

Appendix 3.0

General Biological Assessment for the 2.33-Acre Gun Shooting Range/Tactical Facility Project

GENERAL BIOLOGICAL ASSESSMENT FOR THE 2.33-ACRE GUN
SHOOTING RANGE/TACTICAL TRAINING FACILITY PROJECT
LOCATED IN THE CITY OF WILDOMAR, CALIFORNIA

ASSESSOR'S PARCEL NUMBER 367-020-038

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and

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02 November 2018

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1.0 INTRODUCTION

PURPOSE

Markham Development Management Group, Inc. ("MDMG"), on behalf of **KCG Blue, LLC** ("the Project Applicant"), is currently processing land entitlements with the City of Wildomar on the subject 2.33-acre property. The Project Applicant, through MDMG, has retained **TERACOR Resource Management, Inc.** ("TERACOR") to prepare a General Biological Assessment for the project. The purpose of this Biological Assessment is to provide an assessment of the biological resources present and potentially present on-site and the relationship of the biological resources to the proposed project. This analysis is based on a biological field evaluation performed on-site, our knowledge of area habitats and organisms, and relevant scientific literature.

MSHCP-RELATED BACKGROUND

The subject property is located within the Western Riverside County Multiple Species Habitat Conservation Plan ("MSHCP" or "Plan") area. The following text is taken from Section 1.0 of the MSHCP:

"The MSHCP is a comprehensive, multi-jurisdictional Habitat Conservation Plan ("HCP") focusing on Conservation of species and their associated Habitats in Western Riverside County. This Plan is one of several large, multi-jurisdictional habitat-planning efforts in Southern California with the overall goal of maintaining biological and ecological diversity within a rapidly urbanizing region... The MSHCP will allow Riverside County ...and its Cities to better control local land-use decisions and maintain a strong economic climate in the region while addressing the requirements of the state and federal Endangered Species Acts."

There are 146 sensitive species which are covered under the MSHCP. These species are listed below in *Table 2 – MSHCP-Covered Species in Section 5.0 – Regulatory Status Species Analysis*. The MSHCP formation was a collaborative effort between the scientific community, governmental agencies, consultants and Permittees that determined which species were of particular concern in western Riverside County. This suite of sensitive organisms was approved by the **U.S. Fish and Wildlife Service** ("USFWS") and the **California Department of Fish and Wildlife** ("CDFW"). The MSHCP is the overriding document that provides the framework for where and when surveys are conducted and how conservation occurs in the Plan area.

SITE LOCATION

The 2.33-acre subject property is generally located within the City of Wildomar, California. The property is specifically located on the southeast corner of the Bundy Canyon Road and Mission Trail Road intersection, west of Interstate 15 ("I-15"). The subject property is comprised of Assessor's Parcel Number ("APN") 367-020-038 and is generally a rectangular-shaped parcel. The location of the site relative to local thoroughfares is illustrated in *Exhibit 1 – Regional Location Map*, attached.

Geographically, the site is located in Section 27, Township 6 south, Range 4 west, of the *Lake Elsinore, California 7.5 Minute Series U.S.G.S. Topographic Quadrangle*. Additionally, the subject property is

approximately 0.5 mile southeast of Lake Elsinore. *Exhibit 2 – USGS Topographic Map*, attached, illustrates the geographic location and topography of the project site.

GENERAL SITE CONDITIONS

Most of the site is vacant, however, an existing residence and barnlike structure is present in the eastern portion of the subject property. There is substantial disturbance to the site. For example, TERACOR personnel observed evidence of fill placed along Bundy Canyon Road and Mission Trail Road. There were also small piles of material spread across the project site.

As shown from review of historic aerial photography (from 1994, 2002 and 2012), the project site contains a history of vegetation disturbance and removal over several decades; likely from the construction and improvements to Bundy Canyon Road. As further described below in *Section 3.0 – Vegetation and Plant Communities*, the subject property is generally comprised of a mix of coastal sage scrub vegetation and non-native grasses and weeds.

TOPOGRAPHY AND SOILS

The topography of the site gently slopes to the west toward Mission Trail. Elevations on-site range from approximately 1,296 feet (395 meters) above mean sea level (“msl”) at the western property boundary near Mission Trail to approximately 1,305 feet (397 meters) above msl at the northeastern corner of the property near Bundy Canyon Road, according to Google Earth Pro.

Soils on-site are comprised of the Ramona series. A description of the specific soil type on-site is presented below, based on soil series information presented in the *USDA Western Riverside Area Soil Survey*, issued 1971. Soils on-site are depicted in *Exhibit 3 - Soil Survey Map*, attached.

Ramona very fine sandy loam, 0 to 8 percent slopes, eroded (ReC2). The Ramona series consists of well-drained soils on alluvial fans and terraces. These soils developed in alluvium consisting mainly of granitic materials. This soil type has a dark-brown very fine sandy loam surface layer. The available water holding capacity of this soil is 9.5 to 10.5 inches. Runoff is medium, and the hazard of erosion is moderate. The entire subject property is comprised of this soil type.

