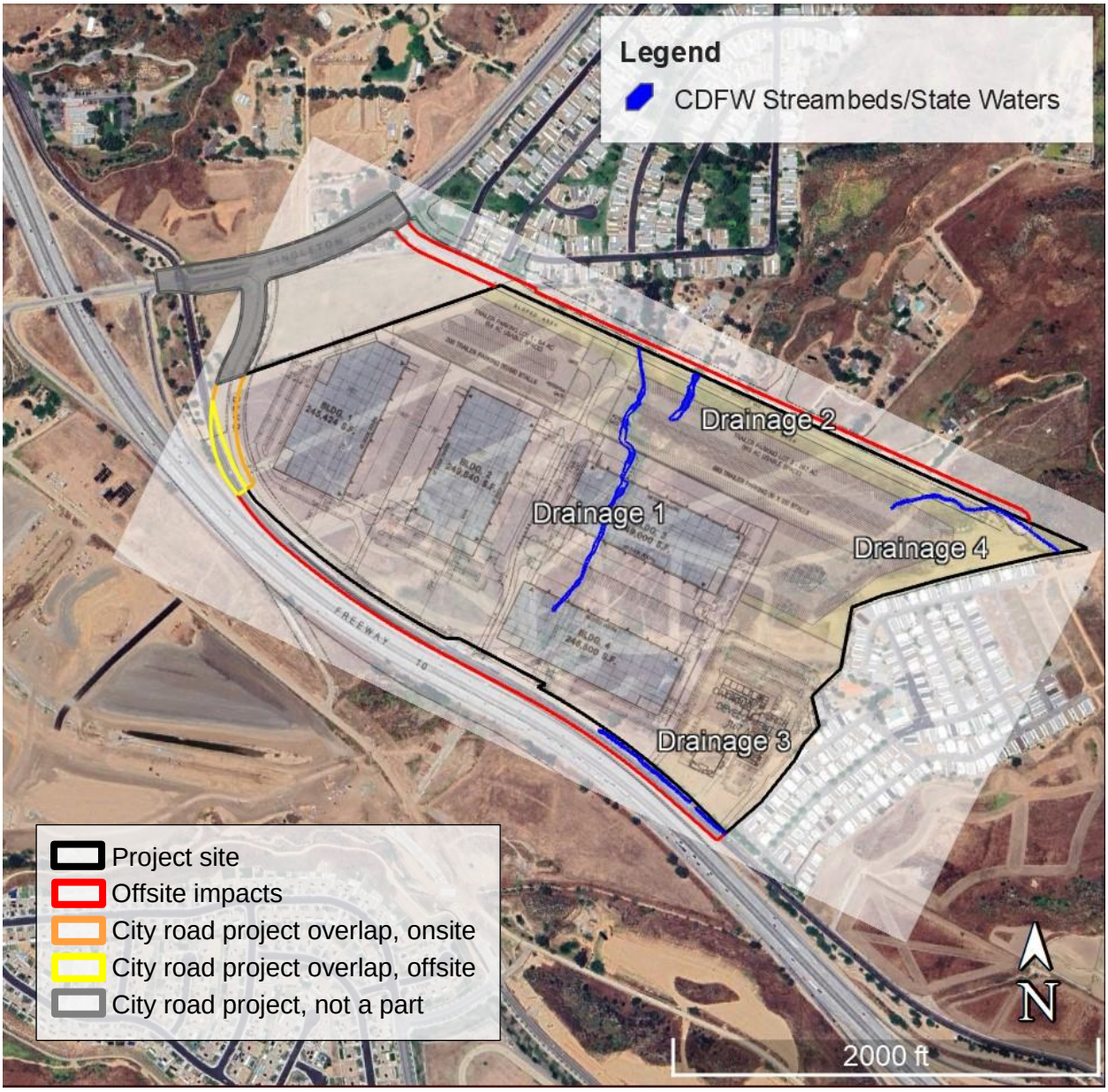
Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

CDFW Streambeds/State Waters
Figure 14a



Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

MSHCP Riverine Resources
Figure 14b



Oak Valley North Commerce Center
City of Calimesa, Riverside County, California

CDFW Streambeds/State Waters with Site Plan
Figure 14c

5.0) ANALYSIS OF POTENTIAL EFFECTS

The following discussion examines potential impacts to biological resources that may occur as a result of implementation of the proposed Project. Impacts can be direct, indirect, or cumulative. Direct impacts are those that are caused by a project and occur at the same time and place. Indirect effects are reasonably foreseeable and caused by a project but occur at a different time or place. Cumulative impacts are two or more individual effects which, when considered together, compound or increase other environmental impacts. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively significant projects taking place over a period of time.

Direct impacts include the loss, modification, or disturbance of vegetation communities, which in turn, directly affect plant and wildlife species dependent on those habitats, as well as the destruction of individual plants or wildlife. Direct impacts also include any effects that result from vegetation or ground disturbing activities during construction, including associated dust, noise and vibration, etc.

Indirect impacts are the result of such things as introduction of invasive plants and animals; predator subsidies (i.e., food, water, perch sites, etc.) that lead to increased predation on wildlife; and harassment or predation by domestic animals. These impacts may change the behavioral patterns of wildlife and reduce native plant and wildlife diversity and abundance in habitats adjacent to project sites.

Under the CEQA Guidelines (2019 revision), project impacts on biological resources are potentially significant if one or more of the following conditions would result from implementation of the proposed Project:

a) A substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS.

b) A substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or USFWS.

c) A substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) direct removal, filling, hydrological interruption, or other means.

d) 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 sites.

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

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

This section describes the Project's expected impacts to biological resources and mitigation. Proposed mitigation measures to avoid, minimize, and compensate for impacts are listed in Section 6.0.

5.1) Listed and Special Status Species

General measures to avoid and minimize impacts to listed and special status species are Mitigation Measures BIO-1 (Biological Monitoring and Clearance Surveys), BIO-2 (Workers Environmental Awareness Program), BIO-3 (Flag or Fence Disturbance Areas), BIO-10 (Invasive Plants), BIO-11 (Wildlife Hazards), and BIO-12 (Trash).

Mitigation Measure BIO-1 requires biological monitoring and daily clearance surveys during initial vegetation clearing and grading to ensure that impacts to burrowing owl, nesting birds, and other special status species and sensitive biological resources are avoided and minimized. Mitigation Measure BIO-2 requires that workers attend training regarding sensitive biological resources that may be present on the site and the Project's requirements regarding protection of those resources. Mitigation Measure BIO-3 requires fencing of disturbance areas adjacent to habitat or avoidance areas to avoid impacts to biological resources outside of Project disturbance areas.

Invasive plants degrade habitat for wildlife. Although the site is already largely dominated by non-native grasses, the introduction or spread of additional invasive species could impact local or downstream habitats. Mitigation Measure BIO-10 requires actions to avoid and minimize the introduction or spread of invasive plants.

Construction of the Project may introduce wildlife hazards to the site such as excavations or materials where wildlife may become trapped, lighting, dust and toxic chemicals, etc. Mitigation Measure BIO-11 requires actions to avoid and minimize potential wildlife hazards.

Trash brought onsite by Project workers, particularly food trash, can attract wild and domestic predators of wildlife. Mitigation Measure BIO-12 requires secure storage and removal of trash to avoid and minimize attracting predators.

5.1.1) Listed, Special Status, and Narrow Endemic Plants

No federal or state-listed plant species were observed on the site during surveys. The site is not within USFWS designated critical habitat for any federally listed plant species. Based on the thick growth of non-native grasses throughout the site, disturbances associated with current and past land use, a lack of CNDDB records in the site vicinity, and results of the botanical survey, federal or state-listed plant species known from the region are either absent or not expected to occur on the site. There would be **no impacts** to federal or state-listed plants and no mitigation is proposed.

No special status plant species were observed on the site during surveys. Special status plant species known from the region are either absent or not expected to occur, with the exception of Plummer's mariposa lily, smooth tarplant, and Parry's spineflower. These species were not observed during surveys but, due to low rainfall in 2022, could not be determined to be absent. **No impacts** to special status plants other than these three species are anticipated and no mitigation is proposed.

If Plummer's mariposa lily, smooth tarplant, and/or Parry's spineflower are present, implementation of the Project could impact these plants through loss of habitat and loss of individuals or populations within the disturbance area. Since Plummer's mariposa lily and Parry's spineflower are covered under the MSHCP and considered adequately conserved, Project-related impacts (if any) to Plummer's mariposa lily and Parry's spineflower would be a **covered impact under the MSHCP** and no mitigation is proposed. Smooth tarplant is a covered species under the MSHCP. Surveys for smooth tarplant are required within the MSHCP CASSA and mitigation is required if the species is present in the CASSA. However, the Project is not within the CASSA and surveys and mitigation are not required for smooth tarplant for the Project. Project-related impacts (if any) to smooth tarplant would be a **covered impact under the MSHCP** and no mitigation is proposed.

Narrow endemic plants Marvin's onion and many-stemmed dudleya were not observed during focused surveys, suitable habitat for these species is lacking, and these species are considered absent from the site. **No impact** to narrow endemic plant species would occur and the Project would be consistent with MSHCP Section 6.1.3.

Regulated trees are addressed in Section 5.5.

5.1.2) Listed and Special Status Wildlife

Impacts to vegetation communities on the site are discussed in Section 5.2. These communities are non-native grassland and wildflower fields, coastal sage – chaparral scrub, and disturbed/developed/ornamental areas. These communities provide potential habitat for common, special status, and listed wildlife species. However, all three vegetation communities are commonly found in the region and the loss of the largely non-native and disturbed wildlife habitat on the site would be a **less than significant** impact and no mitigation is proposed.

Burrowing Owl

Burrowing owl has not been detected on the site during surveys, although surveys determined that potentially suitable habitat (including suitable burrows) is present on the site. While no burrowing owls or their sign were found during focused owl surveys, suitable habitat is present and owls could occupy the site prior to construction activities. Because burrowing owls will tend to shelter in their burrows rather than flee from disturbance, adults as well as eggs, chicks, and juveniles could be harmed by Project activities.

Mitigation Measure BIO-4 (Burrowing Owl) requires a preconstruction survey for burrowing owl, avoidance buffers if any owls are present during nesting season, and other mitigation as required by the MSHCP.

Project-related impacts to burrowing owl would be **less than significant with mitigation** as described in Mitigation Measures BIO-1 (Biological Monitoring and Clearance Surveys), BIO-2 (Workers Environmental Awareness Program), BIO-3 (Flag or Fence Disturbance Areas), BIO-4 (Burrowing Owl), BIO-10 (Invasive Plants), BIO-11 (Wildlife Hazards), and BIO-12 (Trash).

Nesting Birds

There is potential habitat for nesting birds, including raptors, on and adjacent to the site. Adult birds will typically avoid or flee from construction activities and other disturbance and the potential for physical harm would be limited to nests, eggs, and dependent juveniles.

Mitigation Measure BIO-5 (Nesting Birds) requires site disturbance to occur outside of the nesting season. If work cannot be scheduled outside of the nesting season, this measure requires a preconstruction nesting bird survey and avoidance buffers for active nests. Project-related impacts to nesting birds would be **less than significant with mitigation** as described in Mitigation Measures BIO-1 (Biological Monitoring and Clearance Surveys), BIO-2 (Workers

Environmental Awareness Program), BIO-3 (Flag or Fence Disturbance Areas), BIO-5 (Nesting Birds), BIO-10 (Invasive Plants), BIO-11 (Wildlife Hazards), and BIO-12 (Trash).

Crotch Bumble Bee

Crotch bumble bee was not found on the site during focused surveys but patches of suitable habitat are present. If present, Crotch bumble bee could be impacted by loss of individuals or colonies.

Mitigation Measure BIO-6 (Crotch Bumble Bee) requires a qualified biologist to conduct preconstruction surveys within seven (7) days prior to the start of vegetation or ground disturbance or tree trimming/encroachment/removal within the bee's activity period.

If a survey finds that the species is present on the site, consultation with CDFW is required. If Crotch bumble bee will be impacted by the Project, an incidental take permit will be obtained prior to Project impacts and/or other mitigation as required by CDFW. Impacts to Crotch bumble bee would be **less than significant with mitigation** as described in Mitigation Measures BIO-1 (Biological Monitoring and Clearance Surveys), BIO-2 (Workers Environmental Awareness Program), BIO-3 (Flag or Fence Disturbance Areas), Mitigation Measure BIO-6 (Crotch Bumble Bee), BIO-10 (Invasive Plants), BIO-11 (Wildlife Hazards), and BIO-12 (Trash).

Riparian Birds

There is no riparian habitat on or adjacent to the site and no suitable habitat for least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo. These species are considered absent from the site, there would be **no impact** to these riparian bird species, and no mitigation is proposed.

Fairy Shrimp

There is no naturally occurring vernal pool habitat on the site. However potential habitat for listed fairy shrimp species was observed. Ponding water was observed in offsite impact areas along Calimesa Boulevard and Beckwith Avenue during surveys in 2023. Fairy shrimp surveys were initiated in Fall 2023 and the dry season survey found only the common versatile fairy shrimp. Additional details regarding the dry season survey results can be found in Appendix K. Wet season surveys are in progress and have also found only the common versatile fairy shrimp through February 2024. Wet season surveys will be completed in early 2024. If listed fairy shrimp species are present, individuals or cysts (eggs), as well as occupied habitat, could be damaged

or destroyed by construction activities. Mitigation Measure BIO-13 (Fairy Shrimp) requires conservation of occupied habitat and/or purchase of credits at a mitigation bank.

If listed fairy shrimp are present, then implementation of Mitigation Measure BIO-13 would either conserve 90 percent of the occupied habitat (including the surrounding hydrology) on the Project site or compensate for the loss of occupied habitat on the Project site through purchase of preservation credits at a 3:1 ratio (preserved habitat : occupied habitat) at the Skunk Hollow / Berry Jones Mitigation Bank or a mitigation bank that is determined to be acceptable to the City of Calimesa Planning Department, USFWS, and CDFW. Impacts to listed fairy shrimp species would be **less than significant with mitigation** as described in Mitigation Measure BIO-13 (Fairy Shrimp).

Special Status Bats

There is potentially suitable habitat for foraging and roosting special status bats on and immediately adjacent to the site. Pallid bat, Townsend's big-eared bat, and western mastiff bat each have a moderate potential to forage and roost on the site. A habitat assessment for bats was conducted in 2023 and found suitable day, night, and maternity roosting habitat in the abandoned residence and some trees on the site (see Appendix J). Potential roosting sites include dead trees, palm trees, and a vacant residence within the Project impact area. Evidence of bat roosting (guano) was found in the residence. Nighttime emergence surveys for special status bats are planned for 2024. Emergence surveys and installation of exclusion devices were not conducted in 2023 because, by the time Project construction starts, bats could return and occupy other areas on the Project site where they had not been previously found. Optimal results regarding presence/absence of bats are best achieved by conducting bat surveys and installing exclusion devices closer to construction (i.e., structure demolition and tree removal), while still allowing time in the Project schedule to install exclusion devices or conduct bat relocation outside of hibernation or maternity roosting seasons.

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, and maternity roosts, as well as loss of roosting habitat.

Mitigation Measure BIO-7 (Special Status Bats) requires site disturbance to occur outside of the maternity roosting season. If work cannot be scheduled outside of the maternity roosting season, this measure requires a qualified bat specialist to conduct a preconstruction survey and avoidance of maternity roosts. If roosting bats are not detected but may be present (at any time of year),

trees or structures will be brought down in a controlled manner under the supervision of a bat specialist. This measure also installation of replacement bat roosts on the site if any occupied bat roosting habitat is destroyed. Impacts to special status bats would be **less than significant with mitigation** as described in Mitigation Measures BIO-1 (Biological Monitoring and Clearance Surveys), BIO-2 (Workers Environmental Awareness Program), BIO-3 (Flag or Fence Disturbance Areas), BIO-7 (Special Status Bats), BIO-10 (Invasive Plants), BIO-11 (Wildlife Hazards), and BIO-12 (Trash).

Other Listed and Special Status Wildlife Species

No state or federally listed wildlife species were observed during surveys. Two listed species have not been observed but have low to moderate or high potential to occur: white-tailed kite and Stephens' kangaroo rat. The Project site is not within the boundaries of the Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP). The MSHCP covers impacts to Stephens' kangaroo rat because the Project site is located within the MSHCP boundaries but is located outside of the boundaries of the SKR HCP. Stephens' kangaroo rat is a covered species under the MSHCP and considered adequately conserved. Project-related impacts (if any) to Stephens' kangaroo rat would be a **covered impact under the MSHCP** and no mitigation is proposed.

State and federal permits issued for the MSHCP do not allow direct mortality or take of white-tailed kite. No direct mortality or take of adult white-tailed kite is anticipated; there would be **no impact** to adult white-tailed kite, and no mitigation is proposed. White-tailed kite has a low potential to nest on the site. The MSHCP does not provide take authorization for nesting birds and potential impacts and mitigation to nesting birds, including nests, eggs, and dependent juveniles of white-tailed kite are discussed above.

Five special status wildlife species were detected on the site during surveys (orange-throated whiptail, Cooper's hawk, great egret [fly over], wrentit [in adjacent area], and California horned lark) and several others were not detected but have a low to moderate, moderate, moderate to high, or high potential to occur (see Section 4.4). Project-related impacts (if any) to orange-throated whiptail, Cooper's hawk, and California horned lark would be a **covered impact under the MSHCP** and no mitigation is proposed. However, the MSHCP does not provide take authorization for nesting birds (discussed above). Great egret and wrentit are not covered under the MSHCP.

Great egret is a CDFW Special Animal. This species is found in marshes, estuaries, riparian forests, and wetlands and may forage in irrigated pastures. One individual was observed flying

over the site during 2023 surveys. Great egret is not expected to forage on the site and there is no potential for nesting there. Since there is no nesting habitat on the site, Project-related impacts to great egret would be limited to loss of marginal foraging habitat. Although this species is not covered under the MSHCP, the conservation lands that comprise the MSHCP reserve assembly include habitat suitable to support this species on a regional level. Therefore, any potential impact would be addressed through consistency with the MSHCP, as suitable habitat for these species has been conserved on a regional level. Project-related impacts to great egret (if any) would be **less than significant** and no mitigation is proposed.

Wrentit is a USFWS Bird of Conservation Concern. It was detected (by song) in an area adjacent to the site. This species is found in chaparral, oak woodlands, and shrublands. There is no or marginal habitat for this species on the site and it has a low potential to forage or nest there. Adult birds will typically avoid or flee from construction activities and other disturbance and the potential for physical harm would be limited to nests, eggs, and dependent juveniles. Impacts to nesting birds are discussed above.

Of the species that were not observed but have moderate or high potential to occur, coast horned lizard, southern California rufous-crowned sparrow, ferruginous hawk, loggerhead shrike, northwestern San Diego pocket mouse, San Diego black-tailed jackrabbit, and Los Angeles pocket mouse are covered under the MSHCP and considered adequately conserved. Project-related impacts (if any) to these species would be a **covered impact under the MSHCP** and no mitigation is proposed. However, the MSHCP does not provide take authorization for nesting birds (discussed above).

Of the species that were not observed but have moderate or high potential to occur, Crotch bumble bee, Southern California legless lizard, Nuttall's woodpecker, Allen's hummingbird, Lawrence's goldfinch, pallid bat, Dulzura pocket mouse, Townsend's big-eared bat, and mastiff bat are not covered species under the MSHCP. Crotch bumble bee is discussed above.

Southern California legless lizard is a CDFW Species of Special Concern. It has a moderate potential for occurrence on the site, mainly within the coastal sage – chaparral scrub areas. This species is wide-ranging and found generally from south of the Transverse Range to northwestern Baja California, Mexico. It's habitat includes broadleaved upland forest, chaparral, coastal dunes, and coastal scrub. The species is secretive and difficult to detect; however, there are 426 documented occurrences in the CNDDB. Given the species' range and variety of habitats and the marginal quality and limited amount of potentially suitable habitat on the Project site, impacts to this species, if present in the Project's disturbance area, would not be expected to substantially

affect regional populations. Although this species is not covered under the MSHCP, the conservation lands that comprise the MSHCP reserve assembly include habitat suitable to support this species on a regional level. Therefore, any potential impact would be addressed through consistency with the MSHCP, as suitable habitat for these species has been conserved on a regional level. Project-related impacts to southern California legless lizard would be **less than significant** and no mitigation is proposed.

Nuttall's woodpecker is a USFWS Bird of Conservation Concern. It has a moderate to high potential to occur on the site (foraging and nesting). Adult birds will typically avoid or flee from construction activities and other disturbance and the potential for physical harm would be limited to nests, eggs, and dependent juveniles. Impacts to nesting birds are discussed above.

Allen's hummingbird is a USFWS Bird of Conservation Concern. It has a low to moderate potential to forage on the site, but the site is outside the species' breeding range. Adult birds will typically flee from disturbance and injury/mortality would be limited to nests, eggs, and chicks. Since this species does not nest in the area, there would be no potential for injury/mortality. Project-related impacts to Allen's hummingbird would be **less than significant** and no mitigation is proposed.

Lawrence's goldfinch is a USFWS Bird of Conservation Concern and CDFW Special Animal. It has a low to moderate potential to occur on the site (foraging and nesting). Adult birds will typically avoid or flee from construction activities and other disturbance and the potential for physical harm would be limited to nests, eggs, and dependent juveniles. Impacts to nesting birds are discussed above.

Dulzura pocket mouse is a CDFW Species of Special Concern. This species is found in chaparral, coastal scrub, and valley and foothill grassland habitats, and is particularly attracted to chaparral-grassland edges. The CNDDB has 54 documented occurrences of Dulzura pocket mouse primarily in San Diego County with a few occurrences in western Riverside, Orange, and Ventura Counties. It has a moderate potential to occur on the site. Given the species' range and the marginal quality and limited amount of potentially suitable habitat on the Project site, impacts to this species, if present in the Project's disturbance area, would not be expected to substantially affect regional populations. Although this species is not covered under the MSHCP, the conservation lands that comprise the MSHCP reserve assembly include habitat suitable to support this species on a regional level. Therefore, any potential impact would be addressed through consistency with the MSHCP, as suitable habitat for these species has been conserved

on a regional level. Project-related impacts to Dulzura pocket mouse would be **less than significant** and no mitigation is proposed.

Special status bats (pallid bat, Townsend's big-eared bat, and western mastiff bat) are addressed above.

5.2) Vegetation Communities

The entire site will be impacted by the Project and all impacts will be permanent.

Implementation of the Project will result in the permanent loss of ±4.13 acres of coastal sage – chaparral scrub and ±100.18 acres of non-native grasslands and wildflower fields (Table 8). No riparian or other sensitive vegetation communities are present and none will be impacted.

A City of Calimesa road project will impact a small portion of the site, totaling 1.38 acres, prior to implementation of the Project. This area is included in the acreage totals for the Project.

Table 8. Vegetation Communities Impacted

Vegetation Community	Area Impacted (acres)					
	Project Site			City Road Project Overlap Area		
	Onsite	Offsite	Total	Onsite	Offsite	Total
Non-native Grasslands and Fields	100.18	0	100.18	0.70	0.21	0.91
Coastal Sage – Chaparral Scrub	3.91	0.22	4.13	0	0	0
Disturbed/Developed/Ornamental	5.43	7.91	13.34	0	0.47	0.47
Total	**109.52**	**8.13**	**117.65**	**0.70**	**0.68**	**1.38**

Non-native grasslands and disturbed/developed/ornamental areas are not native vegetation communities and the loss of these areas would have **no impact** on the extent of native vegetation communities in the region. No mitigation is proposed.

Native fiddleneck fields are mixed with the non-native grasslands. Fiddleneck fields are found throughout western Riverside County as well as other coastal southern and central California counties (Sawyer et al. 2009). The permanent loss of fiddleneck fields on the Project site would not have a substantial effect on the extent of this vegetation community in the region, the impact would be **less than significant,** and no mitigation is proposed.

The types of coastal sage – chaparral scrub present (California sagebrush – California buckwheat scrub and scrub oak chaparral) are not sensitive vegetation communities and are both ranked by

CDFW as S4 (apparently secure, uncommon but not rare). These vegetation communities are found throughout western Riverside County as well as other coastal southern and central California counties (Sawyer et al. 2009). The permanent loss of coastal sage – chaparral scrub on the Project site would not have a substantial effect on the extent of this vegetation community in the region, the impact would be **less than significant,** and no mitigation is proposed.

5.3) Waters and Wetlands

A jurisdictional delineation found three (3) ephemeral drainages on the site plus a roadside ditch. A total of 0.86 acre of CDFW streambed/State waters is present, of which 0.73 acre is also MSHCP riverine resources subject to Section 6.1.2 of the MSHCP. No state wetlands/MSHCP riparian habitat is present and no federal waters or wetlands are present. The roadside ditch is a manmade feature and therefore not subject to MSHCP Section 6.1.2.

The delineation assumes that all of the CDFW streambed/State waters and MSHCP riverine resources on the site will be impacted. Mitigation Measure BIO-8 (Waters and Wetlands) requires regulatory permitting and compensation for impacts of 0.86 acre at a ratio of no less than 2:1. Project-related impacts to CDFW streambed/State waters and MSHCP riverine resources on the site would be **less than significant with mitigation** as described in Mitigation Measure BIO-8 (Waters and Wetlands).

5.4) Wildlife Corridors

The Project site provides local movement opportunities for species that live within the site and immediately adjacent undeveloped lands. There is limited native habitat on the site and terrestrial connectivity to the west is limited by a freeway and other existing development. The Project site is not within the Criteria Cells that make up MSHCP Proposed Constrained Linkage 23.

Implementation of the proposed Project would add further development in the area. However, it is not within the area (Proposed Constrained Linkage 23) identified in the MSHCP as a linkage between habitat blocks. Project-related impacts to wildlife corridors would therefore be **less than significant** and no mitigation is proposed.

5.5) Local Ordinances

<u>Trees</u>

There are 54 scrub oaks on the site and 29 non-oak trees with a DBH of 24 inches or greater. These are regulated under Chapter 18.80 and 18.70.120 of the City of Calimesa Zoning Code,

respectively (see Section 2.13). Review of the conceptual site plan (Appendix I) indicates that all of these scrub oaks and non-oak trees will be impacted.

Mitigation Measure 9A (Oaks) requires mitigation for impacted oaks in accordance with a City-approved Tree Preservation and Replacement Plan (Tree Plan). Impacted oaks shall be replaced in-kind on no less than a 1:1 basis with 15-gallon container stock (or as described in the City-approved Landscape Plan). This measure also requires replacement oaks to be monitored for five (5) years with 100 percent survivorship. Project-related impacts to oaks on the site would be **less than significant with mitigation** as described in Mitigation Measure BIO-9A (Oaks).

Mitigation Measure 9B (Non-oak Regulated Trees) requires mitigation for impacted non-oaks trees with a DBH of 24 inches or more in accordance with the City-approved Tree Plan. These trees shall be replaced with the same or similar types of trees on no less than a 1:1 basis with 15-gallon container stock (or as described in the City-approved Landscape Plan). Invasive tree species or species listed on MSHCP Table 6-2 shall not be planted. This measure also requires replacement trees to be monitored for five (5) years with 100 percent survivorship. Project-related impacts to non-oak regulated trees on the site would be **less than significant with mitigation** as described in Mitigation Measure BIO-9B (Non-oak Regulated Trees).

If tree trimming, encroachment, or removal will occur during the nesting season (defined in the MSHCP as February 1 to August 31 but may be extended earlier or later based on the recommendation of the Project biologist), preconstruction nesting bird surveys will be required as detailed in Mitigation BIO-5 (Nesting Birds). Impacts to nesting birds as a result of tree trimming, encroachment, or removal would be **less than significant with mitigation** as described in Mitigation Measure BIO-5 (Nesting Birds).

5.6) Habitat Conservation Plan

The Project is within the covered area for the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The site is located within the area covered by the MSHCP but is not within Criteria Cells. Surveys required by the MSHCP are a habitat assessment to address riparian/riverine and vernal pool habitats and associated species, narrow endemic plants (Marvin's [Yucaipa] onion and many-stemmed dudleya), and burrowing owl. Based on the analysis below, the Project would not conflict with the Western Riverside County MSHCP; and impacts would be **less than significant with mitigation** as discussed below.

<u>MSHCP Riparian/Riverine (MSHCP Section 6.1.2)</u>

A jurisdictional delineation was conducted in 2022 to assess MSHCP riparian/riverine on the site (see Section 4.5). The jurisdictional delineation found 0.73 acre of MSHCP riverine resources and no MSHCP riparian habitat on the site. The delineation assumes that all MSHCP riverine resources on the site will be impacted by the Project. Impacts to MSHCP riverine resources require preparation of a Determination of Biologically Equivalent or Superior Preservation (DBESP). A DBESP has been prepared for separate submittal.

Mitigation Measure BIO-8 (Waters and Wetlands) requires mitigation for impacts of 0.73 acre at no less than a 2:1 ratio (1.46 acres) to provide no net loss of riverine resources. The direct effects to riverine resources would be **less than significant with mitigation** as described in Mitigation Measure BIO-8 (Waters and Wetlands) and there would be no conflict with the MSHCP.

Under MSHCP Section 6.1.4, when approving landscape plans for development proposed adjacent to the MSHCP Conservation Area, Permittees shall consider the invasive, non-native plant species listed in MSHCP Table 6-2 and shall require revisions to landscape plans (subject to the limitations of their jurisdiction) to avoid the use of invasive species. While the Project site is 0.6 mile from downstream MSHCP Conservation Lands, there is likely a hydrologic connection with an opportunity for downstream dispersal.

Mitigation Measure BIO-10 (Invasive Plants) requires actions to avoid and minimize the introduction or spread of invasive plants. The potential indirect effects from invasive species transported onto the site or planted as part of Project landscaping would be **less than significant with mitigation** as described in Mitigation Measure BIO-10 (Invasive Plants) and there would be no conflict with the MSHCP.

Vernal Pools (MSHCP Section 6.1.2)

An assessment for vernal pool habitat was conducted in 2022 (see Section 3.2). Pools or depressions characteristic of naturally occurring vernal habitat were not observed and no vernal pool plant species were present. No MSHCP species listed for protection associated with vernal pools were observed. There would therefore be **no impact** to vernal pool habitat or associated species (other than fairy shrimp, addressed below), no conflict with the MSHCP, and no mitigation is proposed.

Riparian Birds (MSHCP Section 6.1.2)

There is no riparian habitat on or adjacent to the site and no suitable habitat for least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo. These species are considered

absent from the site, there would be **no impact** to these species, no conflict with the MSHCP, and no mitigation is proposed.

Fairy Shrimp (MSHCP Section 6.1.2)

There is no naturally occurring vernal pool habitat on the site; however, ponded water that could provide potential fairy shrimp habitat was observed. Fairy shrimp surveys were initiated in Fall 2023 and the dry season survey found only the common versatile fairy shrimp. Additional details regarding the dry season survey results can be found in Appendix K. Wet season surveys are in progress and have also found only the common versatile fairy shrimp through February 2024. Wet season surveys will be completed in early 2024. If listed fairy shrimp species are present, additional mitigation is required as described in Mitigation Measure BIO-13 (Fairy Shrimp). Impacts to listed fairy shrimp species would be **less than significant with mitigation** as described in Mitigation Measure BIO-13 (Fairy Shrimp) and there would be no conflict with the MSHCP.

Narrow Endemic Plants (MSHCP Section 6.1.3)

Narrow endemic plants Marvin's onion and many-stemmed dudleya were not observed during focused surveys, suitable habitat for these species is lacking, and these species are considered absent from the site. There would be **no impact** to these species, no conflict with the MSHCP, and no mitigation is proposed.

Burrowing Owl (MSHCP Section 6.3.2)

A habitat assessment for burrowing owl was conducted in 2020 and 2022 and a protocol breeding season survey was conducted in 2022 (see Section 3.2.1). The survey found that potentially suitable habitat for burrowing owl is present but no owls or owl sign were observed. Under the MSHCP, a preconstruction survey is required within 30 days prior to the start of Project activities and additional mitigation is required if burrowing owl is present as described in Mitigation Measure BIO-4 (Burrowing Owl). Impacts to burrowing owl would be **less than significant with mitigation** as described in Mitigation Measure BIO-4 (Burrowing Owl) and there would be no conflict with the MSHCP.

6.0) MITIGATION MEASURES

The following measures are proposed to avoid, minimize, and compensate for Project-related impacts on biological resources. Measures apply to the entire Project site, including offsite impact areas.

BIO-1. Biological Monitoring and Clearance Surveys

Prior to issuance of the grading permit, the City shall verify that the grading plan notes include the following requirements:

A qualified biologist with expertise on the sensitive plant and wildlife species potentially present on the site shall be hired by the applicant prior to issuance of the grading permit, with proof of the contract provided to the City of Calimesa Planning Department. The Project Biologist shall be responsible to communicate with and provide guidance to biological monitors regarding biological resources issues, communicate with wildlife agencies as needed, and ensure that any required reports are submitted.

One or more biological monitors shall be assigned to the Project to monitor work activities during the initial vegetation clearing and grading phase of construction (including any ground or vegetation disturbance, demolition, fence installation, grading of existing roads, material delivery, etc.). Monitors shall be responsible for ensuring that impacts to listed and special status species, native vegetation, sensitive habitat, jurisdictional waters, and unique biological resources are avoided and minimized to the extent possible. Monitors shall also be responsible to ensure that work activities are conducted in compliance with Project mitigation measures, permit conditions, and applicable regulations.

Biological monitors shall have the authority to temporarily halt construction activities to avoid unauthorized impacts to biological resources. Halted activities shall not resume until the issue has been appropriately addressed and the biological monitor clears construction to continue.

Biological monitors shall attend daily tailgate/tailboard meetings and inform construction crews of any environmentally sensitive areas (ESAs), avoidance buffers, or other resource issues or restrictions that affect the work sites for that day, and shall communicate with construction crews as needed to provide guidance to maintain compliance with mitigation measures and permit conditions. The Proponent shall ensure that an adequate number of monitors are assigned to effectively monitor work activities.

Biological monitors are required to be familiar with the biological resources present or potentially present, ESAs, nest buffers, and any other biological resource issues at the site(s) they are monitoring. Monitors shall exhibit diligence in their monitoring duties, comply with Project mitigation measures, permit conditions, and applicable regulations, and refrain from any conduct that compromises their ability to effectively carry out their monitoring duties.

The biological monitor(s) shall conduct daily clearance surveys for listed or special status plant and wildlife species and other sensitive biological resources within work sites and areas within no less than 100 feet of work sites to ensure that required measures are being implemented to avoid incidental disturbance of habitat and species of concern. Work activities shall not begin until the daily clearance survey is completed. The monitor shall inspect all debris piles, pipes, burrows, vegetation, and other potential refugia for listed and special status wildlife species prior to initiation of clearing, grubbing, grading, excavating, or any other project activity that may injure listed or special status wildlife.

If any listed or special status plants or wildlife are found, the monitor shall take appropriate action as defined in the mitigation measures, permit conditions, and regulations. The biological monitor may move wildlife or humanely encourage it to move out of out of harm's way, if safe and feasible and permitted to do so. Wildlife carcasses will be handled as needed only by a biological monitor.

Federal, state, and local agencies shall be consulted as needed and appropriate. If needed, an avoidance buffer shall be established to protect the resource until this action has been completed.

Monitoring and survey activities shall be documented on a daily basis. All monitoring reports and communications shall be retained in Project files to allow review by the City of Calimesa Planning Department, CDFW, and USFWS, if requested.

BIO-2. Workers Environmental Awareness Program

Prior to issuance of the grading permit, the City shall verify that the grading plan notes include the following requirements:

All persons employed or otherwise working on the Project site during the vegetation clearing and grading phase of construction shall attend a Workers Environmental Awareness Program (WEAP) training. All workers must attend WEAP training prior to performing any work on-site.

The WEAP shall consist of a presentation (either provided in person by the biological monitor or a recorded training session) that includes a discussion of the biology of the habitats and species

that may be present at the site. The WEAP shall also include information about the special status plant and wildlife species that may be present, legal protections for those species, penalties for violations, and mitigation measures. The WEAP shall include but not be limited to burrowing owl, nesting birds, and other special status species.

The WEAP shall also include information on weed control practices, appropriate trash disposal, fire prevention and procedures for smoking, spill prevention and procedures, jurisdictional waters and Stormwater Pollution Prevention Plan (SWPPP), best management practices (BMPs), biological monitors and compliance responsibilities, and other issues such as pets, firearms, etc.

Attendance at training will be documented and construction workers provided with a hardhat sticker. Supporting materials will be provided to all personnel during the training program, including contact information for the biological monitor and/or other compliance personnel. Informal or formal refresher training shall be conducted as needed to maintain compliance.

BIO-3. Flag or Fence Disturbance Areas

Prior to issuance of the grading permit, the City shall verify that the grading plan notes include the following requirements:

In areas where habitat or avoidance areas are present adjacent to Project disturbance areas, the disturbance area boundaries shall be clearly flagged or fenced prior to vegetation clearing, grading, or other construction activities to prevent incursion into habitat outside of the Project disturbance area. No construction activities, equipment, materials, debris, or spoils shall be allowed outside of the Project boundaries. Personnel shall be instructed to restrict activities to disturbance areas. Flagging/fencing shall remain in place and shall be maintained until replaced by permanent fencing (if applicable) or until Project construction in the area is complete.

BIO-4. Burrowing Owl

Prior to issuance of the grading permit, the City shall verify that the grading plan notes include the following requirements:

Project construction shall be scheduled outside of the burrowing owl nesting season, if feasible. The nesting season is defined in the MSHCP as February 1 to August 31 but may be extended earlier or later based on the recommendation of the Project biologist.

A preconstruction clearance survey for burrowing owl shall be conducted by a qualified biologist and the written results submitted to the City of Calimesa Planning Department within no more

than 30 calendar days prior to any site disturbance, including any ground or vegetation disturbance, vegetation clearing/grubbing, grading/excavation, fence installation, demolition, material delivery, etc. This survey shall be required both within and outside of the nesting season and follow the latest CDFW protocol (CDFG 2012 or more recent guidance if available). The written results of the burrowing owl pre-construction survey(s) shall be submitted to the City of Calimesa Planning Department prior to any site disturbance.

The survey shall be conducted as close to the actual initiation of site disturbance as possible and shall include all areas of the Project site that will be disturbed within 30 calendar days plus a buffer of 500 feet. The survey is valid for 30 calendar days. If work does not commence within the 30 days, the survey shall be repeated. If work starts and is suspended for 30 or more calendar days, the survey shall be repeated.

Due to the size of the Project, the survey shall be repeated as needed to ensure that all construction areas have a clearance survey within 30 days prior to any site disturbance. The biological monitor shall also inspect for burrowing owls, active burrows, and owl sign during daily clearance sweeps of work sites and adjacent areas.

If burrowing owls are found on the site during the pre-construction survey, or any time during construction, the Project biologist shall consult with the City of Calimesa Planning Department and CDFW to develop and implement a mitigation plan. Mitigation shall be based on the following goals and requirements included in the MSHCP:

1. If the site contains or is part of an area supporting less than 35 acres of suitable habitat or the survey reveals that the site and the surrounding area supports fewer than three (3) pairs of burrowing owls, the onsite burrowing owls will be passively or actively relocated following accepted protocols only through coordination with CDFW.

    a. Occupied nests shall be avoided during the nesting season (February 1 to August 31) and a buffer of 300 to 500 feet shall be employed, depending on the level of disturbance surrounding the burrow. Other exclusion buffer requirements shall adhere to the Staff Report on Burrowing Owl Mitigation (CDFG 2012). Buffers may be able to be reduced, but only if done so in coordination with CDFW.

    b. Burrow exclusion shall be utilized outside of the nesting season by installing a one-way door in burrow openings. The burrow shall be closed following verification that burrows are vacant (through site monitoring and scoping).

c. Prior to implementation of exclusion and/or relocation, a Burrowing Owl Protection and Relocation Plan shall be prepared for review and approval by CDFW. This plan shall include, but not be limited to, the following:

- Project Overview
- Species Biology
- Summary of Burrowing Owl Surveys and Results
- Relocation Methods, including location of adjacent suitable habitat and replacement (natural) burrows, conservation and management of relocation area, enhancement of replacement burrows and/or construction of artificial burrows, ratio of replacement burrows to removed burrows, timing of relocation, burrow exclusion, and burrow inspection and excavation of removed burrows
- Monitoring and Reporting, including but not limited to, relocation efforts, surveys, cleaning and maintenance and/or replacement of artificial burrows, duration of monitoring, and reporting requirements

2. If the site (including adjacent areas) supports three (3) or more pairs of burrowing owls, supports greater than 35 acres of suitable habitat, and is noncontiguous with MSHCP Conservation Area lands, at least 90 percent of the area with long-term conservation value and burrowing owl pairs shall be conserved onsite.

BIO-5. Nesting Birds

Prior to issuance of the grading permit, the City shall verify that the grading plan notes include the following requirements:

This measure shall apply to all nesting birds protected under the federal Migratory Bird Treaty Act and California Fish and Game Code. Additional requirements for burrowing owl are addressed in Mitigation Measure BIO-4 (Burrowing Owl).

Site disturbance (removal or disturbance of any trees, shrubs, or any other potential nesting bird habitat, vegetation and/or ground disturbance, tree trimming/encroachment/removal, fence installation, demolition, etc.) shall be scheduled outside of the avian nesting season. The nesting season is defined in the MSHCP as February 1 through August 31 but can vary slightly from year

to year based upon seasonal weather conditions and may be extended earlier or later based on the recommendation of the Project biologist.

If Project-related disturbance to any potential nesting bird habitat cannot be avoided during the nesting season, a preconstruction nesting bird survey shall be conducted by a qualified biologist (with ornithological experience, hired by the applicant, and approved by the City of Calimesa Planning Department) within three (3) days prior to the start of any ground or vegetation disturbing activities, demolition, fence installation, etc. to ensure that no nesting birds will be disturbed during construction. The written results of the nesting bird survey shall be submitted to the City of Calimesa Planning Department prior to any site disturbance.

The survey shall include the Project site, offsite impact areas, and a buffer of 500 feet. Due to the size of the Project, the survey shall be repeated as needed to ensure that all construction areas have a nesting bird survey within three (3) days prior to any site disturbance.

The biological monitor shall also inspect for nesting birds during daily clearance surveys of work sites and areas within 100 feet of work sites. The daily clearance surveys for nesting birds shall be conducted during the monitoring period (see Mitigation Measure BIO-1: Biological Monitoring and Clearance Surveys) and both within and outside of the defined nesting season (i.e., January 1 to December 31).

If active nests are present, avoidance of nest sites is required, and exclusion/avoidance buffers of 300 to 500 feet (or as determined by a qualified biologist) shall be established and maintained until a qualified biologist or biological monitor has determined that the juvenile birds have fledged and are no longer dependent on the nest or the nest has otherwise become inactive. An active nest is defined as a nest with eggs, chicks, or dependent juveniles, or a nest actively being constructed or utilized for reproduction.

The size of the exclusion/avoidance buffer shall be determined by the biologist based on the nature of Project activities, the birds' tolerance to disturbance (if known), conservation status of the affected species, and any applicable agency recommendations or requirements. Exclusion/avoidance buffers may be able to be reduced as determined by the qualified biologist; however, if any buffer reduction involves a State listed or special status species, coordination with CDFW shall occur prior to any buffer reduction.

The boundary of the buffer shall be clearly flagged or marked, and construction crews informed of the restrictions by the biological monitor.

BIO-6. Crotch Bumble Bee

Prior to issuance of the grading permit, the City shall verify that the grading plan notes include the following requirements:

Results of the focused Crotch bumble bee survey conducted in 2023 shall be provided to CDFW prior to the start of ground disturbance.

If initial vegetation or ground disturbance or tree trimming/encroachment/removal occurs during the bee's activity period (February through October), a qualified biologist shall conduct a pre-construction survey of disturbance areas for Crotch bumble bee colonies with seven (7) days prior to the start of work. If a colony is present, a 100-foot avoidance buffer shall be established. Survey results shall be provided to the City of Calimesa Planning Department and CDFW.

If a survey finds that a Crotch bumble bee colony is present on the site, the Project biologist shall consult with CDFW. If the Project will impact Crotch bumble bee, an incidental take permit from CDFW shall be obtained and/or other mitigation shall be implemented as required by CDFW.

BIO-7. Special Status Bats

Prior to issuance of the grading permit, the City shall verify that the grading plan notes include the following requirements:

Project activities shall avoid all habitat for hibernating bats and maternity roosts plus a surrounding 100-foot radius buffer until surveys determine if habitat is occupied. Given that bat exclusion devices on structures are not always 100% effective and that any suitable trees cannot be removed until all approvals are obtained, to ensure the most optimal results regarding presence/absence, focused bat surveys shall be conducted closer to construction but during the April to October season when bats are active and can be detected. Nighttime acoustic and emergence survey(s) at structures or trees shall be conducted by qualified bat biologists to determine if roosting bats are present. Surveys shall be conducted only during weather conditions favorable to detection of emerging bats. Each nighttime survey shall begin approximately 0.5 hour before sunset and continue until 1.5 hours after sunset. All survey personnel shall have experience with nighttime bat surveys and shall use night vision goggles augmented with infrared lights to observe emerging bats. Bat vocalizations shall be captured using an ultrasound detector, with calls recorded for later analysis and species identification. The number and species of any bats detected on the site along with all locations of occupied roosts shall be documented.

If the survey finds that roosting bats are absent, then exclusionary devices shall be installed as recommended by the bat biologist and pre-construction surveys shall be conducted as described below to confirm absence. If bats are not detected, but the bat specialist determines that roosting bats may be present at any time of year, then trees or structures shall be brought down in a controlled manner as described below.

If the survey find that roosting bats are present, then CDFW and the City of Calimesa Planning Department shall be notified, exclusionary devices shall be installed as recommended by the bat biologist, maternity roosts shall be left in place until the end of the maternity season, hibernating colonies shall be left in place until a qualified biologist determines that the bats are no longer hibernating, pre-construction surveys shall be conducted as described below to confirm absence, a bat specialist shall monitor and document demolition activities as described below, artificial bat roosts shall be constructed and maintained at a suitable undisturbed area of the site, and these artificial roosts shall be monitored as described below.

Bats shall be allowed to escape prior to demolition of structures and rock/debris piles. This may be accomplished by placing one-way exclusionary devices into areas where bats are entering a structure or rock/debris pile that allow bats to exit but not re-enter.

Demolition or disturbance to suitable bat roosting habitat shall be scheduled between October 1 and February 28, outside of the maternity roosting season and only after absence of bats has been confirmed. If trees must be encroached during the maternity season (March 1 to September 30), or structures or rock/debris piles must be removed at any time of the year, then a qualified bat specialist shall conduct a pre-construction survey to identify those trees, structures, or rock/debris piles proposed for disturbance that could provide hibernacula or nursery colony roosting habitat for bats. Structures includes buildings, culverts, and other man-made objects that could provide bat roosting habitat.

Each tree, structure, or rock/debris pile 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 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, then 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 or disturbed 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.

Maternity season lasts from March 1 to September 30. Trees, structures, or rock/debris piles determined to be maternity roosts shall be left in place until the end of the maternity season. A tree, structure, or rock/debris pile 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 and rock/debris pile disturbance or structure demolition activities. If special status bats are detected during pre-construction surveys, all construction-related activity within 300 feet of the bat roost shall be halted immediately and the City of Calimesa Planning Department and CDFW shall be notified. Work may only resume subsequent to CDFW and City of Calimesa Planning Department approval.

If confirmed occupied or formerly occupied bat roosting habitat is destroyed, then artificial bat roosts of comparable size and quality shall be constructed and maintained at a suitable undisturbed area of the site. The design and location of the artificial bat roosts shall be determined by the bat specialist and this information shall be provided to CDFW and the City of Calimesa Planning Department. Artificial bat roosts shall be installed prior to the initiation of Project-related activities to allow sufficient time for bats to relocate and become established.