PROJECT DESCRIPTION

The Project Applicant proposes to construct a 43,000 square foot, two (2) story gun shooting range/tactical training facility on-site.

2.0 METHODS

An array of field (on-site) and research (off-site) methodologies were utilized to assess and evaluate the different types of biological resources present or potentially present on-site. These specific methodologies included:

- Literature Review for Vascular Vegetation and Vegetation Community Occurrences
- Literature Review for Animal Occurrences
- State of California *Natural Diversity Data Base* ("CNDDDB") Query for Flora, Fauna and Plant Communities with Special Regulatory Designations
- MSHCP
- California Native Plant Society
- Federal and State Protected Species (Endangered, Threatened, Candidate and Others)
- General Field Investigations and Assessment
- Biogeographic Analysis (Corridors, Movement Pathways)
- Focused Field Investigations and Assessments

These assessment methodologies are described below in detail to provide background information about information sources and references, survey methods and protocols as applicable and overall approach in identifying resources and assessing impacts that could result to those resources with project implementation. Both state and federal resource agencies have, in some instances, adopted survey protocols and/or assessment guidance, and those protocols and procedures have been followed as applicable to attain the requisite level of confidence for each specific study or assessment methodology.

LITERATURE REVIEW

Vascular Vegetation and Vegetation Community Occurrences

Literature reviewed from which plant names and identifications, vegetation communities and associations, and relevant descriptions were derived include: *The Jepson Manual, Vascular Plants of California - Second Edition* (Baldwin et. al. 2012), the CDFW's *California Natural Community List* (2018), and *A Manual of California Vegetation - Second Edition* (Sawyer, Keeler-Wolf and Evens 2009). A complete floral inventory of species observed on-site has been provided as *Appendix A – Floral Compendium*.

Animal Occurrences

The literature review included a query of the CNDDDB, which is a computerized inventory of information on the location of California's rare, threatened, endangered, and otherwise regulatory status¹ plants, animals, and natural communities, and the MSHCP. Paid subscriptions are required in order to access CNDDDB occurrences. Information regarding the species occurrence, population numbers, observers, occurrence dates

¹ "Regulatory Status" refers to those species that appear on a federal or state list as defined by the California Environmental Quality Act ("CEQA").

and potential threats to the organism(s) are included for each occurrence record. TERACOR queried the *Lake Elsinore, California* Quadrangle and surrounding quadrangles in the CNDDDB and MSHCP for local records of MSHCP-covered and otherwise regulatory status organisms and habitats.

Historical records of faunal species occurrence are found not only in the CNDDDB records, but also in other well-known publications including the MSHCP, Schoenherr, 1992, Hall, 1981, Garrett and Dunn, 1981; Small 1994; Williams 1986; and Thelander, et al., 1994, which were also reviewed by TERACOR. The results of these queries are presented in Section 5.0 of this report. A list of faunal species observed and/or species which have the potential to occur on-site has been provided as *Appendix B – Faunal Compendium*.

Queries for Flora, Fauna, and Plant Communities with Special Regulatory Designations

Numerous efforts have been made over the years to catalog and classify California's diverse array of landscape types and plant communities. In 1986, R. Holland, CDFW, published *Preliminary Descriptions of the Terrestrial Natural Communities of California*. His inventory of community types was the 3rd iteration published by the CNDDDB and has been expanded over the years. There was one (1) footnote to Holland's inventory list wherein he noted those communities believed to be the rarest and/or in decline. The footnote stated "Communities with the highest inventory priorities." This was explained as "the communities we currently feel are rare enough to merit inclusion in the inventory...we are particularly interested in knowing the particulars about surviving examples of these communities." This stated need for additional information has translated into the "Sensitive" designation.

California Native Plant Society

The **California Native Plant Society** ("CNPS") is a statewide, non-profit organization dedicated to the preservation of native flora. The *California Native Plant Society's Inventory of Rare and Endangered Plants of California* (2001) includes information regarding the distribution, ecology, rarity, and legal status of over 2,000 rare plants which occur in California. The inventory has been updated and is maintained on a regular basis on the *Inventory of Rare and Endangered Plants Online Database* (2018).

The CNPS regulatory status designation consists of two (2) parts. The first portion of the designation is the rarity code and the second is the threat code. For example, a plant designated as a *Rare Plant Rank 1B.1* is considered rare, threatened, or endangered in California and elsewhere, and is seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat). A description of the rarity and threat code designations is presented below.