In exceptional circumstances, such as when roosts cannot be avoided and bats cannot be evicted by non-invasive means, it may be necessary to capture and transfer the bats to appropriate natural or artificial bat roosting habitat in the surrounding area. Bats raising young or hibernating shall not be captured and relocated. Capture and relocation shall be performed by the bat specialist in coordination with CDFW and shall be subject to approval by the City of Calimesa Planning Department and CDFW. A Bat Relocation Plan shall be prepared if required by CDFW. Implementation of relocation can result in bat mortality. If this occurs, additional mitigation shall be determined through coordination with CDFW.

A monitoring plan shall be prepared for the replacement roosts, which shall include success criteria for the use of the replacement roosts by the displaced species, as well as provisions to

prevent harassment, predation, and disease of relocated bats. Monitoring shall be conducted annually for no less than five (5) years or until success criteria are met. Annual monitoring shall include daytime inspections of the replacement roosts for damage, vandalism, etc. and nighttime acoustic and emergence surveys to document number and species of bats using the replacement roosts. The monitoring period shall be initiated within one (1) year following the installation of the replacement roosting habitat. All monitoring visits shall be performed by a qualified bat biologist.

Each nighttime monitoring survey shall begin approximately 0.5 hour before sunset and continue until 1.5 hours after sunset. All survey personnel shall have experience with nighttime bat surveys and shall use night vision goggles augmented with infrared lights to observe emerging bats. Bat vocalizations shall be captured using an ultrasound detector, with calls recorded for later analysis and species identification. The number and species of any bats detected on the site and emerging from the replacement roosts shall be documented.

Success criteria shall be met when the replacement roosts are occupied by one or more of the bat species displaced by Project activities. If there is no evidence of occupation by bats during the first annual survey, potential causes shall be identified and adaptive management strategies shall be developed by a qualified bat biologist and subsequently implemented. These adaptive management strategies may include, but are not limited to, reducing light trespass in the vicinity of the roost structures, modifying the exteriors of the roost structures to improve thermal characteristics, and using acoustic lures. If the roosting habitat structures have not been occupied by the fifth year of monitoring, additional annual monitoring shall be required until all feasible adaptive management strategies have been implemented for at least 2 years or until alternative mitigation acceptable to the City of Calimesa Planning Department and CDFW has been implemented.

Annual reports detailing the success of roost replacement and bat relocation shall be prepared and submitted to the City of Calimesa Planning Department and CDFW for five (5) years following relocation or until success criteria are met, whichever period is longer.

BIO-8. Waters and Wetlands

Prior to issuance of the grading permit, the City shall verify that the grading plan notes include the following requirements:

The Project proponent shall obtain all applicable and necessary regulatory permits from the RWQCB and CDFW before impacting any state jurisdictional waters. The Project proponent shall implement all mitigation measures and conditions contained within these permits, including

compensation for impacts to CDFW streambeds/State waters at no less than a 2:1 ratio through purchase of mitigation credits. No construction on the site shall occur until mitigation for CDFW/State jurisdictional areas has been approved by RWQCB and CDFW such that impacts are reduced to less than significant.

The applicant shall provide proof of purchase to the City of Calimesa Planning Department of mitigation credits within an approved mitigation bank at no less than a 2:1 ratio prior to issuance of a grading permit or commencing ground-disturbing activities that would impact waters of the state and/or MSHCP riverine resources. Mitigation purchased shall consist of no less than 1:1 re-establishment credits plus no less than 1:1 rehabilitation credits. Credits purchased to mitigate impacts to state waters are inclusive of the mitigation required to address MSHCP riverine impacts.

BIO-9A. Oaks

Prior to issuance of the grading permit, the City shall verify that the grading plan notes include the following requirements:

If implementation of the Project will remove or encroach upon the protected zone of oak species or stands of oaks, including scrub oaks, regulated by the City of Calimesa, impacted oaks shall be mitigated in accordance with a City-approved Tree Preservation and Replacement Plan (Tree Plan). The protected zone is defined as five [5] feet from the dripline or 15 feet from the trunk, whichever is greater. The Tree Plan shall be prepared and approved prior to issuance of the grading permit. The Tree Plan shall include, but not be limited to, the following:

1. Letter of justification explaining the reasons for the removal.

2. Site plan and/or elevations showing the location of all trees on the parcel or lot.

3. Oak tree assessment prepared by an arborist, if determined to be necessary by the Community Development Department.

4. Methods proposed to mitigate the loss of an oak tree, including the planting of replacement oak trees or acorns, or other adequate mitigation. Mitigation other than replacement shall include the payment of replacement costs to replace each tree that is removed, as determined by the oak tree assessment.

The Tree Plan shall demonstrate the following:

1. The proposed location and configuration of lots, buildings, and streets have been designed to minimize to the greatest extent feasible the removal of healthy trees, including the protection of singular significant specimens (i.e., heritage oak trees) and clusters of oak woodlands.

2. The proposed trees to be retained are located on common open space lots that will be preserved indefinitely.

3. In considering site design, more than 90 percent of healthy trees will be retained.

a) If a lesser percentage of trees is proposed to be retained, the plan shall identify additional measures to offset the loss of more trees, including the payment of fees equivalent to the replacement cost of the tree(s).

b) Not less than 75 percent of trees shall be retained.

4. In considering site design, any impacted grove will be retained.

5. Grading operations (e.g., location of cut and fill, construction operations) will be designed and conducted to minimize any negative effects on the trees to be retained.

6. An effective combination of replacement trees, acorns, and/or appropriate mitigation will be planted or provided.

a) Trees to be removed shall be replaced at a minimum replacement ratio of one tree for each tree removed or nine acorns planted for each tree removed.

b) Mitigation other than replacement shall include the payment of replacement costs to replace each tree that is removed as determined by the oak tree assessment.

7. The trees to be retained or replacement trees will be located in an area that will be maintained in such a manner as to ensure their long-term health (e.g., not be overwatered or receive too many nutrients).

8. A program has been included to monitor and report on the survival rate of replaced trees to ensure the long-term success of a tree preservation and replacement plan.

Impacted oaks shall be replaced in-kind on no less than a 1:1 basis with 15-gallon container stock (or as described in the City-approved Landscape Plan). The replacement trees shall be planted in landscaped areas on the Project site and/or another appropriate mitigation area. Container stock shall be locally sourced (within 25 miles of project site), if feasible. Planting and maintenance shall be conducted by a qualified landscape contractor.

After installation, a restoration specialist shall inspect the plantings, establish marked photo locations, and prepare a baseline report documenting the location and species of each of the mitigation oaks. The oaks shall be monitored annually by the restoration specialist for five (5) years. Monitoring shall include a visual health assessment of the oaks, photos from the photo locations, and a count of surviving mitigation oaks. The restoration specialist shall prepare a progress report memo after each annual monitoring visit for submittal to the City of Calimesa Planning Department. The annual reports shall evaluate the site according to the performance standard and recommend remedial measures as needed. The performance standard is no less than 100 percent survivorship of mitigation oaks at the end of the five-year period.

BIO-9B. Non-oak Regulated Trees

Prior to issuance of the grading permit, the City shall verify that the grading plan notes include the following requirements:

If implementation of the Project will remove or encroach upon the protected zone of mature non-oak trees regulated by the City of Calimesa, a Tree Preservation and Replacement Plan (Tree Plan) shall be prepared and approved by the City of Calimesa Planning Department prior to issuance of the grading permit.

All existing trees on-site shall be surveyed and plotted. Impacted non-oak trees with a DBH (Diameter Breast Height) of 24 inches or more shall be replaced with the same or similar types of trees at no less than a 1:1 ratio with 15-gallon container stock (or as described in the City-approved Landscape Plan). Invasive or potentially invasive tree species or species listed on MSHCP Table 6-2 shall not be planted, including but not limited to African sumac (*Searsia lancea*), black locust (*Robinia pseudoacacia*), Brazilian pepper (*Schinus terebinthifolius*), Cootamundra wattle (*Acacia baileyana*), olive (*Olea europaea*), retama (Mexican) palo verde (*Parkinsonia aculeata*), and tree of heaven (*Ailanthus altissima*).

Replacement trees shall be planted on the Project site in accordance with the Landscape Plan. Planting and maintenance shall be conducted by a qualified landscape contractor.

After installation, a restoration specialist shall inspect the plantings, establish marked photo locations, and prepare a baseline report documenting the location and species of each of the mitigation trees. The trees shall be monitored annually by the restoration specialist for five (5) years. Monitoring shall include a visual health assessment of the trees, photos from the photo locations, and a count of surviving mitigation trees. The restoration specialist shall prepare a progress report memo after each annual monitoring visit for submittal to the City of Calimesa Planning Department. The annual reports shall evaluate the site according to the performance standard and recommend remedial measures as needed. The performance standard is no less than 100 percent survivorship of mitigation trees at the end of the five-year period.

Every effort shall be made to prevent encroachment of structures, grading, or trenching within the dripline or 25 feet of the trunk of any retained trees, whichever is greater. If encroachment within the dripline is unavoidable, no more than one-third of the root area shall be disturbed, graded, or covered with impervious materials. The root area is considered to extend beyond the dripline a distance equal to one-half the radius.

Building, grading, or improvements shall not occur within 15 feet of the trunk of any retained tree. Retaining walls shall be constructed where necessary to preserve the natural grade at least one-half the distance between the trunk and dripline. Walls shall be designed with a post or caisson footing rather than a continuous footing to minimize root damage.

Runoff channeled near trees shall not substantially change normal soil moisture characteristics on a seasonal basis. Runoff shall not be directed toward the base of trees so that the base of the trees remains in wet soil for an extended period. Where natural topography has been altered, drainage away from trunks shall be provided where necessary to ensure that water will not stand at the crown. Sedimentation and siltation in the drainage ways shall be controlled where necessary to avoid filling around the base of the trees.

Land uses that would cause excessive soil compaction within the dripline of trees shall be avoided. If the areas are planned for recreation, trails shall be provided so as to restrict compaction to a small area. Heavy use under trees shall be avoided unless measures to minimize compaction are undertaken.

BIO-10. Invasive Plants

Prior to issuance of the grading permit, the City shall verify that the grading plan notes include the following requirements:

To prevent the introduction and/or spread of invasive plants, all heavy equipment used onsite shall be washed at a commercial truck wash or similar facility, particularly the wheels, undercarriage, outriggers, and other parts that come in contact with soil and vegetation, prior to bringing it onto the Project site. Care shall be taken to remove soil and debris that may contain seeds or propagules of invasive plants.

Any straw, mulch, gravel, or similar products brought onto the Project site shall be certified weed-free. Green waste that may contain weed seeds/propagules shall be promptly removed from the Project site and transported in a covered vehicle and disposed of at a licensed landfill or other appropriate facility. Any erosion control planting or seeding shall consist of native species, native seed mix, or other ecologically appropriate, non-invasive plants. Invasive plant species shall not be installed in landscaping. Invasive plants are defined as non-native species listed on the California Invasive Plant Council Inventory (https://www.cal-ipc.org/plants/inventory/).

Prior to issuance of building permits, Project landscape plans shall be reviewed by the City of Calimesa Planning Department to ensure invasive plants listed on MSHCP Table 6-2 (Plants That Should Be Avoided Adjacent to the MSHCP Conservation Area) are not included on Project landscape plans.

BIO-11. Wildlife Hazards

Prior to issuance of the grading permit, the City shall verify that the grading plan notes include the following requirements:

All potential wildlife pitfalls (trenches, bores, and other excavations) shall be backfilled or securely covered at the end of each workday. If backfilling or covering is not feasible, wildlife escape ramps shall be installed, in consultation with the biological monitor, sufficient to allow trapped wildlife to escape. The biological monitor shall inspect all excavations for trapped wildlife daily during the monitoring period (see Mitigation Measure BIO-1: Biological Monitoring and Clearance Surveys).

All construction pipes, culverts, or other hollow materials shall be securely covered or capped while stored on the Project site to prevent wildlife access. All such materials shall be inspected

for wildlife before being moved, buried, or capped. Any vertical pipes shall be capped as they are installed. No open water storage tanks shall be allowed on the Project site. Water storage tanks must be enclosed to prevent wildlife entrapment.

If wildlife become trapped, the biological monitor shall remove the animal (if feasible and safe and permitted to do so) and place it in nearby suitable habitat outside of the impact area. If the biological monitor is unable to remove the animal, CDFW or other wildlife authority or CDFW-approved wildlife rehabilitator shall be immediately contacted for guidance and/or assistance.

Any wildlife encountered on the Project site shall be allowed to leave the area unharmed or moved, or encouraged to move, out of harm's way by the biological monitor, if safe and feasible and permitted to do so. Construction personnel shall not harm, harass, or handle any wildlife.

Excessive and unnecessary noise (e.g., blaring radios) shall be avoided.

Construction activities shall be restricted to daylight hours to the extent feasible. Lighting shall be shielded and/or directed away from habitat.

Appropriate air quality measures shall be employed to control dust and toxic emissions. If water is applied to the site to control dust, ponding of this water shall be minimized to avoid creating predator subsidies.

Project-related vehicles and equipment shall be limited to a speed of 15 mph within the boundaries of the Project site.

Appropriate hazardous materials measures shall be employed to control toxic chemicals. Any chemical spills shall be cleaned up promptly and disposed of properly at an appropriate facility.

Smoking will be allowed only in enclosed vehicles or other designated areas where measures have been employed to ensure that accidental ignition of vegetation cannot occur. Appropriate fire prevention measures will be employed during all hot work (i.e., welding, grinding, etc.) to ensure that vegetation will not be ignited.

Project personnel, with the exception of security personnel, shall be prohibited from bringing firearms to the Project site. Project personnel shall be prohibited from bringing pets to the Project site.

BIO-12. Trash

Prior to issuance of the grading permit, the City shall verify that the grading plan notes include the following requirements:

Trash brought onsite by workers, particularly food items or packaging that could attract wild or domestic predators, shall be kept inside vehicles or in closed, animal-proof containers and removed from work areas regularly. All trash containers on the site shall be kept securely covered and emptied regularly. Trash dumped on the site by others shall be removed promptly. All trash shall be disposed of properly at an appropriate facility.

BIO-13. Fairy Shrimp

Protocol surveys shall be completed prior to any site disturbance. Suitable fairy shrimp habitat (ponding areas and surrounding hydrology) on the Project site shall be fully avoided until protocol surveys have been completed and results obtained. Surveys shall follow the latest USFWS protocol (USFWS [2017] or more recent guidance if available). This protocol requires one wet and one dry season survey to be conducted within a three-year period by a biologist holding a USFWS Section 10(a)(1)(A) permit for listed large branchiopods.

If listed or special status fairy shrimp are found on the site during surveys, the applicant shall immediately notify the City of Calimesa Planning Department, USFWS, and CDFW. All areas of habitat occupied by listed or special status fairy shrimp (ponding areas and surrounding hydrology) on the Project site shall be fully avoided until mitigation has been secured.

If listed or special status fairy shrimp are found on the site during surveys, the Project biologist shall consult with the City of Calimesa Planning Department, USFWS, and CDFW to develop and implement a mitigation plan. Mitigation shall be based on the following requirement included in the MSHCP:

> If survey results are positive, 90 percent of the occupied portions of the property that provide for long-term conservation value for the fairy shrimp shall be conserved.

Alternatively, the Project may purchase credits at a ratio of 3:1 (preserved habitat : occupied habitat) at the Skunk Hollow / Berry Jones Mitigation Bank or a mitigation bank that is determined to be acceptable to the City of Calimesa Planning Department, USFWS, and CDFW.

If wet season surveys determine that listed and special status fairy shrimp are absent, this mitigation measure will be removed.

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APPENDIX A: PLANT AND WILDLIFE SPECIES

Plant and wildlife species identified on the site during surveys in 2020, 2022, and 2023. One asterisk (*) indicates a non-native species; two asterisks (**) indicates a special status species; a question mark (?) indicates uncertainty regarding identification or native status. Unidentified ornamental trees and shrubs are also present.

	Scientific Name	**Common Name**
	VASCULAR PLANTS	
	DICOTYLEDONS	
	Gymnosperms	
	CUPRESSACEAE	CYPRESS FAMILY
*	*Juniperus sp.*	Unid. ornamental juniper
	PINACEAE	PINE FAMILY
*	*Abies species*	Unid. ornamental fir
*	*Cedrus deodara*	Deodar cedar
*	*Pinus species*	Unid. ornamental pine
*	*Pinus halepensis*	Aleppo pine
	Angiosperms	
	ADOXACEAE	MUSKROOT FAMILY
	Sambucus mexicana *(S. nigra ssp. cerulea)*	Mexican elderberry, blue elderberry
	AIZOACEAE	FIG-MARIGOLD or ICEPLANT FAMILY
*	*Mesembryanthemum nodiflorum* *(Gasoul nodiflorum)*	Slender-leaved iceplant
	ANACARDIACEAE	SUMAC or CASHEW FAMILY
	Rhus ovata	Sugar bush
*	*Schinus terebinthifolius*	Brazilian pepper tree
*	*Searsia lancea*	African sumac
	ASTERACEAE	ASTER FAMILY
	Ambrosia acanthicarpa	Annual bur-sage, annual sandbur
	Ambrosia psilostachya	Western ragweed
	Artemisia californica	California sagebrush
	Baccharis pilularis	Coyote brush
	Baccharis salicifolia (B. glutinosa)	Mulefat
*	*Centaurea melitensis*	Tocalote
	Corethrogyne filaginifolia var. filaginifolia *(Lessingia filaginifolia)*	California-aster, sand-aster
	Encelia farinosa	Brittlebush

	Scientific Name	**Common Name**
	Erigeron bonariensis	
*	*(Conyza bonariensis)*	Flax-leaved horseweed
	Erigeron canadensis	Horseweed, mare's tail
	(Conyza canadensis)	
*	*Gazania species*	Unid. ornamental gazania
	Helianthus annuus	Western sunflower
	Heterotheca grandiflora	Telegraph weed
*	*Hypochaeris glabra*	Smooth cat's-ear
	Isocoma menziesii	
	(Haplopappus venetus)	Coastal goldenbush
*	*Lactuca serriola*	Prickly lettuce
	Logfia filaginoides	
	(Filago californica)	California filago
	Matricaria discoidea	
	(Chamomilla suaveolens,	
*	*M. matricarioides)*	Pineapple weed
	Oncosiphon pilulifer	
*	*(Matricaria globosa)*	Stinknet
*	*Senecio vulgaris*	Common groundsel
*	*Sonchus asper*	Prickly sow thistle
*	*Sonchus oleraceus*	Common sow thistle
*	*Taraxacum officinale*	Common dandelion
	BORAGINACEAE	BORAGE OR WATERLEAF FAMILY
	Amsinckia intermedia	
	(A. menziesii var. intermedia)	Common fiddleneck
	Cryptantha species	Unid. annual cryptantha
	Pectocarya linearis	Slender pectocarya
	Plagiobothrys species	Popcornflower
	BRASSICACEAE	MUSTARD FAMILY
*	*Brassica nigra*	Black mustard
*	*Brassica tournefortii*	Sahara mustard, wild turnip
*	*Hirschfeldia incana*	Shortpod mustard
	(Brassica geniculata)	
*	*Raphanus sativus*	Wild radish
*	*Sisymbrium irio*	London rocket
*	*Sisymbrium orientale*	Wild mustard, hare's ear cabbage
	CACTACEAE	CACTUS FAMILY
	*Echinopsis species (*probably	
*	*candicans)*	Easter lily cactus
	CHENOPODIACEAE	GOOSEFOOT FAMILY
*	*Chenopodium album*	Lamb's quarters, common goosefoot
*	*Salsola tragus*	Russian thistle
	CONVOLVULACEAE	MORNING-GLORY FAMILY
*	*Convolvulus arvensis*	Common bindweed

Scientific Name	**Common Name**
CRASSULACEAE	STONECROP FAMILY
Crassula connata (C. erecta)	Pygmy-weed, pygmy stonecrop
CUCURBITACEAE	GOURD FAMILY, CUCUMBER FAMILY
Marah macrocarpa	Chilicothe, wild cucumber
EUPHORBIACEAE	SPURGE FAMILY
Croton setiger (C. setigerus, Eremocarpus setiger, E. setigerus)	Turkey-mullein, doveweed
* *Euphorbia peplus*	Petty spurge
Euphorbia polycarpa (Chamaesyce polycarpa)	Smallseed sandmat
Euphorbia serpillifolia	Thyme-leafed spurge
FABACEAE	LEGUME FAMILY, PEA FAMILY
* *Acacia baileyana*	Cootamundra wattle
Acmispon americanus (Lotus purshianus, L. unifoliatus)	"Spanish" clover
Acmispon glaber (Lotus scoparius)	Deerweed
Lupinus bicolor	Miniature lupine, dove lupine
Lupinus microcarpus var. densiflorus	White chick lupine
* *Medicago polymorpha*	California burclover
* *Melilotus indicus*	Sourclover, India sweetclover
* *Parkinsonia aculeata*	Mexican palo verde
* *Robinia pseudoacacia*	Black locust
* *Vicia villosa*	Winter vetch
FAGACEAE	OAK FAMILY
Quercus berberidifolia (Q. dumosa)	Scrub oak
GERANIACEAE	GERANIUM FAMILY
* *Erodium botrys*	Long-beak filaree
* *Erodium cicutarium*	Redstem filaree
LAMIACEAE	MINT FAMILY
* *Lamium amplexicaule*	Common henbit
* *Marrubium vulgare*	Horehound
Trichostema lanceolatum	Vinegar weed
MALVACEAE	MALLOW FAMILY
* *Malva parviflora*	Cheeseweed

Scientific Name	**Common Name**
OLEACEAE	OLIVE FAMILY
* *Olea europaea*	Russian olive
ONAGRACEAE	EVENING-PRIMROSE FAMILY
Camissonia species	Unid. evening-primrose
Camissoniopsis bistorta (Camissonia bistorta)	California sun cup
Oenothera species (suffrutescens?)	Unid. evening primrose
POLEMONIACEAE	PHLOX FAMILY
Navarretia hamata	Hooked navarretia
POLYGONACEAE	BUCKWHEAT FAMILY
Eriogonum elongatum	Long-stem wild buckwheat, wand buckwheat
Eriogonum fasciculatum var. foliolosum	Leafy California wild buckwheat, interior California buckwheat
Eriogonum gracile	Slender wild buckwheat
Lastarriaea coriacea (Chorizanthe coriacea)	Leather-spineflower, lastarriaea
* *Polygonum aviculare (P. arenastrum)*	Common knotweed
PORTULACACEAE	PURSLANE FAMILY
* *Portulaca oleracea*	Common purslane
RHAMNACEAE	BUCKTHORN FAMILY
Rhamnus crocea	Spiny redberry
ROSACEAE	ROSE FAMILY
Adenostoma fasciculatum	Chamise
* *Prunus amygdalus*	Ornamental almond
* *Pyracantha coccinea*	Firethorn
SAPOTACEAE	
* *Sideroxylon lanuginosum*	Gum bumilia
SIMAROUBACEAE	QUASSIA or SIMAROUBA FAMILY
* *Ailanthus altissima*	Tree of heaven
SOLANACEAE	NIGHTSHADE FAMILY
Datura wrightii (D. meteloides)	Jimsonweed, tolguacha
* *Nicotiana glauca*	Tree tobacco
Solanum xanti	Chaparral nightshade
ULMACEAE	ELM FAMILY
* *Ulmus parviflora*	Chinese elm
URTICACEAE	NETTLE FAMILY
* *Urtica urens*	Dwarf nettle

Scientific Name	**Common Name**
ZYGOPHYLLACEAE	CALTROP FAMILY
* *Tribulus terrestris*	Puncture vine
MONOCOTYLEDONS	
AGAVACEAE	CENTURY PLANT FAMILY, AGAVE FAMILY
Chlorogalum pomeridianum	Soap plant
ARECACEAE	PALM FAMILY
Washingtonia filifera	California fan palm
* *Washingtonia species*	Ornamental fan palm
POACEAE	GRASS FAMILY
* *Avena barbata*	Slender wild oat
* *Avena fatua*	Wild oat
* *Bromus diandrus (B. rigidus)*	Ripgut brome
* *Bromus rubens (B. madritensis ssp. rubens)*	Red brome
* *Bromus tectorum*	Cheatgrass
* *Cynodon dactylon*	Bermuda grass
* *Digitaria sanguinalis*	Hairy crabgrass
Elymus condensatus (Leymus condensatus)	Giant wild-rye
* *Festuca species*	Unid. fescue
* *Hordeum murinum*	Wall barley, hare barley
* *Schismus barbatus*	Mediterranean grass
* *Triticum aestivum*	Wheat
THEMIDACEAE	BRODIAEA FAMILY
Dichelostemma capitatum (D. pulchella, Brodiaea pulchella)	Blue dicks, wild hyacinth

Scientific Name	**Common Name**
VERTEBRATES	
Reptiles	
Phrynosomatidae	Spiny Lizards
Sceloporus occidentalis	Western fence lizard
Uta stansburiana	Side-blotched lizard
Teiidae	Teiid Lizards
** *Aspidoscelis hyperythra*	Orange-throated whiptail
Birds	
Accipitridae	Hawks, Eagles, and Harriers
** *Accipiter cooperii*	Cooper's hawk
Buteo jamaicensis	Red-tailed hawk
Aegithalidae	Long-tailed Tits
Psaltriparus minimus	Bushtit
Alaudidae	Larks
** *Eremophila alpestris actia*	California horned lark
Ardeidae	Herons
** *Ardea alba*	Great egret (fly over)
Charadriidae	Plovers
Charadrius vociferus	Killdeer
Columbidae	Pigeons and Doves
* *Columba livia*	Rock dove, common pigeon
* *Streptopelia decaocto*	Eurasian collared-dove
Zenaida macroura	Mourning dove
Corvidae	Crows and Jays
Aphelocoma californica	California scrub jay
Corvus brachyrhynchos	American crow
Corvus corax	Common raven
Falconidae	Falcons
Falco sparverius	American kestrel
Fringillidae	Finches
Spinus (Carduelis) psaltria	Lesser goldfinch
Haemorhous (Carpodacus) mexicanus	House finch
Hirundinidae	Swallows
Hirundo rustica	Barn swallow
Petrochelidon pyrrhonota tachina	Cliff swallow

Scientific Name	**Common Name**
Stelgidopteryx serripennis	Northern rough-winged swallow
Icteridae	Blackbirds
Euphagus cyanocephalus	Brewer's blackbird
Icterus bullockii	Bullock's oriole
Sturnella neglecta	Western meadowlark
Mimidae	Mockingbirds
Mimus polyglottos polyglottos	Northern mockingbird
Parulidae	Wood Warblers
Setophaga coronata	Yellow-rumped warbler
Passerellidae	New World Sparrows
Chondestes grammacus	Lark sparrow
Melozone crissalis	California towhee
Passerculus sandwichensis	Savannah sparrow
Zonotrichia leucophrys	White-crowned sparrow
Picidae	Woodpeckers
Colaptes auratus	Northern flicker
Ptiliogonatidae	Silky-flycatchers
Phainopepla nitens	Phainopepla
Sturnidae	Starlings
* *Sturnus vulgaris*	European starling
Timaliidae	Babblers
** *Chamaea fasciata*	Wrentit (adjacent area)
Trochilidae	Hummingbirds
Calypte anna	Anna's hummingbird
Troglodytidae	Wrens
Thryomanes bewickii	Bewick's wren
Turdidae	Thrushes
Sialia mexicana	Western bluebird
Tyrannidae	Tyrant Flycatchers
Sayornis nigricans	Black phoebe
Sayornis saya	Say's phoebe
Tyrannus verticalis	Western kingbird
Tyrannus vociferans	Cassin's kingbird

Scientific Name	**Common Name**
Mammals	
Canidae	Dogs, Foxes, and Coyotes
Canis latrans	Coyote
Didelphidae	Opossums
* *Didelphis virginiana*	Virginia opossum (dead)
Geomyidae	Pocket Gophers
Thomomys bottae	Botta's pocket gopher (sign)
Leporidae	Rabbits
Sylvilagus audubonii	Audubon's cottontail
Sciuridae	Squirrels
Spermophilus beecheyi	California ground squirrel

APPENDIX B: SPECIAL STATUS SPECIES OBSERVATIONS

Special status species observations during 2020, 2022, and 2023 surveys.

Species	Date	GPS Coordinates/ Location	Elevation (feet)	Observation
Orange-throated whiptail	04.29.2022	N 33.975080 W 117.039100	2,325	1 individual in coastal sage – chaparral scrub
California horned lark*	04.03.2022	N 33.978068 W 117.043725	2,322	4 individuals
	04.29.2022	N 33.977157 W 117.039971	2,324	9 individuals
	05.07.2022	N 33.977157 W 117.039971	2,324	several individuals
	05.13.2022	N 33.975669 W 117.041719	2,297	3 individuals
	05.23.2022	N 33.975669 W 117.041719	2,297	6 individuals
	04.21.2023	N 33.977580 W 117.044773	2,315	4 to 6 individuals
	05.11.2023	N 33.977580 W 117.044773	2.315	4 to 6 individuals
	05.22.2023	N 33.977580 W 117.044773	2,315	4 to 6 individuals
Cooper's hawk	04.04.2020	N 33.977937 W 117.039934	2,331	1 individual perching in an ornamental tree
	03.09.2022	N 33.977872 W 117.039795	2,331	1 individual perching in an ornamental tree
	04.21.2023	N 33.978413 W 117.040971	2,330	1 individual foraging
	05.05.2023	N 33.978413 W 117.040971	2,330	1 individual foraging
Great egret*	2023	N 33.976511 W 117.045221	2,304	1 individual flying over the site
Wrentit*	2023	N 33.976322 W 117.035040	2,409	Heard singing adjacent to site

*locations approximate.

APPENDIX C: SPECIAL STATUS SPECIES POTENTIALS FOR OCCURRENCE

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Plants				
Abronia villosa var. aurita Chaparral sand-verbena	Annual herb. Sandy soils in chaparral, coastal scrub, desert dunes at 75-1600m elevation. Riverside, San Bernardino, Imperial, San Diego, Orange Cos. (presumed extirpated in Orange Co.), Arizona, Baja.	(Jan)Mar-Sep	Fed: None Calif: S2 CRPR: 1B.1	Not expected; no or marginal habitat, no documented occurrences within 5 mi., not observed during surveys.
Allium marvinii Yucaipa onion	Perennial bulbiferous herb. Clay soils in openings in chaparral at 760-1065m. Riverside, San Bernardino, Orange, San Diego Cos.	Apr-May	Fed: None Calif: S1 CRPR: 1B.2 MSHCP: AC b USFS: S	Absent; no suitable habitat, three documented occurrences within 5 mi. (2005, San Bernardino Mts., 3.6 mi. NE; 2013, 1.0 mi. E; 2017, transmission line corridor, 0.6 mi. S), not observed during focused surveys.
Ambrosia pumila San Diego ambrosia	Perennial rhizomatous herb. Sandy or clay soils, often in disturbed areas, sometimes alkaline. Chaparral, coastal scrub, valley and foothill grassland, and vernal pools at 20-415m elevation. Riverside, San Diego Co., Baja.	Apr-Oct	Fed: END Calif: S1 CRPR: 1B.1 MSHCP: AC b	Not expected; potentially suitable habitat, above elevation range, no documented occurrences within 5 mi., not observed during surveys.
Arenaria lanuginosa var. saxosa Rock sandwort	Perennial herb. Mesic, sandy soils in upper montane coniferous forest, subalpine coniferous forest at 1455-2600m elevation. San Bernardino Co., western US and Baja.	Jul-Aug	Fed: None Calif: S2 CRPR: 2B.3 USFS: S	Absent; no suitable habitat, well below elevation range, no documented occurrences within 5 mi., not observed during surveys.
Arenaria paludicola Marsh sandwort	Perennial stoloniferous herb. Sandy soils and openings in freshwater or brackish marshes and swamps at 3-170m elevation. LA, San Bernardino, Riverside, Santa Cruz, Marin, San Francisco, San Luis Obispo, and Santa Cruz Cos. and Sonora Mexico, Washington state. Presumed extirpated in San Bernardino, San Francisco, and Santa Cruz Cos.	May-Aug	Fed: END Calif: END, S1 CRPR: 1B.1	Absent; no suitable habitat, well above elevation range, no documented occurrences within 5 mi., not observed during surveys.
Artemisia palmeri San Diego sagewort	Perennial deciduous shrub. Sandy, mesic areas in chaparral, coastal scrub, riparian scrub/woodland/forest at 15-915m elevation. San Diego, Riverside, San Bernardino Cos., Baja.	(Feb)May-Sep	Fed: None Calif: S3? CRPR: 4.2	Not expected; no or marginal habitat, no documented occurrences within 5 mi., not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Astragalus hornii var. *hornii* Horn's milk-vetch	Annual herb. Alkaline soils and along lake margins, meadows and seeps and playas at 60-850m elevation. San Bernardino, Riverside, Inyo, Kern, LA, Orange, and Kings Cos. and Nevada. San Joaquin Valley, South Coast, Western Transverse Ranges, W edge of the Mojave Desert. Presumed extirpated in San Bernardino Co.	May-Oct	Fed: None Calif: S1 CRPR: 1B.1	Absent; no suitable habitat, one documented occurrence within 5 mi. (1889, exact location unknown, mapped 3.6 mi. SE), not observed during surveys.
Astragalus lentiginosus var. borreganus Borrego milk-vetch	Annual herb. Sandy soils in Mojavean and Sonoran desert scrub at 30-895m elevation. Imperial, Riverside, San Bernardino, San Diego Cos., AZ, NV, Baja and Sonora.	Feb-May	Fed: None Calif: S4 CRPR: 4.3	Absent; no suitable habitat, no mapped CCH records within 5 mi., not observed during surveys.
Astragalus lentiginosus var. coachellae Coachella Valley milk-vetch	Annual/perennial herb. Sandy soils in Sonoran desert scrub, desert dunes at 40-655m elevation. Riverside Co.	Feb-May	Fed: END Calif: S1 CRPR: 1B.2	Absent; no suitable habitat, outside geographic range, no documented occurrences within 5 mi., not observed during surveys.
Astragalus pachypus var. jaegeri Jaeger's milk-vetch	Perennial shrub. Sandy or rocky soils in chaparral, cismontane woodland, coastal scrub, valley and foothill grassland at 365-975m elevation. Riverside and San Diego Cos.	Dec-Jun	Fed: None Calif: S1 CRPR: 1B.1 MSHCP: AC USFS: S BLM: S	Not expected; no or marginal habitat, one documented occurrence within 5 mi. (1897, exact location unknown, mapped 3.6 mi. SE), not observed during surveys.
Atriplex coronata var. notatior San Jacinto Valley crownscale	Annual herb. Alkaline soils in playas, mesic areas of valley and foothill grassland, vernal pools at 139-500m elevation. Western Riverside Co.	Apr-Aug	Fed: END Calif: S1 CRPR: 1B.1 MSHCP: AC d	Absent; no or marginal habitat, above elevation range, no documented occurrences within 5 mi., not observed during surveys.
Atriplex parishii Parish's brittlescale	Annual herb. Alkaline soils in chenopod scrub, playas, vernal pools at 25-1900m elevation; Riverside, San Bernardino, LA, Orange, and San Diego Cos. and Baja. Presumed extirpated in LA, Orange, and San Bernardino Cos.	Jun - Oct	Fed: None Calif: S1 CRPR: 1B.1 MSHCP: AC d USFS: S	Absent; no suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
Atriplex serenana var. davidsonii Davidson's saltscale	Annual herb. Alkaline soils in coastal bluff scrub, coastal scrub at 10-200m elevation; Channel Islands, LA, Orange, Riverside, San Luis Obispo, Santa Barbara, and Ventura Cos. Presumed extirpated in Santa Barbara Co., possibly extirpated in LA Co.	Apr - Oct	Fed: None Calif: S1 CRPR: 1B.2 MSHCP: AC d	Absent; no or marginal habitat, well above 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
Berberis nevinii 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 Cos.	(Feb)Mar-Jun can ID all year	Fed: END Calif: END, S1 CRPR: 1B.1 MSHCP: AC d	Absent; no or marginal habitat, no documented occurrences within 5 mi., conspicuous plant not observed during surveys.
Botrychium crenalutum Scalloped moonwort	Perennial rhizomatous herb. Bogs and fens, meadows and seeps, freshwater marshes and swamps, upper and lower montane coniferous forest at 1268-3280m elevation. N and S CA, western US.	Jun-Sep	Fed: None Calif: S3 CRPR: 2B.2 USFS: S	Absent; no suitable habitat, well below elevation range, no documented occurrences within 5 mi., not observed during surveys.
Bouteloua trifida Three-awned grama	Perennial herb. Carbonate, rocky soils in Mojavean desert scrub at 700-2000m elevation. Riverside, San Bernardino, Inyo Cos. SW US and Sonora, Mexico.	(Apr)May-Sep	Fed: None Calif: S3 CRPR: 2B.3	Absent; no suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
Brodiaea filifolia Thread-leaved brodiaea	Perennial bulbiferous herb. Often on clay soils in chaparral openings, cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools at 25-1120m elevation. LA, Orange, Riverside, San Bernardino, and San Diego Cos.; scattered in Southern CA foothills & valleys.	Mar-Jun	Fed: THR Calif: END, S2 CRPR: 1B.1 MSHCP: AC d	Not expected; potentially suitable or marginal habitat, no documented occurrences within 5 mi., not observed during surveys.
Calochortus palmeri var. palmeri 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; no or marginal habitat, no documented occurrences within 5 mi., not observed during surveys.
Calochortus plummerae 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, San Diego, Ventura Cos.	May-Jul	Fed: None Calif: S4 CRPR: 4.2 MSHCP: AC	Moderate; potentially suitable or marginal habitat; eight documented occurrences within 5 mi. (1932-2010; closest is immediately south of the site), not observed during surveys.
Camissoniopsis lewisii Lewis' evening-primrose	Annual herb. Coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub, valley and foothill grassland at 0-300m elevation. LA, Orange, Riverside, San Diego Cos., presumed extirpated in Orange Co. Not tracked in CNDDB.	Mar-May(Jun)	Fed: None Calif: S4 CRPR: 3	Absent; no or marginal habitat, well above elevation range, no mapped CCH records within 5 mi., not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Castilleja lasiorhyncha San Bernardino Mountain's owl's-clover	Hemiparasitic annual herb. Mesic areas in chaparral, montane meadows, pebble plains, riparian woodland, upper montane coniferous forest at 1300-2390m elevation. Moist edges of springs/seeps on clay soil, wet meadows, openings in coniferous forest. Riverside, San Diego, San Bernardino Co.; San Bernardino Mts, San Jacinto Mts.	May-Aug	Fed: None Calif: S2? CRPR: 1B.2	Absent; no suitable habitat, well below elevation range, no documented occurrences within 5 mi., not observed during surveys.
Castilleja montigena Heckard's paintbrush	Hemiparasitic perennial herb. Pinyon and juniper woodland, upper and lower montane coniferous forest at 1950-2800m elevation. San Bernardino Mts. Not tracked in the CNDDB.	May-Aug	Fed: None Calif: S3 CRPR: 4.3	Absent; no suitable habitat, well below elevation range, outside geographic range, no mapped CCH records within 5 mi., not observed during surveys.
Caulanthus simulans Payson's jewelflower	Annual herb. Chaparral, coastal scrub at 90-2200m elevation. North-facing slopes and ridgelines on sandy-granitic soils, frequently on steep rocky slopes, in burned areas, or disturbed sites such as streambeds. Orange, western Riverside, San Diego Cos.	(Feb)Mar-May(Jun)	Fed: None Calif: S4 CRPR: 4.2 MSHCP: AC	Not expected; no or marginal habitat, no documented occurrences within 5 mi., not observed during surveys.
Centromadia pungens ssp. *laevis* Smooth tarplant	Annual herb. Alkaline soils in chenopod scrub, meadows and seeps, playas, riparian woodland, valley and foothill grassland at 0-640m elevation. Also fallow fields, drainage ditches; mainly in SW Riverside Co., a few sites in interior valleys of LA, San Bernardino, San Diego Cos.	Apr-Sep	Fed: None Calif: S2 CRPR: 1B.1 MSHCP: AC d	Low to moderate; no or marginal habitat, slightly above typical elevation range, six documented occurrences within 5 mi. (1992-2020; closest is 1.6 mi. SW of the site, most in San Timoteo Canyon), not observed during surveys.
Chloropyron maritimum ssp. *maritimum* Salt marsh bird's-beak	Hemiparasitic annual herb. Coastal salt marsh and swamp and coastal dunes, sometimes alkaline meadow. Limited to the higher zones of the salt marsh habitat. 0-30m elevation. LA, Orange, Riverside, San Bernardino, San Diego Cos. and Central CA, Baja.	May-Oct(Nov)	Fed: END Calif: END, S1 CRPR: 1B.2	Absent; no suitable habitat, well above elevation range, no documented occurrences within 5 mi., not observed during surveys.
Chorizanthe leptotheca Peninsular spineflower	Annual herb. Granitic soils and alluvial fans in chaparral, coastal scrub, lower montane coniferous forest at 300-1900m elevation. Riverside, San Bernardino, LA, San Diego, Kern, San Luis Obispo Cos., Baja. Not tracked in the CNDDB.	May-Aug	Fed: None Calif: S3 CRPR: 4.2 MSHCP: AC	Not expected; no or marginal 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
Chorizanthe parryi var. *parryi* 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 Cos.	Apr-Jun	Fed: None Calif: S2 CRPR: 1B.1 USFS: S BLM: S MSHCP: AC	Low to moderate; potentially marginal habitat; five documented occurrences within 5 mi. (1992-2015; closest is 2.6 mi. SE of the site), not observed during surveys.
Chorizanthe polygonoides var. longispina Long-spined spineflower	Annual herb. Often on clay soils in chaparral, coastal scrub, meadows and seeps, valley and foothill grassland, vernal pools at 30-1530m elevation. Orange, Riverside, San Diego Cos., Baja.	Apr-Jul	Fed: None Calif: S3 CRPR: 1B.2 MSHCP: AC	Not expected; no or marginal habitat, no documented occurrences within 5 mi., not observed during surveys.
Chorizanthe xanti var. *leucotheca* White-bracted spineflower	Annual herb. Sandy or gravelly soil in coastal scrub (alluvial fans), Mojavean desert scrub, pinyon and juniper woodlands at 300-1200m elevation. Riverside, San Bernardino, San Diego Cos.	Apr-Jun	Fed: None Calif: S3 CRPR: 1B.2	Not expected; no or marginal habitat, no documented occurrences within 5 mi., not observed during surveys.
Convolvulus simulans Small-flowered morning-glory	Annual herb. Clay soils, serpentinite seeps, chaparral openings, coastal scrub, valley and foothill grassland at 30-740m elevation. LA, Orange, Riverside, San Bernardino, San Diego Cos. and Central CA, Baja. Not tracked in CNDDB.	Mar-Jul	Fed: None Calif: S4 CRPR: 4.2 MSHCP: AC	Not expected; no or marginal habitat, no mapped CCH records within 5 mi., not observed during surveys.
Cuscuta obtusiflora var. *glandulosa* Peruvian dodder	Annual parasitic vine. Freshwater marshes & swamps at 15-280m elevation. Scattered locations in LA, San Bernardino Cos., Northern and Central 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, no documented occurrences within 5 mi., not observed during surveys.
Deinandra mohavensis Mojave tarplant	Annual herb. Mesic areas in chaparral, coastal scrub, riparian scrub at 640-1600m. Inyo, Kern, Riverside, San Diego, Tulare Cos. Presumed extirpated in San Bernardino Co.	(May)Jun-Oct(Jan)	Fed: None Calif: END, S3 CRPR: 1B.3 MSHCP: NAC e USFS: S BLM: S	Not expected; no or marginal habitat, no documented occurrences within 5 mi., not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Deinandra (Hemizonia) paniculata Paniculate tarplant	Annual herb. Usually vernally mesic areas, sometimes sandy. Coastal scrub, valley and foothill grassland, vernal pools at 25-940m elevation. LA, Orange, Riverside, San Bernardino, San Diego, Ventura, Kern, Santa Barbara, San Luis Obispo Cos., Baja. Not tracked in the CNDDB.	(Mar) Apr-Nov	Fed: None Calif: S4 CRPR: 4.2	Not expected; potentially marginal habitat, no mapped CCH records within 5 mi., not observed during surveys.
Delphinium parishii ssp. subglobosum Colorado Desert larkspur	Perennial herb. Chaparral, cismontane woodland, pinyon and juniper woodland, Sonoran desert scrub at 600-1800m elevation. Imperial, Riverside, San Diego Cos. and Baja. Not tracked in the CNDDB.	Mar-Jun	Fed: None Calif: S4 CRPR: 4.3	Absent; no suitable habitat, no mapped CCH records within 5 mi., not observed during surveys.
Delphinium parryi ssp. purpureum Mt. Pinos larkspur	Perennial herb. Chaparral, Mojavean desert scrub, pinyon and juniper woodland at 1000-2600m elevation. Kern, Santa Barbara, Ventura, Riverside, San Bernardino Cos. Not tracked in the CNDDB.	May-Jun	Fed: None Calif: S4 CRPR: 4.3 USFS: S	Absent; no suitable habitat, below elevation range, no mapped CCH records within 5 mi., not observed during surveys.
Diplacus clevelandii Cleveland's bush monkeyflower	Perennial rhizomatous herb. Gabbroic, rocky, often in disturbed areas and openings in chaparral, cismontane woodlands, lower montane coniferous forest at 450-2000m elevation. Orange, Riverside, San Diego Co., Baja. Not tracked in CNDDB.	Apr-Jul	Fed: None Calif: S4 CRPR: 4.2	Absent; no suitable habitat, no mapped CCH records within 5 mi., not observed during surveys.
Diplacus johnstonii 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, below elevation range, no mapped CCH records within 5 mi., not observed during surveys.
Dodecahema leptoceras Slender-horned spineflower	Annual herb. Open, sandy alluvial benches in valleys & canyons. Chaparral, coastal scrub (alluvial fans), cismontane woodland at 200-760m elevation. LA, Riverside, San Bernardino Cos.	Apr-Jun	Fed: END Calif: END, S1 CRPR: 1B.1 MSHCP: AC b	Not expected; no or marginal habitat, one documented occurrence within 5 mi. (1923, exact location unknown, mapped 2.8 mi. N, possibly extirpated), not observed during surveys.
Dudleya multicaulis 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 Cos.	Apr-Jul	Fed: None Calif: S2 CRPR: 1B.2 USFS: S MSHCP: AC b	Absent; no suitable habitat, no documented occurrences within 5 mi., not observed during focused surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Eriastrum densifolium ssp. *sanctorum* Santa Ana River woollystar	Perennial herb. Sandy or gravelly soils in chaparral, coastal scrub (alluvial fans) at 91-610m elevation. Orange, Riverside, San Bernardino Co., endemic to Santa Ana River watershed. Presumed extirpated in Orange Co.	Apr-Sep	Fed: END Calif: END, S1 CRPR: 1B.1 MSHCP: AC	Absent; no suitable habitat, one documented occurrence within 5 mi. (1923, Wildwood Canyon, exact location unknown, mapped 2.3 mi. N), not observed during surveys.
Eriophyllum lanatum var. obovatum Southern Sierra woolly sunflower	Perennial herb. Sandy loam soils in upper and lower montane coniferous forest at 1114-2500m elevation. San Bernardino Mts., Fresno, Kern, Tulare Cos. Not tracked in CNDDB.	Jun-Jul	Fed: None CA: S4 CRPR: 4.3	Absent; no suitable habitat, well below elevation range, outside geographic range, no mapped CCH records within 5 mi., not observed during surveys.
Galium jepsonii 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 CNDDB.	Jul-Aug	Fed: None Calif: S3 CRPR: 4.3	Absent; no suitable habitat, well below elevation range, no mapped CCH records within 5 mi., not observed during surveys.
Galium johnstonii 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 CNDDB.	Jun-Jul	Fed: None Calif: S4 CRPR: 4.3	Absent; no suitable habitat, well below elevation range, no mapped CCH records within 5 mi., not observed during surveys.
Gilia leptantha ssp. leptantha San Bernardino gilia	Annual herb. Sandy or gravelly soils in lower montane coniferous forest at 1500-2560m elevation. San Bernardino Co.	Jun-Aug	Fed: None Calif: S2 CRPR: 1B.3 USFS: S	Absent; no suitable habitat, well below elevation range, no documented occurrences within 5 mi., not observed during surveys.
Heuchera parishii Parish's alumroot	Perennial rhizomatous herb. Rocky, sometimes carbonate soils in alpine boulder and rock field, subalpine and montane coniferous forest at 1500-3800m elevation. Riverside and San Bernardino Cos.	Jun-Aug	Fed: None Calif: S3 CRPR: 1B.3 USFS: S	Absent; no suitable habitat, well below elevation range, no documented occurrences within 5 mi., not observed during surveys.
Hordeum intercedens Vernal barley	Annual grass. Saline flats and depressions in valley and foothill grassland, vernal pools, coastal dunes, coastal scrub at 5-1000m elevation. LA, Orange, Riverside, San Diego Cos., Central CA, Channel Islands. Not tracked in the CNDDB.	Mar-Jun	Fed: None Calif: S3S4 CRPR: 3.2 MSHCP: AC	Not expected; no or marginal 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
Horkelia cuneata var. *puberula* Mesa horkelia	Perennial herb. Sandy or gravelly soils in maritime chaparral, cismontane woodland, coastal scrub at 70-810m elevation. LA, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Ventura Cos. Presumed extirpated in Riverside and San Diego Cos.	Feb-Jul(Sep)	Fed: None Calif: S1 CRPR: 1B.1 USFS: S	Absent; no or marginal habitat, no documented occurrences within 5 mi., presumed extirpated, not observed during surveys.
Hulsea vestita ssp. parryi Parry's sunflower	Perennial herb. Granitic or carbonate soils, rocky areas, openings in pinyon and juniper woodlands, upper and lower montane coniferous forest at 1370-2895m elevation. Kern, LA, Mono, San Bernardino, Ventura Cos.	Apr-Aug	Fed: None Calif: S4 CRPR: 4.3	Absent; no suitable habitat, no mapped CCH records within 5 mi., well below elevation range, not observed during surveys.
Imperata brevifolia 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. Riverside, San Bernardino, LA, Orange, San Diego, Ventura, Imperial Cos., Central and Northern CA, SW US, Baja.	Sep-May	Fed: None Calif: S3 CRPR: 2B.1 USFS: S	Absent; no or marginal habitat, no documented occurrences within 5 mi., not observed during surveys.
Juglans californica 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 Cos., Central and Northern CA. Not tracked in CNDDB.	Mar-Aug	Fed: None Calif: S4 CRPR: 4.2 MSHCP: AC	Absent; no or marginal habitat, conspicuous plant not observed during surveys.
Juncus duranii 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, no mapped CCH records within 5 mi., not observed during surveys.
Lasthenia glabrata spp. coulteri Coulter's goldfields	Annual herb. Coastal salt marshes and swamps, playas, vernal pools at 1-1220m elevation. Riverside, San Bernardino, LA, Orange, Ventura Cos., Central and Northern CA, Baja. Presumed extirpated in LA, San Bernardino Cos.	Feb-Jun	Fed: None Calif: S2 CRPR: 1B.1 BLM: S MSHCP: AC d	Absent; no suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	Annual herb. Chaparral, coastal scrub at 1-885m elevation. LA, Orange, Riverside, San Bernardino, San Diego, Ventura, Santa Barbara, Mono Cos., Channel Islands, Baja.	Jan-Jul	Fed: None Calif: S3 CRPR: 4.3	Not expected; no or marginal habitat, one documented occurrence within 5 mi. (2001, Badlands, exact location unknown, mapped 3.5 mi. SW), not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Lilium humboldtii ssp. ocellatum 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.	Mar-Jul(Aug)	Fed: None Calif: S4? CRPR: 4.2 MSHCP: NAC f	Absent; no suitable habitat, no mapped CCH records within 5 mi., not observed during surveys.
Lilium parryi 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 MSHCP: NAC f	Absent; no suitable habitat, well below elevation range, no documented occurrences within 5 mi., not observed during surveys.
Malacothamnus parishii Parish's bush-mallow	Perennial deciduous shrub. Chaparral, coastal scrub at 305-455m elevation. San Bernardino Co. Presumed extirpated.	Jun-Jul	Fed: None Calif: SX CRPR: 1A	Absent; no or marginal habitat, above elevation range, presumed extirpated, no documented occurrences within 5 mi., not observed during surveys.
Mentzelia tricuspis Spiny-hair blazing star	Annual herb. Sandy, gravelly slopes and washes in Mojavean desert scrub at 150-1280m elevation. San Bernardino, San Diego, Inyo, and possibly Riverside Co., AZ, NV, UT.	Mar-May	Fed: None Calif: S2 CRPR: 2B.1	Absent; no suitable habitat, one documented occurrence within 5 mi. (1886, exact location unknown, mapped 3.7 mi. SE), not observed during surveys.
Monardella macrantha ssp. hallii Hall's monardella	Perennial rhizomatous herb. Broadleaf upland forest, chaparral, cismontane woodland, lower montane coniferous forest, valley and foothill grassland at 730-2195m elevation. LA, Orange, Riverside, San Bernardino, San Diego Co.	Jun-Oct	Fed: None Calif: S3 CRPR: 1B.3 USFS: S MSHCP: AC	Not expected; no or marginal habitat, no documented occurrences within 5 mi., not observed during surveys.
Muilla coronata Crowned muilla	Perennial bulbiferous herb. Chenopod scrub, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland at 670-1960m elevation. Inyo, Kern, LA, San Bernardino, Tulare Cos., Nevada.	Mar-Apr(May)	Fed: None Calif: S3 CRPR: 4.2	Absent; no suitable habitat, no mapped CCH records within 5 mi., not observed during surveys.
Myosurus minimus ssp. apus Little mousetail	Annual herb. Valley and foothill grasslands, alkaline vernal pools at 20-640m elevation. Riverside, San Bernardino, San Diego Cos., Central and Northern CA, Oregon, Baja.	Mar-Jun	Fed: None Calif: S2 CRPR: 3.1 MSHCP: AC d	Not expected; no or marginal habitat, no documented occurrences within 5 mi., not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Nama stenocarpa Mud nama	Annual/perennial herb. Found in marshy habitat on lake margins and riverbanks at 5-500m elevation. S CA, San Clemente Island, central CA, AZ, TX, Baja, Sonora.	Mar-Oct	Fed: None Calif: S1S2 CRPR: 2B.2 MSHCP: AC d	Absent; no suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
Navarretia fossalis Spreading navarretia	Annual herb. Chenopod scrub, shallow freshwater marshes and swamps, playas, vernal pools at 30-655m elevation. LA, Riverside, San Diego, San Luis Obispo Cos., Baja.	Apr-Jun	Fed: THR Calif: S2 CRPR: 1B.1 MSHCP: AC b	Absent; no suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
Oxytropis oreophila var. oreophila Rock-loving oxytrope	Perennial herb. Gravelly or rocky soils in alpine boulder and rock field, subalpine coniferous forest at 3400-3800m elevation. LA and San Bernardino Cos., AZ, NM, NV, UT.	Jun-Sep	Fed: None Calif: S2 CRPR: 2B.3 USFS: S	Absent; no suitable habitat, well below elevation range, no documented occurrences within 5 mi., not observed during surveys.
Parnassia cirrata var. *cirrata* San Bernardino grass-of-Parnassus	Perennial herb. Mesic areas, streamsides, sometimes calcareous soils in lower and upper montane coniferous forest, meadows and seeps at 1250-2440m elevation. San Gabriel Mts, San Bernardino Mts, Mexico.	Aug-Sep	Fed: None Calif: S2 CRPR: 1B.3 USFS: S	Absent; no suitable habitat, well below elevation range, no documented occurrences within 5 mi., not observed during surveys.
Petalonyx linearis Narrow-leaf sandpaper-plant	Perennial shrub. Sandy or rocky canyons in Mojavean and Sonoran desert scrub at 25-1115m elevation. Riverside, San Bernardino, San Diego, and Imperial Cos., Arizona, Sonora and Baja Mexico.	(Jan-Feb)Mar-May(Jun-Dec)	Fed: None Calif: S3? CRPR: 2B.3	Absent; no suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
Piperia leptopetala Narrow-petaled rein orchid	Perennial herb. Cismontane woodland, upper and lower montane coniferous forest at 380-2225m elevation. Not tracked in CNDDB.	May-Jul	Fed: None Calif: S4 CRPR: 4.3	Absent; no suitable habitat, no mapped CCH records within 5 mi., not observed during surveys.
Pseudognaphalium leucocephalum 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 Cos., AZ, NM, TX, Baja and Sonora Mex.	(Jul)Aug-Nov(Dec)	Fed: None Calif: S2 CRPR: 2B.2	Not expected; no or marginal habitat, no documented occurrences within 5 mi., not observed during surveys.
Pseudorontium cyathiferum Deep Canyon snapdragon	Annual herb. Rocky soils in Sonoran desert scrub at 0-800m elevation. Riverside, Imperial, San Diego Cos., AZ, Baja and Sonora, Mexico.	Feb-Apr	Fed: None Calif: S1 CRPR: 2B.3	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
Quercus engelmannii 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, San Bernardino, and San Diego Counties, also southeast San Gabriel Mountain foothills (LA County). Not tracked in the CNDDB.	Mar-Jun	Fed: None Calif: S3 CRPR: 4.2	Absent; potentially suitable habitat, conspicuous plant not observed during surveys.
Ribes divaricatum var. *parishii* Parish's gooseberry	Perennial deciduous shrub. Riparian woodland at 65-300m elevation. LA, San Bernardino Co. Presumed extirpated.	Feb-Apr	Fed: None Calif: SX CRPR: 1A	Absent; no suitable habitat, presumed extirpated, no documented occurrences within 5 mi., not observed during surveys.
Rupertia rigida 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; no or marginal habitat, no mapped CCH records within 5 mi., not observed during surveys.
Sedum niveum Davidson's stonecrop	Perennial rhizomatous herb. Rocky soils in lower and upper montane and subalpine coniferous forest at 2075-3000m elevation. Riverside and San Bernardino Cos., Baja. Not tracked in CNDDB.	Jun-Aug	Fed: None Calif: S3 CRPR: 4.2 USFS: S	Absent; no suitable habitat, well below elevation range, no mapped CCH records within 5 mi., not observed during surveys.
Senecio astephanus 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. Not tracked in CNDDB.	May-Jul	Fed: None Calif: S3 CRPR: 4.3	Absent; no suitable habitat, no mapped CCH records within 5 mi., not observed during surveys.
Sidalcea hickmanii ssp. parishii Parish's checkerbloom	Perennial herb. Chaparral, cismontane woodland, lower montane coniferous forest at 1000-2499m elevation. Kern, Santa Barbara, San Bernardino, San Luis Obispo Cos. San Bernardino Mts.	(May)Jun-Aug	Fed: None Calif: Rare, S1 CRPR: 1B.2 BLM: S USFS: S	Absent; no suitable habitat, below elevation range, no documented occurrences within 5 mi., not observed during surveys.
Sidalcea neomexicana 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 Cos., western US, Sonora Mex. Presumed extirpated in LA Co.	Mar-Jun	Fed: None Calif: S2 CRPR: 2B.2 USFS: S	Not expected; no suitable habitat, one documented occurrence within 5 mi. (1891, Wildwood Canyon, exact location unknown, mapped 3.8 mi. NE), not observed during surveys.