The CNPS codes presented for regulatory status flora below include the following:

Rare Plant Rank 1A:	Presumed Extirpated in California and Either Rare or Extinct elsewhere
Rare Plant Rank 1B:	Rare, Threatened, or Endangered in CA and elsewhere
Rare Plant Rank 2A:	Presumed Extirpated in CA, but common elsewhere
Rare Plant Rank 2B:	Rare, Threatened, or Endangered in CA but more common elsewhere

- Rare Plant Rank 3:** Plants about which more information is needed - a review list
Rare Plant Rank 4: Plants of Limited Distribution - a watch list
Rare Plant Rank CBR: Considered But Rejected

The **Threat Code** is as follows:

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

MSHCP-covered regulatory status plant species descriptions have been provided in *Section 5.0 – Regulatory Status Species Analysis, Table 2 – MSHCP-Covered Species*. These species descriptions are based on plant information provided in the MSHCP, *Jepson Manual*, as well as the *CNPS Online Inventory*. Species information from these two (2) sources, such as elevational ranges or blooming periods of regulatory status plant species, is not always consistent. Because the regulatory status plant species listed below in *Table 2* are CNPS-ranked, and the CNPS generally provides broader descriptive information relative to distribution, the species information as summarized in the *CNPS Online Inventory* has generally been presented in this biological assessment.

A full list of scientific and background literature references has been provided as *Appendix C - References*.

FEDERAL AND STATE PROTECTED SPECIES

Protected regulatory status species are usually classified by both state and federal resource management agencies as threatened or endangered, under provisions of the State and federal Endangered Species Acts. Vulnerable or “at-risk” species which have been proposed or are being considered for listing as threatened or endangered or “species of special concern” are categorized administratively by the USFWS. The CDFW uses various terminology and classifications to describe regulatory status species. There are also other species classifications and categories used in this report; all are described below.

For some species, the CNDDDB designates only specific life history phases or constructs, such as roosts, rookeries, or nest sites, and not the organism itself outside of that phase. Migratory birds are protected under provisions of the Migratory Bird Treaty Act, which prohibits killing any designated bird including disturbing or destroying an active nest of a bird listed under the Act. The list of bird species, in fact, does contain some common birds and birds now considered pests, such as brown-headed cowbird (*Molothrus ater*). Nesting birds are also protected under California Fish and Game Code Sections 3503, 3503.5, and 3512, which prohibit the take of active bird nests.

Federal Protection and Classifications

The federal Endangered Species Act of 1973 ("FESA") defines an endangered species as:

"any species which is in danger of extinction throughout all or a significant portion of its range..."

The FESA defines a threatened species as:

"any species which is likely to become an endangered species in the foreseeable future throughout all or significant portions of its range..."

Federal regulatory status species' listings are as follows:

Federally listed as Endangered	= FE
Federally listed as Threatened	= FT
Federally Proposed as Endangered	= FPE
Federally Proposed as Threatened	= FPT
Federal Candidate Species	= FC
Federally Proposed for Delisting	= FPD
Federally Delisted as Endangered or Threatened	= FDL

State of California Protection and Classifications

California's Endangered Species Act ("CESA") defines an endangered species as:

"a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion, of its range due to one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, or disease."

CESA defines a threatened species as:

"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 the special protection and management efforts required by this chapter. Any animal determined by the commission as rare on or before January 1, 1985 is a threatened species."

California regulatory status species listings are as follows:

State listed as Endangered	= SE
State listed as Threatened	= ST
State Candidate for Endangered	= SCE
State Candidate for Threatened	= SCT

State listed as Rare (Plants only)	= SR
State Fully Protected	= SFP
State Species of Special Concern	= SSC
State Delisted as Endangered or Threatened	= SDL

Other State classifications are:

State Special Animal	= SSA
State Watch List Species	= SWL

State Candidate Species

Candidate species are defined as:

"a native species or subspecies of a bird, mammal, fish, amphibian, reptile, or plant that the commission has formally noticed as being under review by the department for addition to either the list of endangered species or the list of threatened species, or a species for which the commission has published a notice of proposed regulation to add the species to either list."

Candidate species may be afforded temporary protection as though they were already listed as threatened or endangered at the discretion of the Fish and Game Commission. Unlike the FESA, CESA does not include listing provisions for invertebrate species.

State Rare Species

Fish and Game Code §1901 defines a rare plant species as:

"...although not presently threatened with extinction, the species, subspecies, or variety is found in such small numbers throughout its range that it may be endangered if its environment worsens."

State Fully Protected Species

The state defines a "Fully Protected" species as:

"The classification of Fully Protected was the State's initial effort in the 1960's to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibians and reptiles, birds and mammals. Please note that many Fully Protected species have also been listed as Threatened or Endangered species under the more recent endangered species laws and regulations."

The Fish and Game Code sections dealing with Fully Protected species state that these 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. This language arguably makes the "Fully Protected" designation the strongest and most restrictive regarding the "take" of these species. In 2003 the code sections dealing with Fully Protected species were amended to allow CDFW to authorize take resulting from recovery activities for state-listed species.