Species	Growth Form, Habitat and Distribution	Flowering Season	Conservation Status	Potential for Occurrence
Streptanthus bernardinus Laguna Mountains jewelflower	Perennial herb. Chaparral, lower montane coniferous forest at 670-2500m elevation. Riverside, San Bernardino, San Diego Co.	May-Aug	Fed: None Calif: S3S4 CRPR: 4.3	Absent; no suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
Streptanthus campestris Southern jewelflower	Perennial herb. Rocky soils in chaparral, lower montane coniferous forest, pinyon and juniper woodland at 900-2300m elevation. Imperial, Santa Barbara, Ventura, San Bernardino, Riverside, San Diego Co, Baja.	(Apr)May-Jul	Fed: None Calif: S3 CRPR: 1B.3	Absent; no suitable habitat, below elevation range, no documented occurrences within 5 mi., not observed during surveys.
Symphyotrichum defoliatum 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. LA, Orange, Riverside, San Bernardino, San Diego, Imperial, Kern, Santa Barbara, San Luis Obispo Cos.	Jul-Nov	Fed: None Calif: S2 CRPR: 1B.2 USFS: S	Not expected; no or marginal habitat, one documented occurrence within 5 mi. (1951, San Timoteo Canyon, exact location unknown, mapped 3.7 mi. W), not observed during surveys.
Tortula californica California screw-moss	Moss. Sandy soil in chenopod scrub, valley and foothill grassland at 10-1460m elevation. LA, Riverside, San Diego, Ventura Cos., Central and Northern CA, Channel Islands.	Not applicable	Fed: None Calif: S2? CRPR: 1B.2 BLM: S	Not expected; no or marginal habitat, no documented occurrences within 5 mi., not observed during surveys.
Trichocoronis wrightii var wrightii Wright's trichocoronis	Annual herb. Alkaline soils in meadows and seeps, marshes and swamps, riparian forest, vernal pools at 5-435m elevation. Riverside Co., Central Valley, TX, Baja.	May-Sep	Fed: None Calif: S1 CRPR: 2B.1 MSHCP: AC b	Absent; no suitable habitat, well above elevation range, no documented occurrences within 5 mi., not observed during surveys.
References: CDFW (2023a, 2023c), USFWS (2023a), CNPS (2023), Dudek (2003), RCA (2022)				