State Species of Special Concern

A Species of Special Concern is defined as:

"a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria:

- a) is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role;*
- b) is listed as Federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed;*
- c) is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status;*
- d) has naturally small populations exhibiting high susceptibility to risk from any factor(s); that if realized, could lead to declines that would qualify it for State threatened or endangered status."*

The Species of Special Concern list is broken down into separate lists for Mammal and Bird species. The Reptile and Amphibian species list is combined as one (1).

Mammal Species

The Mammalian List of Species of Special Concern ("Mammal List") lists such species into three (3) separate categories: "Highest Priority," "Second Priority," and "Third Priority." According to the Mammal List:

"The definitions for these categories are based on the perceived proximity of threats or extinction. Species listed in the Highest Priority category appear to face a high probability of extinction or extirpation from their entire geographic range in California if current trends continue. Populations of species in the Second Priority category are definitely jeopardized and declining, but the threats of extinction or extirpation appear less imminent. Populations of species listed in the Third Priority category appear not to face extinction in the near future, but they are declining seriously or are otherwise highly vulnerable to extirpation because of human developments, and require special attention in land and resource management decisions. Some species listed in the Second and Third Priority categories are relatively rare

and virtually no current data on their distributions and population status are available; when investigated in detail, some of these may be found to face greater or lesser threats."

Mammal Species of Special Concern which are not listed in the three (3) categories described above are listed in the "Additions to List" category.

Bird Species

The Bird Species of Special Concern List ("Bird List"), similar to the Mammal List described above, is comprised of three (3) priority categories (First Priority, Second Priority, and Third Priority) derived through a scoring and ranking process. In addition to the priority categories, bird species which meet the definition described above and are determined to be either 1) "*Taxa Extirpated from the State Totally or in Their Primary Seasonal or Breeding Role*", and/or 2) "*Taxa Listed as Federally, but Not State, Threatened or Endangered*" are included on the Bird List.

No formal discussion on the definitions of the First, Second, and Third Priority categories is given. TERACOR, therefore, has preliminarily assigned meanings to the three (3) categories. First Priority bird species are birds which are of highest concern. Second Priority birds are of moderate concern. Third Priority birds are of lowest concern.

Reptile and Amphibian Species

The Reptile and Amphibian List of Species of Special Concern ("Herp List") is relatively simpler than the Mammal or Bird Lists in that it lists regulatory status herp species into five (5) groups: Turtles, Lizards, Snakes, Salamanders, and Frogs. No further categories comprise the Reptile and Amphibian List.

State "Special Animal"

The state defines a "Special Animal" as:

"Special Animals" is a general term that refers to all of the taxa the CNDDDB is interested in tracking, regardless of their legal or protection status. This list is also referred to as the list of "species at risk" or "special status species". The Department of Fish and Game considers the taxa on this list to be those of greatest conservation need."

Any species included in the CNDDDB is considered a Special Animal, and in addition to SSC, the CNDDDB Special Animals List includes species that lack state or federal status, but have been listed by various other state or federal agencies or by various conservation organizations.

State "Watch List" Bird Species

The CDFW has recently created a new designation for species; a "watch list" species. A "watch list" species is defined by CDFW as:

"a new category of "Taxa to Watch" [that] was created in the new California Bird Species of Special Concern report. The birds on this watch list are 1) not on the current Special Concern list but were on previous lists and they have not been state listed under CESA; 2) were previously state or federally listed and now are on neither list; or 3) are on the list of 'fully protected' species."

Other types of species besides bird species are also listed on CDFW's watch list.

GENERAL FIELD INVESTIGATIONS

Fieldwork was conducted on foot by TERACOR Principal Biologist S. Reed and TERACOR Senior Biologist J. Reed on 26 July 2018 and by J. Reed on 07, 14, 21 and 29 August 2018. Plants identified in *Appendix A* were identified in the field by site investigators. Seasonal timing was not optimal for detecting Spring and Summer-blooming annual plants. Reptile species in *Appendix B* were surveyed by turning debris, and scanning sunning and foraging areas. Particular attention was given to rock piles on-site. Amphibians are not expected to occur on-site due to lack of suitable habitat and adequate water. Nomenclature follows Stebbins (2003), and was updated in accordance with *The Center for North American Herpetology* website. Bird species in *Appendix B* were identified by field personnel both aurally and visually, with nomenclature following Dunn (1999), Sibley (2003), and updated utilizing the American Ornithological Society's most recent checklist. Mammals were identified initially by sight or sign evidence.

With regard to determining the presence of some organisms, this assessment is, in part, habitat-based and predictive. The evaluation for presence for regulatory status organisms (for example, considered rare or given regulatory status by the USFWS, CDFW, CNPS, or the CNDDB) included such variables as availability of support resources (such as rock outcrops, surface water, specific host plants, nesting sites, etc.), the location and size of the subject property, and the history of disturbance. The likelihood of potential occurrences is further predicated on the known distributions of species, and their overall habitat requirements and preferences.

Current overall conditions on the subject property are depicted in the attached *Exhibit 4 – 2018 Aerial Photograph*.

FOCUSED ASSESSMENTS

TERACOR has conducted focused surveys for burrowing owl (*Athene cunicularia*) on the subject property. The focused assessment and the results of that focused assessment are discussed below. Methodologies specific to the focused survey are presented in an MSHCP Consistency Analysis, currently being prepared for the project.

Burrowing Owl

TERACOR conducted focused surveys on the subject property during August 2018, with no burrowing owl detected.

The above-mentioned MSHCP Consistency Analysis describes habitat suitability and the conducted focused surveys for burrowing owl on-site:

MSHCP Consistency Analysis

The project site is located within the boundaries of the MSHCP area. All projects within the MSHCP area are required to analyze their consistency with the MSHCP. TERACOR is therefore preparing a *MSHCP Consistency Analysis* for the subject property.

REGULATORY STATUS ORGANISMS AND THE SUBJECT PROPERTY

Table 2 presented below is a composite of plants and animals that are covered and considered locally important under the MSHCP.

PRESENCE/ABSENCE AND/OR PROBABILITY OF OCCURRENCE

Each organism presented in Table 2 below will be designated as present, not present, or potentially occurring within the subject property.

TERACOR based its predictive analysis on the known distribution or range of each species, including elevation, the subject property disturbance levels, history of disturbance, and remnant site resources. Each individual is listed in common and scientific name, with habitat and distributional information. An "occurrence probability rating" has been designated for each species based on the above described factors. Species occurrence has been: 1) **Confirmed Present**, 2) determined **Not Present**, or 3) potential presence determined to be one of the following:

- **Low** - The subject property is within the historic range or distribution of the species. Habitat on-site is marginal to suitable, but other conditions may exist (adjacent urbanization, isolation, etc.) to suggest a low probability of occurrence. Transitory presence is not necessarily precluded, but site conditions are such that sustained or seasonal presence is unlikely.
- **Moderate** - The subject property is within the historic range or distribution of the species. The species has a reasonable possibility of occurrence on-site, habitats are suitable, and the species is known to occur in the area. Some areas of habitat may be slightly altered or degraded from original condition but overall conditions are such that sustained or seasonal presence is possible.
- **High** - The subject property is within the historic range or distribution of the species. The subject property contains suitable to very favorable habitat for the species. The organism has recently been recorded in the vicinity, or ecological conditions are such that qualified personnel can reasonably anticipate presence.

3.0 VEGETATION AND PLANT COMMUNITIES

Classification of plant communities on-site generally follows CDFW's *California Natural Community List* (2018) and *A Manual of California Vegetation - Second Edition* (Sawyer, Keeler-Wolf and Evens, 2009). References herein reflect the previously mentioned published materials described in *Section 2.0 – Methods*.

Geographically, the subject property is located within the California Floristic Province Southwestern California region. Specifically, the subject property is within the South Coast subregion. The South Coast subregion extends along the Pacific Coast from Point Conception to Mexico. According to the authoritative work on California native plants, the Jepson Manual, coastal sage scrub and chaparral communities that support numerous endemic species are common, but most of the subregion from Santa Barbara to the Mexican border has been urbanized, with substantial loss of natural habitat (Baldwin et al, 2012).

Two (2) distinct plant communities and landscape types are recognized on-site. The vegetation assemblage within the 2.33-acre subject property is comprised of disturbed coastal scrub and grassland communities. The balance of the subject property consists of disturbed and developed areas which are mostly unvegetated or vegetated with weedy vegetation. As described above in Section 1.0, most of the subject site is comprised of vacant land. Relictual elements of natural former vegetation communities are present on-site. Vegetation assemblages and landscape types present on-site are shown in the attached *Exhibit 5 - Vegetation Map – 2018 Aerial Photograph*.

Individual vegetation communities and landscape types that comprise the 2.33-acre subject property, as well as their respective California Natural Community Codes ("CaCodes"), are described and quantified below.

SCRUB COMMUNITIES

Upland scrub communities occur most often in low-lying valley floors, on south-facing slopes and/or on shallow soils in cismontane² southern California. Low-lying areas throughout most of coastal and inland valley areas of southern California have been eliminated through development.