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Invertebrates			
Bombus crotchii Crotch bumble bee	Coastal CA E to Sierra-Cascade crest & S into Mexico. Open grassland and scrub habitats. Food plant genera include *Antirrhinum, Asclepias, Chaenactis, Lupinus, Medicago, Salvia, Phacelia, Clarkia, Dendromecon, Eschscholzia,* and *Eriogonum*. Lives in colonies that may be underground in rodent holes or above ground in rock piles, tree cavities, etc.	Fed: None Calif: CanE, S2	Low to moderate; potentially suitable habitat, food plants present, five documented occurrences within 5 mi. (1975-2020, closest is 0.9 mi. NW of site). Not observed during focused surveys.
Branchinecta lynchi Vernal pool fairy shrimp	Vernal pools or similar vernal habitats, requires cool water pools (≤50ºF to hatch, ≤75ºF to survive); disjunct locations in Riverside Co. and the Coast Ranges thru Central Valley to Tehama Co., southern Oregon, up to elevation of 1159m.	Fed: THR Calif: SA, S3 MSHCP: AC a	Not expected; no or very marginal habitat, no documented occurrences within 5 mi.
Danaus plexippus pop. 1 Monarch butterfly	California overwintering population.	Fed: CAN State: SA, S2 USFS: S (Los Padres NF)	Absent; individual monarchs may be present but site is too far inland to support overwintering population.
Diplectrona californica California diplectronan caddisfly	Known only from Thurman Flats (north of Yucaipa) in San Bernardino County and the Claremont area in Los Angeles County/San Bernardino County. No information has been published on the larvae of this species, but other larvae in the genus live in fast-flowing, cool streams. Adults have been collected in May.	Fed: None Calif: SA, S1	Absent; no suitable habitat for larvae, outside of geographic range, no documented occurrences within 5 mi.
Eugnosta (Carolella) busckana Busck's gallmoth	Coastal dunes, coastal scrub in coastal southern CA. Larval host is *Encelia californica.* Adult flight period during winter, generally Nov – Feb.	Fed: None Calif: SA, S2S3	Not expected; potentially marginal habitat, no larval host plants, no documented occurrences within 5 mi., possibly extirpated.
Halictus harmonius Harmonius halictid bee	Known only from the foothills of the San Bernardino Mts and possibly also the San Jacinto Mts.	Fed: None Calif: SA, S3	Absent; outside geographic range.
Neolarra alba White cuckoo bee	Cleptoparasitic in the nests of perdita bees. Known only from localities in Southern California. All occurrences are historical.	Fed: None Calif: SA, SH	Not expected; no documented occurrences within 5 mi., all occurrences are historical.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Streptocephalus woottoni Riverside fairy shrimp	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Coastal scrub, valley & foothill grassland, vernal pool, wetland. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season. Generally restricted to pools greater than 12 inches deep. All known populations lie between 30 and 415 meters elevation.	Fed: END Calif: SA, S2 MSHCP: AC a	Not expected; no or very marginal habitat, well above elevation range, no documented occurrences within 5 mi.
Fish			
Oncorhynchus mykiss irideus pop. 10 Steelhead – southern California DPS	South coast flowing waters. Fed listing refers to pops from Santa Maria River south to southern extent of range (San Mateo Creek in San Diego Co.)	Fed: END Calif: CanE, S1	Absent; no perennial water.
Rhinichthys osculus subspecies 8 Santa Ana speckled dace	Headwaters of the Santa Ana & San Gabriel Rivers, May be extirpated from the Los Angeles River system. Santa Ana River populations in lower San Bernardino Mtn. foothills & washes. Requires permanent flowing streams with summer water temps of 17-20C. usually inhabits shallow cobble and gravel riffles.	Fed: None Calif: SSC, S1 USFS: S	Absent; no perennial water.
Amphibians			
Rana muscosa 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, S2 MSHCP: AC c USFS: S	Absent; no perennial water.
Spea hammondii 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, S3S4 BLM: S MSHCP: AC	Not expected; no suitable habitat, four documented occurrences within 5 mi. (1967, 4.7 mi. SW; 2005, 3.1 mi. SE; 2010, 1.7 mi. SW; 2015, 4.8 mi. W), not observed during surveys.
Reptiles			
Anniella stebbinsi (Anniella pulchra pulchra) 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, five documented occurrences within 5 mi. (1949 to 2018, closest is 0.5 mi. SE), not observed during surveys but is secretive.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Arizona elegans occidentalis 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. Nocturnal.	Fed: None Calif: SSC, S2	Low; potentially marginal habitat, no documented occurrences within 5 mi., not observed during surveys but is nocturnal.
Aspidoscelis hyperythra Orange-throated whiptail	Low-elevation coastal scrub, chaparral, valley-foothill hardwood, sea level to 1040m. Sandy areas, patches of rock. S CA, west of desert to tip of Baja CA.	Fed: None Calif: WL, S2S3 USFS: S MSHCP: AC	Occurs; observed on the site during surveys.
Aspidoscelis tigris stejnegeri 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 MSHCP: AC	Low; potentially marginal habitat, one documented occurrence within 5 mi. (2004, 3.1 mi. SSE), not observed during surveys.
Charina umbratica Southern rubber boa	Found in a few locales in San Bernardino & San Jacinto Mtn. ranges. Moist coniferous forest and woodlands from about 5000-9000 ft. elev. Fossorial, nocturnal, sometimes crepuscular. Hibernates in rock outcrops, rotting logs, or other underground refuges. Active April-October. Thick duff and downed logs important for cover. Usually found within several hundred meters of water.	Fed: None Calif: THR, S2 MSHCP: NAC f USFS: S	Absent; no suitable habitat, well below elevation range, two documented occurrences within 5 mi. (1970s and 1995, 7600 and 6000 feet, location information suppressed to protect the species, at least 2.7 mi. NE), not observed during surveys.
Crotalus ruber Red-diamond rattlesnake	Desert scrub, thorn scrub, chaparral below 4,000ft. San Bernardino County S through most of Baja California, Mexico.	Fed: None Calif: SSC, S3 USFS: S MSHCP: AC	Not expected; no suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
Diadophis punctatus modestus 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; potentially marginal habitat, no documented occurrences within 5 mi., not observed during surveys.
Emys marmorata 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 MSHCP: AC	Absent; no perennial water.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Phrynosoma blainvillii 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, S4 BLM: S MSHCP: AC	Moderate; potentially suitable habitat, four documented occurrences within 5 mi. (1991, 3.9 mi. S; 2003, 4.9 mi. SSE; 2004, 3.1 mi. SSE; 2005, 2.6 mi. SE), not observed during surveys.
Salvadora hexalepis virgultea Coast patch-nosed snake	Shrublands, washes, sandy flats, rocky areas; Santa Barbara county through southwest Calif., to northwest Baja Calif. Diurnal.	Fed: None Calif: SSC, S3	Not expected; no or marginal suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
Thamnophis hammondii Two-striped gartersnake	Usually in or near perennial fresh water & adjacent riparian habitat, pools in streams. SW CA & NW Baja California. Usually in or near perennial fresh water & adjacent riparian habitat, pools in streams. SW CA & NW Baja California. Primarily aquatic. Diurnal. Also active at night and at dusk during hot weather in some areas. Can be active most of the year depending on weather conditions. Has been found from January to November.	Fed: None Calif: SSC, S3S4 BLM: S USFS: S	Absent; no suitable habitat, no documented occurrences within 5 mi., not observed during surveys.
Birds			
Accipiter cooperii 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. CNDDB only tracks nesting.	Fed: None Calif: WL, S4 MSHCP: AC	Occurs (foraging), moderate (nesting); observed on the site during surveys.
Aechmophorus clarkii Clark's grebe	Requires large, open waters for courtship, feeding, and flocking, and extensive beds of tall, emergent vegetation such as tules or cattails for nesting; generally nests in colonies. Not tracked in CNDDB.	Fed: BCC Calif: None	Absent (foraging and nesting); no suitable habitat, not observed during surveys.
Agelaius tricolor Tricolored blackbird	Breeds colonially in freshwater marshes, nomadic among marshes and fields in winter; almost completely endemic to Calif. Year-round resident in southern California range. CNDDB only tracks nesting.	Fed: BCC Calif: THR, SSC, S2 BLM: S MSHCP: AC	Absent (nesting), not expected (foraging); no suitable nesting habitat, one documented occurrence (nesting) within 5 mi. (2013, San Timoteo Cyn, 2.5 mi. W), multiple eBird observations (San Timoteo Cyn 1980-2013, 2.2 to 3.5 mi. W), not observed during surveys.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	Sparse, mixed chaparral, scrub, rocky, brushy slopes. Central California to Baja California. Year-round resident in southern California range.	Fed: None Calif: WL, S4 MSHCP: AC	Low to moderate (foraging and nesting); potentially marginal habitat, five documented occurrences within 5 mi. (2002-2016, closest is immediately adjacent to the property on the west), several eBird observations within 5 mi., not observed during surveys.
Aquila chrysaetos 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). CNDDB tracks nesting and wintering.	Fed: BGEPA, BCC Calif: FP, WL, S3 BLM: S MSHCP: AC	Absent (nesting), not expected (foraging); no suitable nesting habitat, potentially suitable foraging habitat but avoids human disturbance, one documented occurrence within 5 mi. (1980, San Timoteo Cyn, 0.9 mi. W), eBird observations in San Timoteo Cyn (1971-2010, 2.2 mi. W), not observed during surveys.
Ardea alba Great egret	Brackish and freshwater marshes, estuary, riparian forest, wetland. Colonial nester in large trees. Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes. CNDDB only tracks nesting colonies.	Fed: None Calif: SA, S4	Occurs (fly over), absent (nesting), not expected (foraging). Fly over observed during surveys, no suitable nesting habitat, no or marginal foraging habitat.
Artemisiospiza belli belli Bell's sage sparrow	Sage scrub and chaparral communities. Nests mainly in shrubs, also in grass, and occasionally on ground under shrub. Found in coastal sage scrub in south of range. Central Washington southward to Baja California, Mexico. Year-round resident in southern CA.	Fed: BCC Calif: WL, S3 MSHCP: AC	Low (foraging and nesting); no or marginal habitat, no documented occurrences within 5 mi., several eBird records, mainly in Badlands to the south, not observed during surveys.
Asio otus Long-eared owl	Conifer, oak, riparian, pinyon-juniper, and desert woodlands that are open or adjacent to grasslands, meadows, or shrublands. Most of CA *except* Central Valley, coastal LA and Orange Co., western Imperial Co., and central Riverside Co. Very limited breeding range in southern CA. CNDDB only tracks nesting.	Fed: BCC Calif: SSC, S3?	Low (foraging and nesting); no or marginal habitat, no documented occurrences (nesting) within 5 mi., one eBird record within 5 mi. (Badlands to south), not observed during surveys but is nocturnal.
Athene cunicularia Burrowing owl	Nests in rodent burrows, usually in grasslands. Forages in open habitat; increasingly uncommon in S CA. Occurs through W US/Mex. Sparse in desert scrub but common around irrigated lands. CNDDB tracks burrow sites and some wintering sites.	Fed: BCC Calif: SSC, S2 BLM: S MSHCP: AC c	Absent; potentially suitable habitat, no documented occurrences within 5 mi., not observed during protocol breeding season surveys.
Baeolophus inornatus Oak titmouse	Open pine or mixed oak-pine forest, juniper woodland, pinyon or juniper mixed with Joshua trees. Not migratory. CNDDB only tracks nesting.	Fed: BCC Calif: none	Low (foraging and nesting); no or marginal habitat, no documented occurrences (nesting) within 5 mi., multiple eBird records within 5mi., not observed during surveys.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Buteo regalis Ferruginous hawk	Open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. Great Basin grassland and scrub, pinyon and juniper woodlands, valley and foothill grassland. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles. Does not breed in southern CA.	Fed: BCC Calif: WL, S3S4 MSHCP: AC	Moderate to high (foraging), absent (nesting); potentially suitable habitat, no documented occurrences within 5 mi., several eBird records within 5 mi.(closest is 0.35 mi. SE, from 2021), not observed during surveys.
Buteo swainsoni 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. CNDDB only tracks nesting.	Fed: BCC Calif: THR, S4 BLM: S MSHCP: AC	Not expected (foraging), absent (nesting); outside current geographic range, may be seen in migration, one documented occurrence (nesting) within 5 mi. (1900, Yucaipa area exact location unknown, possibly extirpated), not observed during surveys.
Campylorhynchus brunneicapillus sandiegensis Coastal cactus wren	Desert scrub and coastal sage scrub with cactus patches; Southern CA and northwestern Baja. Non-migratory. Pairs defend territories throughout the year. Limited to San Diego and Orange Cos.	Fed: BCC Calif: SSC, S2 USFS: S MSHCP: AC	Absent (foraging and nesting); no suitable habitat, outside geographic range, no documented occurrences within 5 mi., not observed during surveys.
Chamaea fasciata Wrentit	Chaparral, oak woodland, shrublands, western CA, northwestern Baja, western Oregon. Year-round resident in southern CA range. CNDDB does not track this species.	Fed: BCC Calif: None	Occurs (adjacent area), low (foraging and nesting); no or marginal habitat, many eBird records within 5 mi..
Coccyzus americanus occidentalis 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. CNDDB only tracks nesting.	Fed: THR, BCC Calif: END, S1 BLM: S USFS: S MSHCP: AC a	Absent (foraging and nesting); no suitable habitat, no documented occurrences (nesting) within 5 mi., not observed during surveys.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Contopus cooperi Olive-sided flycatcher	Uncommon to common summer breeding resident throughout CA (except deserts, Central Valley, other lowland valleys), variety of forest/woodland habitats below 2800 m (9000 ft). Preferred nesting habitats include mixed conifer, montane hardwood-conifer, Douglas-fir, redwood, red fir, and lodgepole pine. Requires large trees (usually conifers) for nesting and lofty perches for singing posts and hunting perches. CNDDB only tracks nesting	Fed: BCC Calif: SSC, S3	Low (foraging and nesting); no or marginal habitat, no documented occurrences within 5 mi., a few eBird records within 5 mi., not observed during surveys.
Cypseloides niger 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. CNDDB only tracks nesting.	Fed: BCC Calif: SSC, S3 MSHCP: AC	Not expected (foraging), absent (nesting); no or marginal foraging habitat, no suitable nesting habitat, no documented occurrences (nesting) within 5 mi., few eBird records within 5 mi., not observed during surveys.
Dryobates (Picoides) nuttallii 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 CNDDB.	Fed: BCC Calif: None	Moderate to high (foraging and nesting); potentially suitable habitat, many eBird records within 5 mi., not observed during surveys.
Elanus leucurus White-tailed kite	Breeds in woodlands and riparian forests, forages over open terrain; Pacific Coast (Calif, northern Baja, Oregon), other scattered localities. Year-round resident in southern CA range. CNDDB only tracks nesting.	Fed: None Calif: FP, S3S4 BLM: S MSHCP: AC	Low to moderate (foraging), low (nesting); potentially suitable or marginal habitat, three documented occurrences (nesting) within 5 mi. (2006, 2.6 mi. NNE; 2016, 1.2 mi. W; 2016, 1.9 mi. W), many eBird records within 5 mi., not observed during surveys.
Empidonax traillii extimus 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. CNDDB only tracks nesting.	Fed: END Calif: END, S3 MSHCP: AC a	Absent; no suitable habitat, two documented occurrences within 5 mi. (both 2004, Cooper's Creek, 3.0 and 3.3 mi. SSE), not observed during surveys.
Eremophila alpestris actia California horned lark	Variety of open habitats with low growing vegetation or bare ground, grasslands, rangelands, "bald" hills, mtn. meadows, open coastal plains, fallow fields, alkali flats. Within coastal Sonoma Co. to San Diego Co., San Joaquin Valley & E to foothills.	Fed: None Calif: WL, S4 MSHCP: AC	Occurs (foraging), high (nesting); observed foraging on the site during surveys.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Haliaeetus leucocephalus 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. CNDDB tracks nesting and wintering.	Fed: Delisted, BGEPA, BCC Calif: END, FP, S3 MSHCP: AC BLM: S USFS: S	Absent (foraging and nesting); no suitable habitat, no documented occurrences within 5 mi. (nesting and wintering), a few eBird records within 5 mi. (near water), not observed during surveys.
Icteria virens 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. CNDDB only tracks nesting.	Fed: None Calif: SSC, S4 MSHCP: AC	Absent (foraging and nesting); no suitable habitat, one documented occurrence within 5 mi. (2016, San Timoteo Cyn, 1.1 mi. SW), a few eBird records within 5 mi. (San Timoteo Cyn and Oak Valley Golf Course), not observed during surveys.
Lanius ludovicianus Loggerhead shrike	Open areas where small trees, shrubs, and fences can provide suitable perches. Nests in small trees and large shrubs. Throughout much of North America. CNDDB only tracks nesting.	Fed: BCC Calif: SSC, S4 MSHCP: AC	Moderate (foraging and nesting); potentially suitable habitat, one documented occurrence (nesting) within 5 mi. (2003, 4.8 mi. SE), few eBird records within 5 mi., not observed during surveys.
Plegadis chihi White-faced ibis	Freshwater wetlands, shallow lakes, wet meadows, flooded pastures and croplands. Nests in dense, fresh emergent wetland. Salton Sea, local winter visitor along coast, uncommon elsewhere in southern CA and Central Valley. CNDDB only tracks nesting colonies.	Fed: None Calif: WL, S3S4 MSHCP: AC	Absent (foraging and nesting); no suitable habitat, no documented occurrences (nesting) within 5 mi., few eBird records within 5 mi., not observed during surveys.
Polioptila californica californica Coastal California gnatcatcher	Sage scrub, also chaparral, grasslands, riparian adjacent to or mixed with sage scrub below 2,500 ft elevation. S Ventura Co. to LA, Orange, Riv., San Bern., San D. Cos into Baja CA, Mexico.	Fed: THR Calif: SSC, S2 MSHCP: AC	Not expected (foraging and nesting); potentially marginal habitat, no documented occurrences within 5 mi., not observed during surveys.
Progne subis Purple martin	Inhabits woodlands, low elevation coniferous forest of Douglas-fir, ponderosa pine, and Monterey pine. Nests in old woodpecker cavities mostly; also in human-made structures. Nest often located in tall, isolated tree/snag. Broadleaved upland forest, lower montane coniferous forest. CNDDB only tracks nesting.	Fed: None Calif: SSC, S3 MSHCP: AC	Not expected (foraging and nesting); potentially marginal habitat, one documented occurrence (nesting) within 5 mi. (1910, Beaumont area, exact location unknown), not observed during surveys.
Selasphorus sasin 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	Low to moderate (foraging), absent (nesting); potentially suitable foraging habitat, outside breeding range, several eBird records within 5 mi., not observed during surveys.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Setophaga petechia 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, S3	Not expected (foraging and nesting); no or marginal habitat, one documented occurrence (nesting) within 5 mi. (2016, San Timoteo Cyn, 1.3 mi. SW), not observed during surveys.
Spinus lawrencei 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, S4	Low to moderate (foraging and nesting); no or marginal habitat, no documented occurrences (nesting) within 5 mi., many eBird records within 5 mi., not observed during surveys.
Spizella atrogularis Black-chinned sparrow	Chaparral, sagebrush, arid scrublands, and brushy hillsides. Present during breeding season only in California. Not tracked in the CNDDB.	Fed: BCC Calif: None	Low (foraging and nesting); no or marginal habitat, several eBird records within 5 mi., not observed during surveys.
Toxostoma redivivum California thrasher	Chaparral. Coastal and foothill areas of California and NW Baja California, Mexico. Resident throughout its range. Not tracked in CNDDB.	Fed: BCC Calif: none	Low (foraging and nesting); no or marginal habitat, many eBird records within 5 mi., not observed during surveys.
Vireo bellii pusillus Least Bell's vireo	Riparian woodlands, bottomlands. N Mex. & Baja CA into S CA & the S mid-western US. CNDDB only tracks nesting.	Fed: END Calif: END, S3 MSHCP: AC a	Absent (foraging and nesting); no suitable habitat, one documented occurrence (nesting) within 5 mi. (2013, San Timoteo Cyn, 1.4 mi. SW), not observed during surveys.
Xanthocephalus xanthocephalus Yellow-headed blackbird	Marsh, swamp, wetland. Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects are abundant. CNDDB only tracks nesting.	Fed: None Calif: SSC, S3	Absent (foraging and nesting); no suitable habitat, no documented occurrences (nesting) within 5 mi., a few eBird records within 5 mi. (most in San Timoteo Cyn), not observed during surveys.
Mammals			
Antrozous pallidus 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	Moderate (foraging and roosting); potentially suitable foraging and roosting habitat, no documented occurrences within 5 mi.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Chaetodipus californicus femoralis Dulzura pocket mouse	Variety of habitats including coastal scrub, chaparral & grassland. Attracted to grass-chaparral edges. Chaparral, coastal scrub, valley and foothill grassland.	Fed: None Calif: SSC, S3	Moderate; potentially suitable habitat, no documented occurrences within 5 mi.
Chaetodipus (Perognathus) fallax fallax Northwestern San Diego pocket mouse	Sandy herbaceous areas, usually in association with rocks or coarse gravel, chaparral, coastal scrub, grasslands. SW CA & NW Baja California (inland to San Bernardino Valley).	Fed: None Calif: SSC, S3S4 MSHCP: AC	High; potentially suitable habitat, five documented occurrences within 5 mi. (1992-2016, closest is immediately adjacent to the site on the west).
Corynorhinus townsendii 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	Moderate (foraging and roosting); potentially suitable foraging and roosting habitat, no documented occurrences within 5 mi.
Dipodomys merriami parvus San Bernardino kangaroo rat	Alluvial floodplains and adjacent upland habitats within the San Bernardino, Menifee, and San Jacinto valleys, Riversidean alluvial fan sage scrub.	Fed: END Calif: CanE, SSC, S1 MSHCP: AC c	Not expected; no suitable habitat, no documented occurrences within 5 mi.
Dipodomys stephensi Stephens' kangaroo rat	Sparse, gently sloping grassland, sometimes at margins of cultivated or disturbed lands; prefers grassland dominated by forbs rather than annual grasses, prefers sparse perennial vegetation; firm soil for burrowing (not too hard or too sandy); may use abandoned gopher burrows; W Riverside Co. and adjacent San Diego Co. San Bernardino County occurrences extirpated. No critical habitat has been designated.	Fed: THR Calif: THR, S3 MSHCP: AC	High; potentially suitable habitat, five documented occurrences within 5 mi. (1989-1999, closest is 2.9 mi. SE).
Eumops perotis californicus 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	Moderate (foraging and roosting); potentially suitable foraging and roosting habitat, no documented occurrences within 5 mi.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Glaucomys oregonensis (sabrinus) californicus San Bernardino flying squirrel	Mature mixed conifer forest (white fir, Jeffrey pine, & black oak) with large trees & snags, closed canopy, downed woody debris, & riparian areas. 4000-8500 ft. elev. San Bernardino & San Jacinto Mt. Ranges (may be extirpated in the San Jacinto Mts.).	Fed: None Calif: SSC, S1S2 MSHCP: NAC e USFS: S	Absent; no suitable habitat, well below elevation range, outside geographic range, no documented occurrences within 5 mi.
Lasiurus xanthinus 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	Low (foraging and roosting); no or marginal habitat, two documented occurrences within 5 mi. (1989, Highland Springs area [NE of Beaumont], exact location unknown; 1991, Yucaipa area, exact location unknown).
Leptonycteris (curasoae) yerbabuenae Lesser long-nosed bat	Nectar, pollen, fruit eating bat; primarily feeding on agaves, saguaro, organ pipe cactus. Mojavean and Sonoran desert scrub, Upper Sonoran scrub. Caves, mines used as day roosts. Caves, mines, rock crevices, trees and shrubs, abandoned buildings used as night roosts. No maternity roosts known from CA.	Fed: Delisted Calif: SSC, S1	Absent (foraging and nesting), no suitable habitat, one documented occurrence within 5 mi. (1993, Yucaipa area, exact location unknown, probably a vagrant).
Lepus californicus bennettii 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: SA, S3S4 MSHCP: AC	Moderate to high; potentially suitable habitat, two documented occurrences within 5 mi. (2003, 4.9 mi. SSE, 2004, 3.1 & 3.7 mi. SSE), not observed during surveys.
Neotamias speciosus speciosus 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, S2	Absent; no suitable habitat, well below elevation range, no documented occurrences within 5 mi., not observed during surveys.
Neotoma lepida intermedia San Diego desert woodrat	Arid shrublands, rocky outcrops, & crevices. Cismontane CA., San Luis Obispo to San Diego Co. & NW Baja California. 0-7000 ft. elev. Variety of shrub and desert habitats, primarily associated with rock outcroppings, boulders, cacti, or areas of dense undergrowth. Constructs elaborate middens of sticks and other materials.	Fed: None Calif: SSC, S3S4 MSHCP: AC	Low; potentially marginal habitat, one documented occurrence within 5 mi. (2003, 4.4 mi. SE), no sign (middens) observed during surveys.

Species	Habitat and Distribution	Conservation Status	Potential for Occurrence
Nyctinomops femorosaccus 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.
Onychomys torridus ramona 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; no or marginal habitat, one documented occurrence within 5 mi. (1938, 2.8 mi. SSW).
Perognathus longimembris brevinasus Los Angeles pocket mouse	Nocturnal, active Apr-Aug. Annual grassland, sage scrub, alluvial sage scrub. S California from Rancho Cucamonga (W boundary), San Gorgonio (E), Aguanga & Oak Grove, San Diego (S). Open ground with fine, sandy soils.	Fed: None Calif: SSC, S1S2 MSHCP: AC c	Moderate; potentially suitable habitat, three documented occurrences within 5 mi. (1939, Beaumont area, exact location unknown; 1940, Eden Springs, exact location unknown; 2016, 3.2 mi. ESE).
Puma concolor 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 MSHCP: AC	Low; potentially marginal habitat with adjacent roads and development. No sign observed during surveys.
Taxidea taxus 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 sign (burrows, diggings) observed during surveys.

References: CDFW (2023b, 2023c), USFWS (2023a), Dudek (2003), RCA (2022); Cornell (2023); eBird (2023)

"Documented occurrences" refers to species occurrences in the California Natural Diversity Database (CNDDB) unless otherwise noted. For plant species that are not tracked in the CNDDB, records from the Consortium of California Herbaria (CCH) may be used (only CCH records that include map coordinates are utilized). 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" means 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.
CanT:	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.

Western Riverside County Multiple Species Habitat Conservation Plan: Applied to species that are covered under state and federal permits for the MSHCP.

NAC: Species Not Adequately Conserved
AC: Species Adequately Conserved
(a): Surveys may be required for these species as part of wetlands mapping as described in Section 6.1.2 of the MSHCP.
(b): Surveys may be required for these species within Narrow Endemic Plant Species survey area as described in Section 6.1.3 of the MSHCP.
(c): Surveys may be required for these species within locations shown on survey maps as described in Section 6.3.2 of the MSHCP.

(d): Surveys may be required for these species within Criteria Area as described in Section 6.3.2 of the MSHCP.
(e): These Covered Species will be considered Adequately Conserved when conservation requirements identified in species-specific conservation objectives have been met. Species-specific conservation objectives for these species are presented in Section 9.0 of the MSHCP. Please refer to Table 9-3 of the MSHCP for specific conservation objectives that must be met for these species prior to including them on the list of Covered Species Adequately Conserved.
(f): These Covered Species will be considered Adequately Conserved when a Memorandum of Understanding is executed with the U.S. Forest Service that addresses management for these species on Forest Service Land. Refer to Table 9-3 of the MSHCP.
No entry: Not a Covered 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: TREE SURVEY DATA

Note that trees with Tags 104 through 159 and 313 through 336 are in areas that were removed from the final Project boundary after the survey was conducted. These trees are not included in the data below. Based on previous communications with the City of Calimesa, trees that are regulated under Chapter 18.80 and Section 18.70.120 of the Calimesa Zoning Code consist of oaks with DBH ≥ 2 inches, clusters of four or more oaks, and non-oak trees with DBH ≥ 24 inches. These regulated trees are noted by an asterisk in the Tree Tag column.

No.	Tree Tag	Species Common Name	Species Scientific Name	Est. Height (feet)	DBH (inches)	Health Rating	Latitude (degrees)	Longitude (degrees)	Comments
1	160*	Deodar Cedar	*Cedrus deodara*	60	29	Fair	33.973562	-117.039628	
2	161*	Olive	*Olea europaea*	25	35	Fair	33.973635	-117.039367	Multi Trunk
3	162	Brazilian Pepper	*Schinus terebinthifolius*	10	16	Good	33.973586	-117.039402	Multi Trunk
4	163	Olive	*Olea europaea*	15	14	Fair	33.973568	-117.039263	Multi Trunk
5	164	Brazilian Pepper	*Schinus terebinthifolius*	20	20	Dying	33.973505	-117.039202	Multi Trunk
6	165	Olive	*Olea europaea*	12	9	Good	33.973561	-117.039186	Multi Trunk
7	166	Olive	*Olea europaea*	15	14	Dying	33.973615	-117.039157	Multi Trunk
8	167	Olive	*Olea europaea*	14	17	Fair	33.973461	-117.039071	Multi Trunk
9	168	Olive	*Olea europaea*	16	11	Fair	33.973536	-117.039039	Multi Trunk
10	169	Cootamundra Wattle	*Acacia baileyana*	14	6	Good	33.973615	-117.038922	Multi Trunk
11	170	Olive	*Olea europaea*	13	8	Good	33.973565	-117.038867	Multi Trunk
12	171	Olive	*Olea europaea*	15	15	Good	33.973461	-117.038738	Multi Trunk
13	172	Olive	*Olea europaea*	17	10	Good	33.973509	-117.038663	Multi Trunk
14	173*	Unidentified Ornamental		50	30	Good	33.973474	-117.038668	Multi Trunk
15	174	Olive	*Olea europaea*	20	14	Good	33.973498	-117.038614	Multi Trunk
16	175	Olive	*Olea europaea*	30	23	Good	33.973584	-117.038689	Multi Trunk
17	176	Brazilian Pepper	*Schinus terebinthifolius*	14	11	Dying	33.973678	-117.038663	Multi Trunk
18	177*	Scrub Oak	*Quercus berberidifolia*	11	9	Good	33.973713	-117.038598	Multi Trunk

No.	Tree Tag	Species Common Name	Species Scientific Name	Est. Height (feet)	DBH (inches)	Health Rating	Latitude (degrees)	Longitude (degrees)	Comments
19	178	Aleppo Pine	*Pinus halepensis*	30	7	Fair	33.973740	-117.038749	
20	179	Brazilian Pepper	*Schinus terebinthifolius*	12	11	Dying	33.973861	-117.038752	Multi Trunk
21	180	Unidentified Ornamental		14	3	Good	33.973854	-117.038786	Multi Trunk
22	181	Unidentified Ornamental		7	2	Good	33.973888	-117.038759	
23	182	Olive	*Olea europaea*	25	8	Dead	33.973908	-117.038786	
24	183	Unidentified Ornamental		11	2.5	Fair	33.973915	-117.038757	Multi Trunk
25	184	Cootamundra Wattle	*Acacia baileyana*	12	4	Good	33.973919	-117.038649	Multi Trunk
26	185	Cootamundra Wattle	*Acacia baileyana*	9	2	Good	33.973963	-117.038728	
27	186	Cootamundra Wattle	*Acacia baileyana*	12	2.5	Good	33.973969	-117.038763	
28	187	Cootamundra Wattle	*Acacia baileyana*	16	6	Good	33.974007	-117.038801	
29	188	Olive	*Olea europaea*	20	18	Good	33.974059	-117.038645	Multi Trunk
30	189	African Sumac	*Searsia lancea*	15	14	Good	33.974036	-117.038554	Multi Trunk
31	190	Olive	*Olea europaea*	16	15	Good	33.974094	-117.038480	Multi Trunk
32	191	Olive	*Olea europaea*	20	20	Good	33.974167	-117.038583	Multi Trunk
33	192*	Scrub Oak	*Quercus berberidifolia*	10	7	Good	33.974327	-117.038306	Multi Trunk
34	193*	Scrub Oak	*Quercus berberidifolia*	10	8	Fair	33.974352	-117.038338	Insects, Multi Trunk
35	194*	Scrub Oak	*Quercus berberidifolia*	5	-	Poor	33.974319	-117.038391	Regrowth from cut/broken tree
36	195*	Scrub Oak	*Quercus berberidifolia*	15	15	Fair	33.974320	-117.038477	Multi Trunk
37	196*	Scrub Oak	*Quercus berberidifolia*	12	8	Fair	33.974259	-117.038578	Multi Trunk
38	197*	Scrub Oak	*Quercus berberidifolia*	13	8.5	Good	33.974262	-117.038656	Multi Trunk
39	198*	Scrub Oak	*Quercus berberidifolia*	11	7.5	Fair	33.974347	-117.038625	
40	199*	Scrub Oak	*Quercus berberidifolia*	6	8	Fair	33.974250	-117.038710	Multi Trunk
41	200*	Scrub Oak	*Quercus berberidifolia*	11	9.5	Good	33.974215	-117.038768	Multi Trunk
42	201*	Scrub Oak	*Quercus berberidifolia*	20	6.5	Fair	33.974248	-117.038837	

No.	Tree Tag	Species Common Name	Species Scientific Name	Est. Height (feet)	DBH (inches)	Health Rating	Latitude (degrees)	Longitude (degrees)	Comments
43	202*	Scrub Oak	*Quercus berberidifolia*	15	5.5	Fair	33.974252	-117.038832	
44	203*	Scrub Oak	*Quercus berberidifolia*	10	4.5	Good	33.974243	-117.038855	
45	204	Olive	*Olea europaea*	30	14	Good	33.974159	-117.038731	
46	205	Cootamundra Wattle	*Acacia baileyana*	12	4	Good	33.974173	-117.038959	
47	206	Gum Bumelia	*Sideroxylon lanuginosum*	8	6	Fair	33.974165	-117.039062	Multi Trunk
48	207	Cootamundra Wattle	*Acacia baileyana*	14	2.5	Good	33.974205	-117.039098	
49	208	Gum Bumelia	*Sideroxylon lanuginosum*	9	6	Fair	33.974201	-117.039142	Multi Trunk
50	209	Gum Bumelia	*Sideroxylon lanuginosum*	8	6.5	Fair	33.974193	-117.039171	Multi Trunk
51	210	Gum Bumelia	*Sideroxylon lanuginosum*	7.5	4	Fair	33.974213	-117.039210	
52	211	Blue Elderberry	*Sambucus mexicana*	9.5	5.5	Fair	33.974275	-117.039157	
53	212	Ornamental Pine/Fir	*Pinus/Abies species*	25	13	Good	33.974276	-117.039238	
54	213*	Blue Elderberry	*Sambucus mexicana*	12	24	Poor	33.974457	-117.039921	Regrowth
55	214*	Scrub Oak	*Quercus berberidifolia*	8.5	5	Good	33.974512	-117.039854	
56	215	Blue Elderberry	*Sambucus mexicana*	10	20	Fair	33.974534	-117.039799	
57	216	Blue Elderberry	*Sambucus mexicana*	12	22	Fair	33.974557	-117.039979	
58	217	Blue Elderberry	*Sambucus mexicana*	13	9	Fair	33.975040	-117.039206	
59	218*	Scrub Oak	*Quercus berberidifolia*	6.5	4	Fair	33.975113	-117.039126	
60	219*	Scrub Oak	*Quercus berberidifolia*	5	0.5	Fair	33.975116	-117.039114	
61	220*	Scrub Oak	*Quercus berberidifolia*	6	5.5	Fair	33.975101	-117.039066	
62	221*	Scrub Oak	*Quercus berberidifolia*	10	4.5	Fair	33.975135	-117.039038	
63	222*	Scrub Oak	*Quercus berberidifolia*	8.5	6.5	Good	33.975109	-117.039025	
64	223*	Scrub Oak	*Quercus berberidifolia*	5	3	Fair	33.975090	-117.039023	
65	224*	Scrub Oak	*Quercus berberidifolia*	10.5	7.5	Fair	33.975072	-117.039023	
66	225*	Scrub Oak	*Quercus berberidifolia*	7	3.5	Poor	33.975074	-117.038983	

No.	Tree Tag	Species Common Name	Species Scientific Name	Est. Height (feet)	DBH (inches)	Health Rating	Latitude (degrees)	Longitude (degrees)	Comments
67	226*	Scrub Oak	*Quercus berberidifolia*	5.5	4	Fair	33.975027	-117.039195	
68	227*	Scrub Oak	*Quercus berberidifolia*	6	5	Fair	33.975098	-117.038927	
69	228*	Scrub Oak	*Quercus berberidifolia*	7	4.5	Fair	33.975143	-117.038955	Inactive bird nest
70	229*	Scrub Oak	*Quercus berberidifolia*	6	3	Fair	33.975170	-117.038936	
71	230*	Scrub Oak	*Quercus berberidifolia*	8	2	Poor	33.975186	-117.038987	
72	231*	Scrub Oak	*Quercus berberidifolia*	5.5	3	Poor	33.975173	-117.038987	
73	232*	Scrub Oak	*Quercus berberidifolia*	7	3	Poor	33.975322	-117.038857	
74	233*	Scrub Oak	*Quercus berberidifolia*	11	8.5	Good	33.975488	-117.039020	
75	234	Blue Elderberry	*Sambucus mexicana*	13	4	Fair	33.975475	-117.038898	
76	235*	Scrub Oak	*Quercus berberidifolia*	15	10	Good	33.975545	-117.038809	
77	236*	Scrub Oak	*Quercus berberidifolia*	12	9.5	Fair	33.975531	-117.038788	Inactive bird nest
78	237*	Scrub Oak	*Quercus berberidifolia*	10	9	Fair	33.975493	-117.038771	
79	238*	Scrub Oak	*Quercus berberidifolia*	7	3.5	Fair	33.975520	-117.038714	
80	239*	Scrub Oak	*Quercus berberidifolia*	17	9	Good	33.975486	-117.038649	
81	240*	Scrub Oak	*Quercus berberidifolia*	10	8	Fair	33.975548	-117.038677	
82	241*	Scrub Oak	*Quercus berberidifolia*	15	9	Fair	33.975591	-117.038697	
83	242	Blue Elderberry	*Sambucus mexicana*	11	7	Poor	33.975595	-117.038548	
84	243*	Scrub Oak	*Quercus berberidifolia*	22	13	Good	33.975596	-117.038607	
85	244*	Scrub Oak	*Quercus berberidifolia*	10	7.5	Fair	33.975565	-117.038558	
86	245*	Scrub Oak	*Quercus berberidifolia*	11	9	Fair	33.975551	-117.038486	
87	246*	Scrub Oak	*Quercus berberidifolia*	14	10	Fair	33.975515	-117.038440	
88	247*	Scrub Oak	*Quercus berberidifolia*	12	7.5	Fair	33.975488	-117.038445	
89	248	Blue Elderberry	*Sambucus mexicana*	12	5	Fair	33.975460	-117.038341	
90	249	Blue Elderberry	*Sambucus mexicana*	15	10	Fair	33.975433	-117.038215	Regrowth

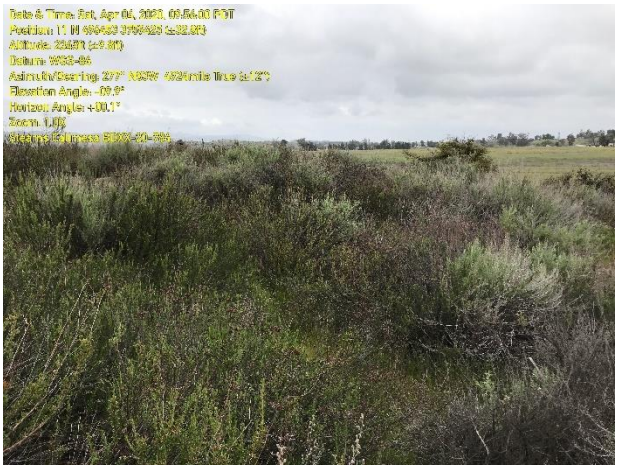
No.	Tree Tag	Species Common Name	Species Scientific Name	Est. Height (feet)	DBH (inches)	Health Rating	Latitude (degrees)	Longitude (degrees)	Comments
91	250*	Scrub Oak	*Quercus berberidifolia*	14	10	Good	33.975443	-117.038060	Cluster
92	251*	Scrub Oak	*Quercus berberidifolia*	15	9.5	Good	33.975525	-117.037972	Inaccessible to tag
93	252	Blue Elderberry	*Sambucus mexicana*	10	6	Fair	33.975593	-117.037914	
94	253*	Scrub Oak	*Quercus berberidifolia*	4	0.5	Fair	33.975620	-117.037943	
95	254*	Scrub Oak	*Quercus berberidifolia*	5	0.5	Fair	33.975620	-117.037885	
96	255*	Scrub Oak	*Quercus berberidifolia*	11	8	Fair	33.975614	-117.037841	
97	256*	Scrub Oak	*Quercus berberidifolia*	7	5	Fair	33.975656	-117.037858	Inactive bird nest
98	257*	Scrub Oak	*Quercus berberidifolia*	7	5.5	Fair	33.975724	-117.037876	Inaccessible to tag
99	258*	Scrub Oak	*Quercus berberidifolia*	9.5	8.5	Good	33.975789	-117.037870	Inaccessible to tag
100	259*	Scrub Oak	*Quercus berberidifolia*	11	9	Fair	33.975777	-117.037775	
101	260*	Scrub Oak	*Quercus berberidifolia*	10.5	8.5	Fair	33.975675	-117.037720	Cluster
102	261*	Scrub Oak	*Quercus berberidifolia*	9.5	4.5	Good	33.975656	-117.037645	
103	262*	Scrub Oak	*Quercus berberidifolia*	11	8	Fair	33.975596	-117.037607	
104	263*	Olive	*Olea europaea*	35	48	Good	33.973991	-117.039063	
105	264	Olive	*Olea europaea*	25	16	Good	33.974071	-117.039323	
106	265*	Olive	*Olea europaea*	20	30	Good	33.974142	-117.039467	
107	266*	Olive	*Olea europaea*	30	38	Good	33.973891	-117.039402	
108	267	Olive	*Olea europaea*	25	20	Good	33.973880	-117.039544	
109	268*	Olive	*Olea europaea*	30	50	Good	33.973915	-117.039614	
110	269*	Olive	*Olea europaea*	25	24	Dead	33.973872	-117.039668	
111	270	Olive	*Olea europaea*	10	4	Good	33.973793	-117.039701	
112	271	Olive	*Olea europaea*	15	5	Good	33.973777	-117.039761	
113	272*	Olive	*Olea europaea*	32	30	Good	33.973870	-117.039743	
114	273*	Olive	*Olea europaea*	25	30	Good	33.973914	-117.039790	

No.	Tree Tag	Species Common Name	Species Scientific Name	Est. Height (feet)	DBH (inches)	Health Rating	Latitude (degrees)	Longitude (degrees)	Comments
115	274	Olive	*Olea europaea*	20	22	Good	33.973820	-117.039920	
116	275	Olive	*Olea europaea*	20	20	Good	33.973770	-117.039898	
117	276	Unidentified Palm	*Washingtonia species*	24	13	Fair	33.974049	-117.041081	
118	277	Deodar Cedar	*Cedrus deodara*	30	13	Fair	33.973430	-117.041001	
119	278	Deodar Cedar	*Cedrus deodara*	30	12	Fair	33.973444	-117.041093	
120	279	Deodar Cedar	*Cedrus deodara*	35	13	Fair	33.973462	-117.041162	
121	280	California Fan Palm	*Washingtonia filifera*	25	16	Fair	33.973549	-117.041253	
122	281*	Ornamental Pine/Fir	*Pinus/Abies species*	100	48	Good	33.973556	-117.041522	
123	282*	Deodar Cedar	*Cedrus deodara*	45	24	Good	33.973570	-117.041615	
124	283*	Deodar Cedar	*Cedrus deodara*	50	30	Good	33.973592	-117.041680	
125	284	Ornamental Juniper	*Juniperus species*	17	10	Dead	33.974356	-117.040735	
126	285*	Unidentified Ornamental		20	40	Fair	33.972154	-117.039935	
127	286*	Unidentified Ornamental		20	40	Fair	33.972237	-117.040038	
128	287*	Unidentified Ornamental		25	36	Fair	33.972305	-117.040130	
129	288*	Unidentified Ornamental		25	50	Fair	33.972382	-117.040229	
130	289*	Olive	*Olea europaea*	23	33	Good	33.972500	-117.040313	
131	290*	Olive	*Olea europaea*	25	35	Good	33.972585	-117.040464	
132	291*	Unidentified Ornamental		21	38	Fair	33.972606	-117.040499	
133	292*	Unidentified Ornamental		20	36	Fair	33.972684	-117.040592	
134	293*	California Fan Palm	*Washingtonia filifera*	30	26	Good	33.972787	-117.040795	
135	294*	Unidentified Ornamental		24	48	Fair	33.972826	-117.040786	
136	295*	Unidentified Ornamental		20	48	Good	33.972900	-117.040876	
137	296*	Unidentified Ornamental		23	32	Fair	33.972968	-117.040967	
138	297*	California Fan Palm	*Washingtonia filifera*	35	24	Good	33.973074	-117.041188	

No.	Tree Tag	Species Common Name	Species Scientific Name	Est. Height (feet)	DBH (inches)	Health Rating	Latitude (degrees)	Longitude (degrees)	Comments
139	298	California Fan Palm	*Washingtonia filifera*	20	16	Good	33.973084	-117.041264	
140	299*	California Fan Palm	*Washingtonia filifera*	35	24	Good	33.973099	-117.041258	
141	300*	California Fan Palm	*Washingtonia filifera*	30	24	Good	33.973130	-117.041284	
142	301	California Fan Palm	*Washingtonia filifera*	25	16	Good	33.973184	-117.041347	
143	302	California Fan Palm	*Washingtonia filifera*	30	22	Good	33.973214	-117.041365	
144	303	Chinese Elm	*Ulmus parvifolia*	20	9	Fair	33.976098	-117.044681	
145	304	Chinese Elm	*Ulmus parvifolia*	20	5	Fair	33.976074	-117.044722	
146	305	Chinese Elm	*Ulmus parvifolia*	15	4	Good	33.976000	-117.044714	
147	306	Chinese Elm	*Ulmus parvifolia*	17	4	Fair	33.975987	-117.044727	
148	307	Chinese Elm	*Ulmus parvifolia*	14	3	Good	33.976018	-117.044750	
149	308	Chinese Elm	*Ulmus parvifolia*	20	4	Fair	33.976001	-117.044751	
150	309	Chinese Elm	*Ulmus parvifolia*	14	2.5	Fair	33.976020	-117.044747	
151	310	Chinese Elm	*Ulmus parvifolia*	23	3	Fair	33.975984	-117.044779	
152	311	Black Locust	*Robinia pseudoacacia*	30	20	Fair	33.976198	-117.044829	
153	312	Black Locust	*Robinia pseudoacacia*	25	13	Fair	33.976191	-117.045003	
154	337	Tree of Heaven	*Ailanthus altissima*	15	5.5	Good	33.977812	-117.040467	
155	338	Almond	*Prunus amygdalus*	10	8	Good	33.977802	-117.040452	
156	339	Tree of Heaven	*Ailanthus altissima*	12	6	Good	33.977891	-117.039973	
157	340	Tree of Heaven	*Ailanthus altissima*	25	2	Good	33.977881	-117.039950	
158	341	Tree of Heaven	*Ailanthus altissima*	25	20	Good	33.977848	-117.039842	
159	342	Tree of Heaven	*Ailanthus altissima*	17	6	Good	33.977839	-117.039818	
160	343	Tree of Heaven	*Ailanthus altissima*	18	8	Good	33.977834	-117.039791	
161	344	Tree of Heaven	*Ailanthus altissima*	15	7	Good	33.977822	-117.039758	
162	345	Tree of Heaven	*Ailanthus altissima*	25	18	Good	33.977810	-117.039728	

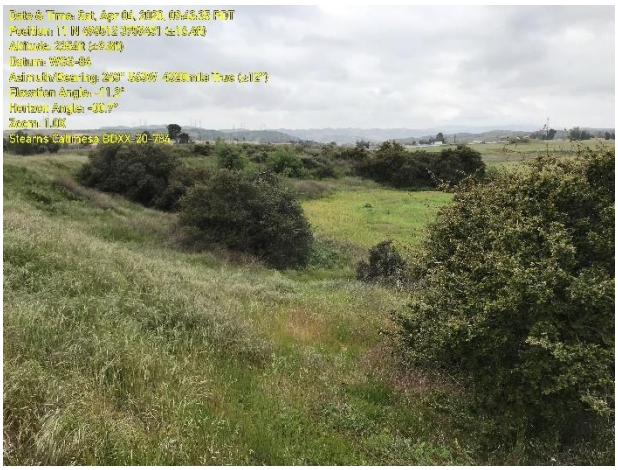
No.	Tree Tag	Species Common Name	Species Scientific Name	Est. Height (feet)	DBH (inches)	Health Rating	Latitude (degrees)	Longitude (degrees)	Comments
163	346	Tree of Heaven	*Ailanthus altissima*	15	10.5	Good	33.977775	-117.039614	
164	347	Tree of Heaven	*Ailanthus altissima*	25	16	Good	33.977743	-117.039518	
165	348	Tree of Heaven	*Ailanthus altissima*	12	4	Good	33.977635	-117.039260	
166	349	Retama Palo Verde	*Parkinsonia aculeata*	13	5	Good	33.976571	-117.036699	

APPENDIX E: SITE PHOTOGRAPHS

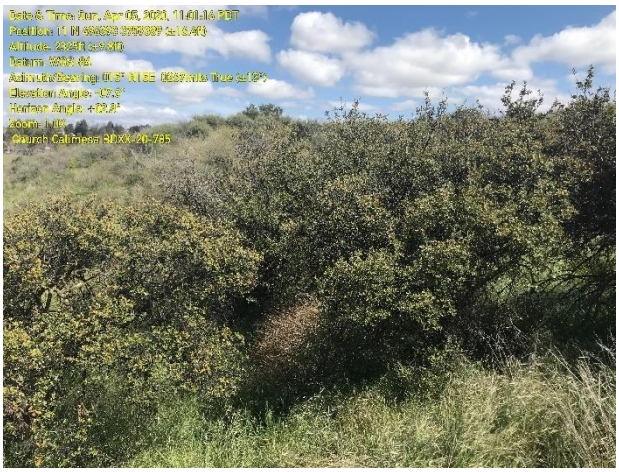


California sagebrush – California buckwheat scrub, northeast end of site facing west (04.04.2020).

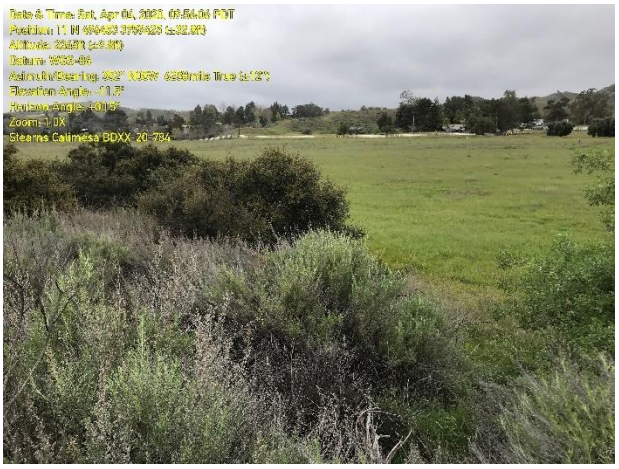
California sagebrush – California buckwheat scrub, northeast end of site facing east-northeast (04.04.2020).



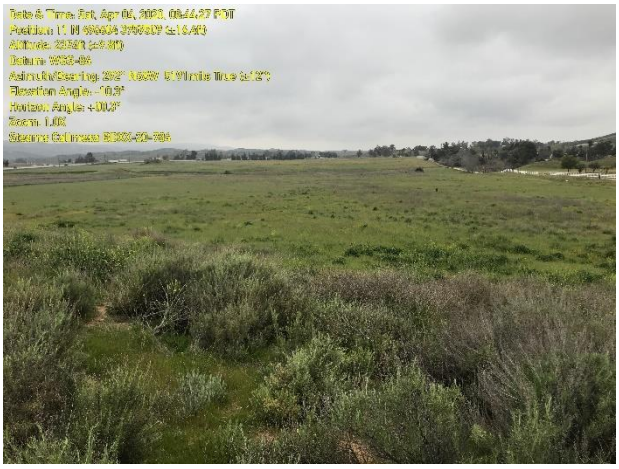
Pocket of coastal sage – chaparral scrub surrounded by non-native grassland, northeast end of site facing west-southwest (04.04.2020).



Mix of scrub oak chaparral (foreground) and California sagebrush – California buckwheat scrub (background), northeast end of site facing north-northeast. Note thick growth of non-native grasses in understory (04.05.2020).



Mix of California sagebrush – California buckwheat scrub and scrub oak chaparral in foreground, non-native grassland in background, northeast end of site facing north. Beckwith Avenue (white fence) visible in background (04.04.2020).



California sagebrush – California buckwheat scrub in foreground, non-native grassland in background, northeastern corner of site facing west-northwest. Beckwith Avenue (white fence) visible on far right (04.04.2020).

Mix of non-native grasslands and fiddleneck fields (yellow flowers are fiddleneck), western corner of site facing east (04.04.2020).

Non-native grasslands, central area of site facing west (04.04.2020).

Non-native grasslands, from north-central boundary of site facing west-southwest (04.04.2020).

Recently disked areas in non-native grassland, central area of site facing southwest (04.04.2020).

Driveway/road entering near the southern corner of site, facing north-northeast (03.09.2022).

Disturbed area in southern corner of site, facing northwest (04.05.2020).

Disturbed area and ornamental trees and shrubs in southern corner of site, facing west-southwest (03.09.2022).

Disturbed area and ornamental trees and debris, southern corner of the site facing east (04.05.2020).

Photo removed – this area is no longer part of the Project

Vacant residence on a hill on the site (on right), fiddleneck fields and non-native grassland in foreground, from southwestern boundary of site facing east-northeast (04.04.2020).

Piles of debris and old pipes (on right), northeast corner of site facing west (03.09.2022).

Old farm equipment in non-native grassland, recently disked area visible, southeast area of site facing north-northwest (04.05.2020).

Ephemeral drainage on site, from north-central boundary of site facing south (04.04.2020).

Roadside ditch along Calimesa Boulevard at southern corner of site, facing east-southeast (03.09.2022).

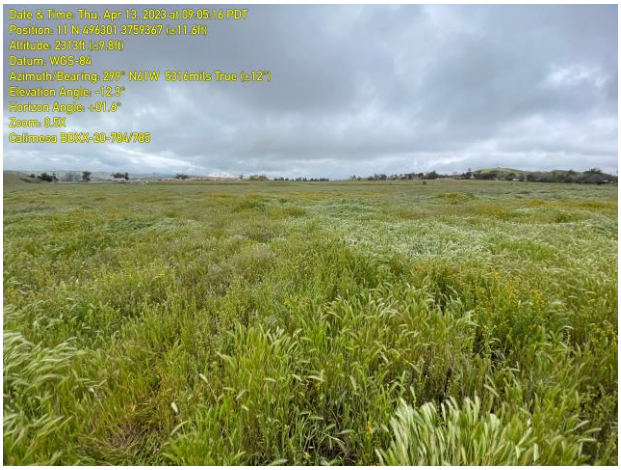
Many-stemmed dudleya in bloom at reference site (yellow flowers). This species was not found on the site. (05.02.2022).

Marvin's (Yucaipa) onion in bloom at reference site (white flowers). This species was not found on the site. (04.05.2022).

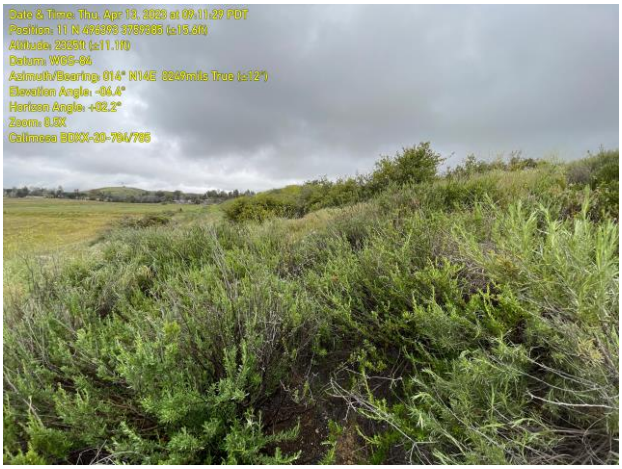
Parry's spineflower in bloom at reference site (white flowers). This species was not found on the site. (05.16.2022).

Plummer's mariposa lily in bloom at reference site (pink flowers). This species was not found on the site. (05.22.2022).

Smooth tarplant in bloom at reference site (yellow flowers). This species was not found on the site. (05.04.2022).

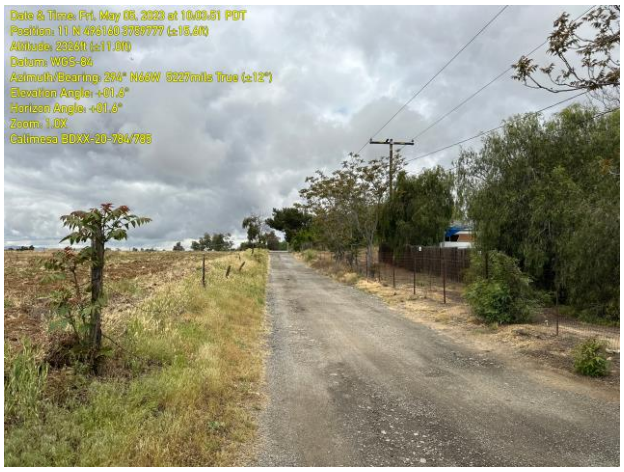


Non-native grassland, south-central area of site facing west-northwest (04.13.2023).