Correspondingly, coastal sage scrub community types are becoming increasingly uncommon on a regional basis and are in decline due to historic agricultural conversions and urban development pressures. Sage scrub communities within the Wildomar area have been geographically reduced in area and fragmented due to historical ranching practices, development, and urbanization. Coastal sage scrub has been recognized by CDFW as a top priority rare natural community in southern California that, according to February 1992

²The prefix "cis" in Latin means literally "this side of". In southern California, there are broad alluvial valleys, each characterized by a major river system. These valleys extend inland for significant distances. The California southern valleys are unlike the usually narrow and short valley systems in the Coast Ranges of Central and Northern California, with the notable exception of the San Joaquin Delta system. The Coast Ranges create a cool, wet climate immediately along the coast that transitions rapidly into a more continental climate further inland. In southern California the moderating effects of the ocean (i.e., cool Summers and warm Winters) extend significantly deeper inland and spread into the watersheds associated with these major rivers: the Santa Clara River, the Los Angeles River, the San Gabriel River, the Santa Ana River, the Santa Margarita River, the San Luis Rey River, and the San Diego River. This cismontane effect creates a recognizably different and distinct mosaic of biodiversity across the inland valleys and associated slopes of cismontane southern California. The river system climatically affecting the Inland Empire is the Santa Ana River.

sensitivity rankings, occurs in six (6) to 20 known locations and/or has 2,000 to 10,000 acres of habitat remaining with a “threatened” degree of threat.

The one (1) alliance represented within the broader **Riversidean Upland Sage Scrub** (CNDDB Code CTT32710CA) category on-site is the Palmer's goldenbush scrub alliance/Annual non-native grassland. This alliance and its respective association on-site are described below.

Palmer's Goldenbush Scrub Alliance (CaCode 38.130.00)/Annual non-native grassland

The Palmer's goldenbush scrub alliance on-site is comprised of the Palmer's goldenbush association, which is described below.

Palmer's Goldenbush Association (CaCode 38.130.01)/Annual Non-Native Grassland

Concentrated relict areas of Palmer's goldenbush scrub are present on-site. Palmer's goldenbush scrub contains one (1) dominant species, thickbracted goldenbush (*Ericameria palmeri* var. *pachylepis*). This association is located throughout the subject property. It is, however, heavily invaded with annual non-native grasses such as wall barley (*Hordeum murinum*) and brome (*Bromus* sp.) and weeds such as Russian thistle (*Salsola tragus*) and short-pod mustard (*Hirschfeldia incana*). This community on-site has therefore been mapped as Palmer's goldenbush scrub / annual non-native grassland. This community comprises 1.72 acres on-site.

GRASSLAND COMMUNITIES

Annual non-native grassland is the only discernible grassland community on the subject property. As described above, several non-native invasive grasses and weeds are present on-site, including wall barley, brome, Russian thistle and short-pod mustard. No specific alliances within the annual non-native grassland community on-site were discernible.

LANDSCAPE TYPES

The balance of the site does not contain native vegetation communities. The eastern portion of the subject property is comprised of existing development and disturbed vegetation.

Developed/Disturbed (No Corresponding CaCode, No Community Present)

As described above in Section 1.0, a single-family residence and associated barn is located in the eastern portion of the subject property. This area was labeled as Developed/Disturbed. This area comprises 0.61 acre on-site.

SUMMARY

Representative photographs depicting current conditions of the subject property are depicted in *Exhibit 6 - Site Photographs*, attached.

The vegetation communities, their landscape distinctions, and their respective acreages on-site are listed below in *Table 1 – Vegetation Communities, Landscape Distinctions, and Respective Areas*.

Table 1 – Vegetation Communities, Landscape Distinctions, and Respective Areas

Developed/disturbed	0.61 Acre
Palmer's goldenbush scrub/annual non-native grassland	1.72 acres
Total	2.33 acres

4.0 BIOGEOGRAPHY, CORRIDORS, AND WILDLIFE

The MSHCP has taken into account the principles discussed below including establishment of protected core areas and maintaining connectivity through linkages between core areas. The project site is not within these cores or linkage areas.

BACKGROUND AND THEORY

Biogeographic theory as a discipline has given rise to concepts such as biodiversity, extirpation event causes, wildlife corridors, habitat patches and fragmentation, edge effect, and reserve design and management. Land use decisions increasingly must consider not only the direct effects to organisms impacted by project implementation, but longer term and less obvious effects to organismal population vitality and organism dispersal and movement.

Movement pathways (small scale, or “micro-corridors”) and corridors (large scale, or “macro-corridors”) are differentiated by their roles. Actual wildlife corridors are often “hard-wired” into a species. Corridors may be as large and diverse as the Pacific Flyway for migratory bird species, or may be smaller for animals moving between montane and valley environments on a seasonal basis. Movement pathways are necessary in the short-term success of mobile organisms, which require larger ranges for their survival.

Biogeographic theory maintains that any habitat patch, or island, which experiences genetic isolation, will undergo eventual extinction if the habitat unit is too small to support genetic variability in any given species.