Coastal sage – chaparral scrub, southeastern area of site facing north-northeast (04.13.2023).

Offsite area along Beckwith Avenue, Project site is on right, central area of northeastern site boundary facing southeast (05.05.2023).



Offsite area along Beckwith Avenue, Project site is on left, northern area of northeastern site boundary facing west-northwest (05.05.2023).

Offsite area along Beckwith Avenue, Project site is on right, northern corner of site facing east-southeast (05.05.2023).

Ponding water in offsite area along Calimesa Boulevard, northwestern portion of site facing east-northeast (01.08.2023).

Ponding water, same area as previous photo, facing east-southeast (05.05.2023).

Ponding water in offsite area along Beckwith Avenue, Project site is on right, northeastern site boundary facing southeast (05.05.2023).

APPENDIX F: CNDDB FORMS

The CNDDB only tracks nesting for Cooper's hawk. No nesting was observed so a CNDDB form is not required for this species. The CNDDB does not track wrentit and only tracks nesting colonies for great egret so CNDDB forms are not required for these species.

CNDDB Online Field Survey Form Report

California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/

This data has been reported to the CNDDB, but may not have been evaluated by the CNDDB staff

Source code BRU22F0009
Quad code 3311781
Occ. no.
EO index no.
Map index no.

Scientific name: *Aspidoscelis hyperythra*

Common name: orange-throated whiptail

Date of field work (mm-dd-yyyy): 04-29-2022

Comment about field work date(s):

OBSERVER INFORMATION

Observer: Guy Bruyea

Affiliation: L&L Environmental, Inc.

Address: 700 E. Redlands Blvd, Suite U-351 , Redlands, CA 92373

Email: cwakeman@llenviroinc.com

Phone: (909) 335-9897

Other observers:

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in:

By another person:

Other: Identified by experienced field biologist

Identification explanation:

Identification confidence: Very confident

Species found: Yes **If not found, why not?**

Level of survey effort: biological resources assessment surveys

Total number of individuals: 1

Collection? **Collection number:**

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? Seen

Number detected in each age class:

adults	juveniles	larvae	egg mass	unknown
1				

Age class comment:

Site use description:

What was the observed behavior?

Describe any evidence of reproduction: None

Submitted: 10/18/2022 BRU22F0009 Page 1 of 2

SITE INFORMATION

Habitat description: Pockets of coastal sage - chaparral scrub in old agricultural fields/non-native grassland

Slope: Land owner/manager: Private

Aspect:

Site condition + population viability: Poor

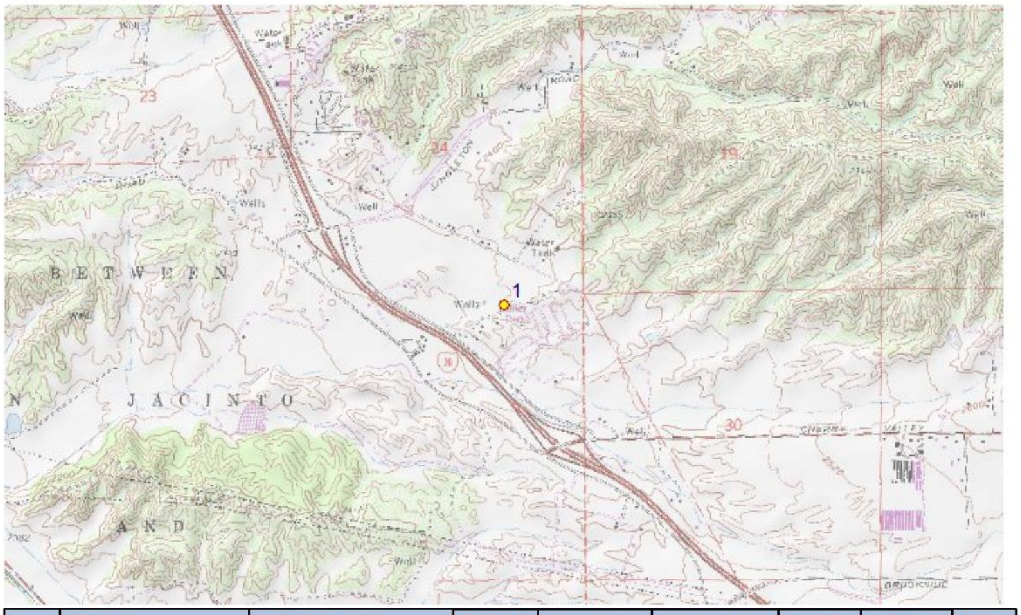
Immediate & surrounding land use: Freeway, residential development

Visible disturbances: Regular disking

Threats: Proposed industrial development

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Riverside	El Casco	2320	33.97508	-117.03910	496388	3759394	11
1	**Public Land Survey**	**Feature Comment**						
	S T02S R02W 25							

The mapped feature is accurate within: 5 m

Source of mapped feature: GPS app on phone

Mapping notes:

Location/directions comments:

Attachment(s):

Submitted: 10/18/2022 BRU22F0009 Page 2 of 2

CNDDB Online Field Survey Form Report

California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/

This data has been reported to the CNDDB, but may not have been evaluated by the CNDDB staff

Source code BRU22F0010
Quad code 3311781
Occ. no.
EO index no.
Map index no.

Scientific name: *Eremophila alpestris actia*

Common name: California horned lark

Date of field work (mm-dd-yyyy): 05-23-2022

Comment about field work date(s): Five observations from 04.03.2022 to 05.23.2022

OBSERVER INFORMATION

Observer: Guy Bruyea

Affiliation: L&L Environmental, Inc.

Address: 700 E. Redlands Blvd, Suite U-351 , Redlands, CA 92373

Email: cwakeman@llenviroinc.com

Phone: (909) 335-9897

Other observers:

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in:

By another person:

Other: Identified by experienced field biologist

Identification explanation:

Identification confidence: Very confident

Species found: Yes **If not found, why not?**

Level of survey effort: biological resources assessment surveys

Total number of individuals: 25

Collection? **Collection number:**

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? Seen

Number detected in each age class:

adults	juveniles	larvae	egg mass	unknown
25				

Age class comment: Total of about 25 adults over five different observations

Submitted: 10/18/2022 BRU22F0010 Page 1 of 3

Bird site use:

☐ Nesting ☐ Rookery ☐ Nesting colony ☐ Burrow site ☐ Lek

☐ Non-breeding (over-wintering) ☐ Communal roost ☑ Other

Site use description: foraging

What was the observed behavior? foraging

Describe any evidence of reproduction: none

SITE INFORMATION

Habitat description: Old agricultural fields/non-native grassland

Slope: generally flat Land owner/manager: Private

Aspect:

Site condition + population viability: Fair

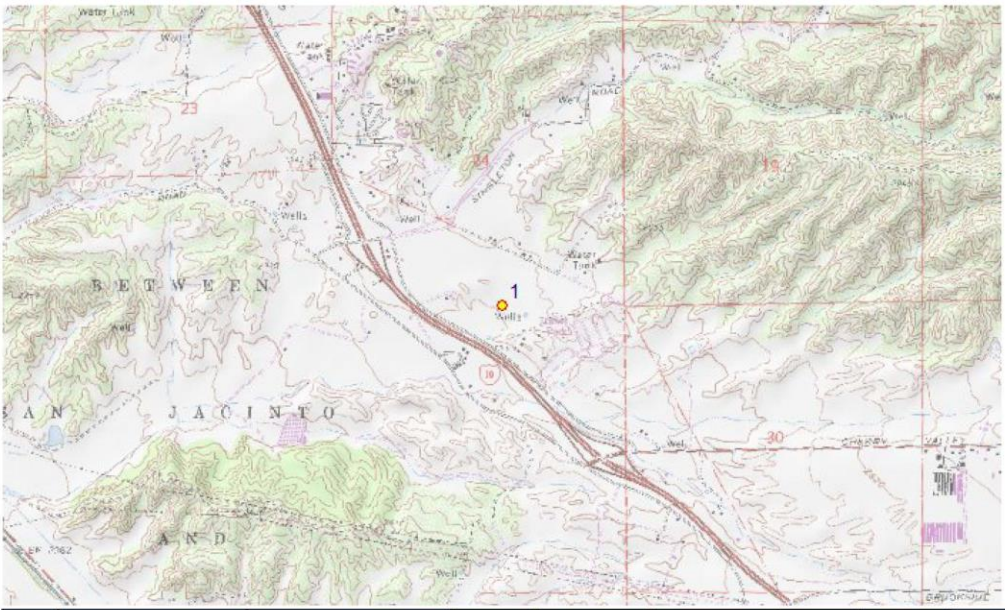
Immediate & surrounding land use: Freeway, residential development

Visible disturbances: Disked periodically

Threats: Proposed industrial development

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Riverside	El Casco	2289	33.97566	-117.04171	496146	3759459	11
1	**Public Land Survey**	**Feature Comment**						
	S T02S R02W 25	Five observations within about 0.25 miles						

The mapped feature is accurate within: 500 m

Source of mapped feature: GPS app on phone

Submitted: 10/18/2022 BRU22F0010 Page 2 of 3

Mapping notes:

Location/directions comments:

Attachment(s):

Submitted: 10/18/2022 BRU22F0010 Page 3 of 3

CNDDB Online Field Survey Form Report

California Natural Diversity Database
Department of Fish and Wildlife
1416 9th Street, Suite 1266
Sacramento, CA 95814
Fax: 916.324.0475
cnddb@wildlife.ca.gov
www.dfg.ca.gov/biogeodata/cnddb/

This data has been reported to the CNDDB, but may not have been evaluated by the CNDDB staff

Source code BRU23F0005
Quad code 3311781
Occ. no.
EO index no.
Map index no.

Scientific name: *Eremophila alpestris actia*

Common name: California horned lark

Date of field work (mm-dd-yyyy): 05-22-2023

Comment about field work date(s): Three observations from 04.21.2023 to 05.22.2023

OBSERVER INFORMATION

Observer: Guy Bruyea

Affiliation: L&L Environmental, Inc.

Address: 700 E. Redlands Blvd, Suite U-351 , Redlands, CA 92373

Email: cwakeman@llenviroinc.com

Phone: (909) 335-9897

Other observers:

DETERMINATION

Keyed in:

Compared w/ specimen at:

Compared w/ image in:

By another person:

Other: Identified by experienced field biologist

Identification explanation:

Identification confidence: Very confident

Species found: Yes **If not found, why not?**

Level of survey effort: biological resources assessment surveys

Total number of individuals: 15+

Collection? **Collection number:**

Museum/Herbarium:

ANIMAL INFORMATION

How was the detection made? Seen

Number detected in each age class:

adults	juveniles	larvae	egg mass	unknown
15				

Age class comment: Total of about 15 adults over three observations

Submitted: 09/01/2023 BRU23F0005 Page 1 of 3

Bird site use:

☐ Nesting ☐ Rookery ☐ Nesting colony ☐ Burrow site ☐ Lek
☐ Non-breeding (over-wintering) ☐ Communal roost ☑ Other

Site use description: Foraging

What was the observed behavior? Foraging

Describe any evidence of reproduction:

SITE INFORMATION

Habitat description: Old agricultural fields, non-native grassland

Slope: generally flat Land owner/manager: Private

Aspect:

Site condition + population viability: Fair

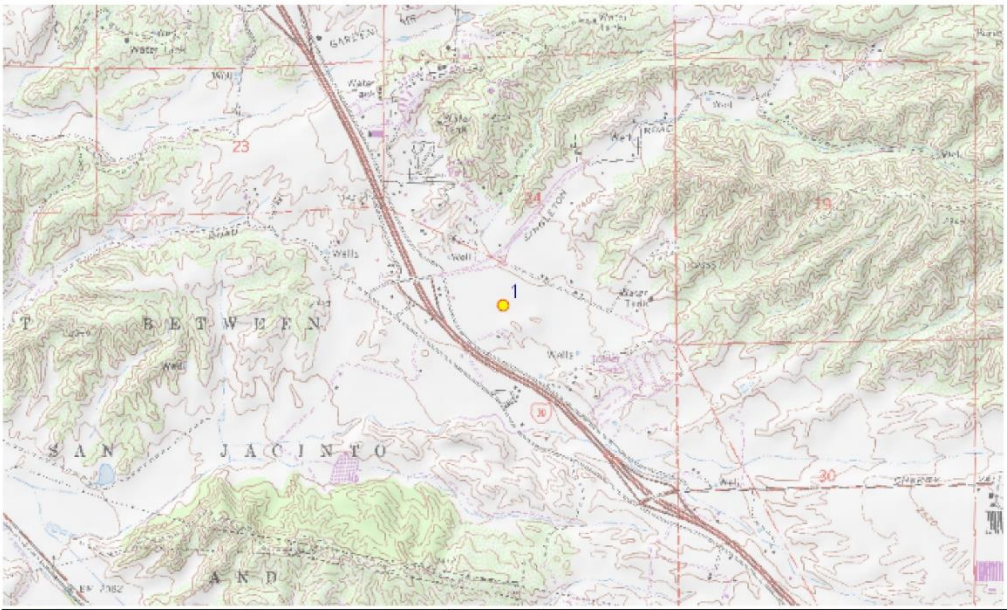
Immediate & surrounding land use: Freeway, residential development

Visible disturbances: Disked periodically

Threats: Proposed industrial development

General comments:

MAP INFORMATION



ID	County	24K Quadrangle	Elev. (ft)	Latitude NAD83	Longitude NAD83	UTM E NAD83	UTM N NAD83	UTM Zone
	Riverside	El Casco	2311	33.97758	-117.04477	495864	3759671	11
1	**Public Land Survey**	**Feature Comment**						
	S T02S R02W 24	three observations within about 0.25 mile						

The mapped feature is accurate within: 500 m

Source of mapped feature: GPS app on phone

Submitted: 09/01/2023 BRU23F0005 Page 2 of 3

Mapping notes:

Location/directions comments:

Attachment(s):

Submitted: 09/01/2023 BRU23F0005 Page 3 of 3

APPENDIX G: PRECIPITATION DATA

Precipitation data from the Beaumont Remote Automatic Weather Station (RAWS) for October 2011 through August 2023, by water year (October 1 through September 30) (WRCC 2023).

Water Year	Precipitation (inches)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
2012	0.96	2.86	0.37	0.99	1.73	3.18	1.71	0.02	0	0.12	0.42	0	12.36
2013	0.31	0.85	2.71	1.30	1.29	1.75	0.14	0.53	0	0.01	0.49	0.33	9.71
2014	0.89	0.90	0.75	0.17	3.08	1.10	1.13	0.09	0	0	0.44	0.12	8.67
2015	0.02	0.92	5.18	0.19	1.23	0.75	1.25	1.46	0.02	1.67	0	1.95	14.64
2016	0.47	0.79	1.63	4.22	0.26*	1.63	2.03	0.71	0	0	0	0.05	11.79*
2017	0.33	1.64	5.72	7.59	2.98	0.31	0	0.35	0	0.01	0.11	0	19.04
2018	0.04	0.03	0	3.32	0.40	2.68	0.02	0.62	0	0.02	0.11	0	7.24
2019	0.66	1.82	1.52	4.03	6.83	1.62	0.48	2.78	0	0	0	0.02	19.76
2020	0	3.38	2.74	0.23	0.62	5.54	3.82	0.02	0.11	0	0	0	16.46
2021	0.01	0.61	1.09	2.46	0.22	2.01	0.11	0.02	0	0.49	0	0.03	7.05
2022	0.88	0	5.87	0.03	0.49	1.22	0.19	0.03	0	0	0	0.43	9.14
2023	0.55	1.68	1.63	8.11	3.03	7.20	0.16	0.51	0.55	0	2.54	--	25.96**

*missing data; **as of August 31.

Precipitation data from the Cranston Remote Automatic Weather Station (RAWS) for October 2011 through August 2023, by water year (October 1 through September 30) (WRCC 2023).

Water Year	Precipitation (inches)												
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
2012	0.33	2.33	0.53	0.38	1.77	1.71	1.45	0.03	0	0.03	2.30	0.89	11.75
2013	0.26	0.16	1.39	1.15	0.98	1.29	0.08	0.22	0	0	0.57	0.21	6.31
2014	0.74	0.58	0.31	0.01	2.23	1.35	0.60	0.01	0	0.32	1.35	2.09	9.59
2015	0.06	0.55	4.53	0.25	0.81	0.84	0.35	1.94	0.31	3.54	0	0.82	14.00
2016	0.85	0.47	1.66	3.41	0.12*	0.80	0.39	0.84	0	0	0.03	0.68	9.25*
2017	0.55*	1.26	4.21	5.56	3.93	0.21	0	0.41	0.01	0	0.21	0	16.35*
2018	0.01	0.06	0	2.15	0.62	2.79	0.01	0.28	0	0.28	0	0	6.20
2019	0.87	0.80	1.74	3.05	9.02	2.07	0.32*	1.87	0.01	0	0	0.08	19.83*
2020	0	3.38	2.44	0.34	0.54	5.04	3.85	0.06	0.03	0	0.21	0	15.89
2021	0	0.52	1.39	2.39	0.28	1.33	0.36	0.05	0.03	0.37	0	0.03	6.75
2022	0.99	0*	3.41*	0.16	0.83	0.94	0.36	0.02	0	0	0	0.26	6.97*
2023	1.55	2.09	1.17	5.83	2.47	6.16	0.04	0.30	0.09	0	1.13	--	20.83**

*missing data; **as of August 31.

APPENDIX H: RIVERSIDE COUNTY DOCUMENTATION

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: September 8, 2023 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

3) Fieldwork Performed By:

Joshua Ball
Name

4) Fieldwork Performed By:

_____
Name

5) Fieldwork Performed By:

_____
Name

6) Fieldwork Performed By:

_____
Name

Check here __ if adding any additional names / signatures below or on other side of page.

BIOLOGICAL REPORT SUMMARY SHEET

Applicant Name: Birtcher Development
Assessor's Parcel Number(s): 413-260-018, 413-280-016, -018, -021, -030, -036, -037, -043, offsite areas on portions of 413-260-014, -017, -019, -020, and -052
Section, Township and Range: Sections 24 and 25, Township 2 South, Range 2 West
Building and Safety Log Number: _____
Case Number: _____ Lot/Parcel _____ EA Number _____

MARK ITEM(S) SURVEYED FOR	**SPECIES or ENVIRONMENTAL ISSUE of CONCERN**	***(Mark Yes, No, or N/A regarding species findings on the referenced site)***		
		Yes	**No**	**n/a**
	Arroyo Southwestern Toad			X
X	Blueline Stream(s)		X	
X	Burrowing Owl		X	
	Coachella Valley Fringed-toed Lizard			X
	Coastal California Gnatcatcher			X
X	Coastal Sage Scrub	X		
	Delhi Sands Flower-loving Fly			X
	Desert Pupfish			X
	Desert Slender Salamander			X
	Desert Tortoise			X
	Flat-tailed Horned Lizard			X
X	Least Bell's Vireo (habitat)		X	
X	Oak Woodlands (clusters of scrub oaks present)		X	
	Quino Checkerspot Butterfly			X
X	Riverside Fairy Shrimp (potential habitat)	X		
	Santa Ana River Woollystar			X
	San Bernardino Kangaroo Rat			X
	Slender-horned Spineflower			X
	Stephens' Kangaroo Rat			X
X	Vernal Pools		X	
X	Wetlands		X	
X	Marvin's (Yucaipa) onion		X	
X	Many-stemmed dudleya		X	
X	Cooper's hawk	X		
X	California horned lark	X		
X	Orange-throated whiptail	X		
X	Great egret (fly over)	X		
X	Wrentit (in adjacent area)	X		

Species of concern shall be any unique, rare, endangered, or threatened species. It shall include species used to delineate wetlands and riparian corridors. It shall also include any hosts, perching, or food plants used by any animals listed as rare, endangered, threatened, or candidate species by either state, or federal regulations, or for Riverside County as listed by the California Department of Fish and Wildlife Natural Diversity Data Base (CNDDB).

I declare under penalty of perjury that the information provided on this summary sheet is in accordance with the information provided in the biological report or habitat assessment.

L & L Environmental, Inc. Signature and Company Name	September 8, 2023 Date
10(a) Permit Number (if applicable)	Permit Expiration Date

County Use Only

Received By: _____ Date: _____

PD-B# _____

Attachment E-4

LEVEL OF SIGNIFICANCE CHECKLIST
For Biological Resources
(Submit two copies to the County)

Case Number: _____ Lot/Parcel No. _____ EA Number _____

Assessor's Parcel Number(s): 413-260-018, 413-280-016, -018, -021, -030, -036, -037, -043, offsite areas on portions of 413-260-014, -017, -019, -020, and -052

Date: September 8, 2023

Biological Resources: (Check the level of impact that applies to the following questions.)

Potentially Significant Impact	Less than Significant Impact with Mitigation Incorporated	Less than Significant Impact	No Impact

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

☐ ■ ☐ ☐

b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?

☐ ■ ☐ ☐

c) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife, or U. S. Wildlife Service?

☐ ■ ☐ ☐

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

☐ ■ ☐ ☐

e) 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 the U.S. Fish and Wildlife Service?

☐ ☐ ☐ ■

f) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pools, coastal, etc.) through direct removal, filling, hydrological interruption)

☐ ☐ ☐ ■

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

☐ ■ ☐ ☐

Findings of Fact:

Project site not within MSHCP Criteria Cell. MSHCP and PQP conserved lands within a mile of the site. Flows leaving the Project site are likely hydrologically connected to San Timoteo Creek within PQP Conserved Lands.

No sensitive vegetation communities present. No listed, special status, or narrow endemic plants found. Native scrub oaks present.

State/CDFW jurisdictional waters and MSHCP riverine resources present. A jurisdictional delineation to be submitted under separate cover. No vernal pools. Ponding areas observed with potential fairy shrimp habitat.

No riparian vegetation and no suitable habitat for least Bell's vireo, southwestern willow flycatcher, or western yellow-billed cuckoo. Potentially suitable burrowing owl habitat present, but no owls or owl sign observed.

Cooper's hawk, California horned lark, and orange-throated whiptail observed on site. All are covered species and considered adequately conserved. Great egret (fly over) and wrentit (in adjacent area) detected and are not covered species. Other listed and special status wildlife species have potential to occur. Some are covered species adequately conserved but others are not covered. Habitat for nesting birds, including raptors, present.

Proposed Mitigation:

Biological monitoring and clearance surveys, Workers Environmental Awareness Program training, flag/fence disturbance areas, burrowing owl surveys and mitigation per MSHCP if present, nesting bird surveys and avoidance buffers, preconstruction surveys for Crotch bumble bee and consultation with CDFW/incidental take permitting if present, surveys for special status bats and avoidance of active roosts, regulatory permitting and compensation for impacts to waters and wetlands, replacement of impacted oaks and non-oak trees, measures to avoid and minimize introduction and spread of invasive plants, measures to avoid and minimize to wildlife hazards, proper containment and disposal of trash, protocol surveys for fairy shrimp and conservation of occupied habitat or offsite compensation if listed fairy shrimp present.

Monitoring Recommended:

Biological monitoring during initial vegetation removal, ground disturbance, and demolition.

Source: CGP Fig. VI.36-VI.40
Revised October 1999; CEQA checklist update 2019

APPENDIX I: CONCEPTUAL SITE PLAN

Conceptual Master Site Plan - 4 Building Plan
OAK VALLEY NORTH
Calimesa, CA | #21401 | 05.06. 2023
HPA
BIRTCHER DEVELOPMENT
LEGACY REAL ESTATE

APPENDIX J: BAT HABITAT ASSESSMENT REPORT

APPENDIX K: FAIRY SHRIMP DRY SEASON SURVEY REPORT