BIOGEOGRAPHIC SETTING

The subject property is located approximately 0.5 mile southeast of Lake Elsinore; therefore the site is located within the larger Elsinore Basin. The Elsinore Basin is generally situated between Warm Springs Valley and the Gavilan Hills to the north, the Elsinore Mountains within the larger Cleveland National Forest to the south and west, and the Sedco Hills and Railroad Canyon Reservoir to the east. The project site's general

region contains a long history of development and recreational use associated with Lake Elsinore, although this region is gradually becoming more urbanized as the human population within the City of Wildomar continues to increase.

WILDLIFE UTILIZATION OF CORRIDORS

Wildlife use of corridors may be fixed or flexible, depending upon the type of organism and the size and complexity of the corridor zone. Animals that move along corridors as part of an evolutionary-based pattern of migration or dispersal may be genetically programmed to follow predetermined and sometimes ancient migration routes (i.e., “hard-wired”, or for example, as with anadromous fish species like spawning salmon [*Oncorhynchus* spp.]). Animals with hard-wired behavior patterns usually have little or no individual ability to modify their behavior, even in the face of abrupt physical changes or barriers. When confronted with impassible barriers, they may have no appropriate alternative response behaviorally. In such cases, actions that physically obstruct corridors may result in population dislocation, inability to reach essential seasonal resource areas, loss of individual animals, and overall population declines.

The project site is located in a relatively urbanized area and is not situated within an MSHCP-established core area or linkage. The area is comprised of residential, commercial and industrial development, Faith Baptist Academy to the south, Elsinore High School to the east, and Skylark Airport to the northwest. As such, the project site is poorly situated to serve as a movement or migratory corridor. Additionally, I-15 presents a substantial barrier for wildlife movement from one (1) side of the Elsinore Basin to the other. We found no evidence to suggest that the subject site lies within a corridor or movement pathway.

LANDSCAPE TYPES

TERACOR identified several generalized landscape types in the vicinity of the project site. These natural and human-affected landscapes include:

1. Natural Open Space, primarily including the Elsinore Mountains and associated foothills;
2. Residential, commercial and industrial development (e.g., rural residential development, single family housing, Faith Baptist Academy, Elsinore High School and Skylark Airport);
3. The Lake Elsinore State Recreation Area; and
4. Infrastructure installations (e.g., freeways and roads)

Much of the landscape is urbanized, characterized primarily by residential buildings and ornamental landscape with wildlife typical to urban areas and fringe urban areas. This condition can be seen in *Exhibit 7 – 2018 Biogeographic Aerial Photograph*, attached.

WILDLIFE WITHIN THE SUBJECT PROPERTY

Because the subject property has been historically disturbed, natural habitat on-site is limited in extent. The project site is considered to have a low value to wildlife. The relatively low density of vegetation, however, does support more common animals like California ground squirrels (*Otospermophilus beecheyi*), desert cottontail (*Sylvilagus audubonii*) and western fence lizard (*Sceloporus occidentalis*). The habitat on-site also provides suitable foraging habitat for California towhee (*Melospiza crissalis*), house finch (*Haemorhous mexicanus*), common raven (*Corvus corax*) and coyote (*Canis latrans*), among others.

In addition to bird species that were easily detected and recorded, there are other animals that are less easy to observe that could reside or occur within the 2.33-acre property from time to time. These include coyote, San Diego desert woodrat (*Neotoma lepida intermedia*) and Dulzura kangaroo rat (*Dipodomys simulans*). Additionally, there are several species of white-footed mice that could occur. Southern Pacific rattlesnake (*Crotalus oreganus helleri*) and common gophersnake (*Pituophis catenifer*) and perhaps other snakes could occur on-site.

AVIAN UTILIZATION

The natural habitat on-site could serve as a stopover or resting area for migratory birds. During the course of focused burrowing owl surveys in 2018, TERACOR field personnel have detected a total of seven (7) avian species which utilize habitats on-site or immediately surrounding the subject property. These species include American crow (*Corvus brachyrhynchos*), mourning dove (*Zenaida macroura*), California scrub-jay (*Aphelocoma californica*), house finch, American kestrel (*Falco sparverius*), Cassin's kingbird (*Tyrannus vociferans*) and rock pigeon (*Columba livia*). Appendix B contains a complete list of birds detected as well as those which have the potential to occur on-site.

BIOGEOGRAPHY CONCLUSION

As shown in the previously-referenced *Exhibit 7 – 2018 Biogeographic Aerial Photograph* and discussed in the foregoing analysis, no existing wildlife movement corridors are present in the vicinity of the project site. Project implementation therefore would not result in the removal of any existing corridors.

5.0 REGULATORY STATUS SPECIES ANALYSIS

MSHCP-COVERED SPECIES AND THE SUBJECT PROPERTY

Table 2 – MSHCP-Covered Species, below, discusses the species covered under the MSHCP, their respective status on-site, life history, and habitat description. TERACOR's methodology of predicted probability of occurrence on-site is described above in *Section 2.0 – Presence/Absence and/or Probability of Occurrence*.

Table 2 – MSHCP-Covered Species

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
PLANTS		
Yucaipa onion (<i>Allium marvinii</i>)	CNPS Rare Plant Rank 1B.2 This species has no formal federal or state governmental listing status	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. This perennial bulbiferous herb blooms from April through May and occurs on clay soils, dry slopes, ridges and openings in chaparral between 760 and 1,065 meters in elevation. According to the CNPS, this species is known only from the Yucaipa and Beaumont area of the southern San Bernardino Mountains. The subject property, therefore, is located outside of this onion's known geographic distribution. This species was not detected on-site.
Munz's onion (<i>Allium munzii</i>)	CNPS Rare Plant 1B.1 FE, ST	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. This perennial bulbiferous herb was listed as federally endangered on 13 October 1998 and as state threatened in January 1990. It occurs on clay soils in mesic grassy openings in coastal sage scrub, chaparral, cismontane woodland and pinyon and juniper woodland between 297 and 1070 meters in elevation. It blooms from March through May. The attached <i>Exhibit 8 – CNDDDB Occurrences</i> shows that Munz's onion was detected west of Elsinore Peak in the Elsinore Mountains in 2008. Clay soils are not present on-site; therefore habitat on the subject property is not suitable for this species. Munz's onion was not detected on-site.
San Diego ambrosia (<i>Ambrosia pumila</i>)	CNPS Rare Plant Rank 1B.1 FE	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. This perennial rhizomatous herb was listed as federally endangered on 02 July 2002. It occurs on sandy loam or clay soils in coastal scrub, chaparral, valley and foothill grassland and vernal pools. San Diego ambrosia can often occur in disturbed areas, and sometimes in alkaline areas. The elevational range of this clonal species is 20 to 415 meters. It blooms from April through October. The nearest occurrences to the project site are located north of Lake Elsinore between Riverside Drive (Highway 74) and Nichols Road and on either side of Baker Street. Sandy loam soils are present on-site, however site conditions are not considered suitable for this species. San Diego ambrosia was not detected on-site.
Rainbow manzanita (<i>Arctostaphylos rainbowensis</i>)	CNPS Rare Plant Rank 1B.1 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial evergreen shrub blooms from December through March and occurs on granitic outcrops in chaparral between 205 and 670 meters in elevation. Suitable habitat for this shrub is not present, and this species is not known to occur within the Wildomar area. Rainbow manzanita was not detected on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
Jaeger's bush milkvetch (<i>Astragalus pachypus</i> var. <i>jaegeri</i>) Formerly known as Jaeger's milk-vetch	CNPS Rare Plant Rank 1B.1 This variety has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial shrub blooms from December through June and occurs in sandy or rocky areas in chaparral, cismontane woodland, coastal scrub and valley and foothills grassland between 365 and 975 meters in elevation. The subject property is outside this variety's known geographic range, and Jaeger's bush milkvetch has not been detected on the subject property.
San Jacinto Valley crownscale (<i>Atriplex coronata</i> var. <i>notatior</i>)	CNPS Rare Plant Rank 1B.1 FE	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. This annual herb was listed as federally endangered on 13 October 1998. It occurs in alkaline playas, mesic valley and foothill grasslands and vernal pools from 139 to 500 meters in elevation. San Jacinto Valley crownscale blooms from April through August. It is threatened by flood control, agriculture, non-native plants, urbanization, vehicles, road maintenance, and pipeline construction. According to the MSHCP, this species is primarily restricted to the alkali floodplains of the San Jacinto River, Mystic Lake and Salt Creek in association with Willows, Domino and Traver soils. This variety is also known to occur north of Diamond Valley Lake and on Willows soils at Alberhill Creek near Lake Elsinore. Suitable habitat is not present on-site. San Jacinto Valley crownscale was not detected on the subject property.
Parish's brittlescale (<i>Atriplex parishii</i>)	CNPS Rare Plant Rank 1B.1 This species has no formal federal or state governmental listing status	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. This species blooms June through October, and occurs on alkaline or clay soils in playas, vernal pools, and chenopod scrub below 1900 meters. In southwest Riverside County, this species is known to occur near Highways 74 and 79 in Winchester and Homeland, Hemet and near Lakeview Hot Springs. Suitable habitat is not present on-site. This species was not detected on-site.
Davidson's saltscale (<i>Atriplex serenana</i> var. <i>davidsonii</i>)	CNPS Rare Plant Rank 1B.2 This variety has no formal federal or state governmental listing status	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. An annual herb which blooms from April through October, this variety occurs below 200 meters in alkaline conditions in coastal bluff scrub and coastal scrub. The nearest known occurrence to the project site is located near Murrieta Creek, south of the intersection of Clinton Keith Road and Palomar Street, west of Interstate 15. Suitable habitat is not present on-site, and the subject property is outside of this variety's known geographic range. This variety was not detected on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
Nevin's barberry (<i>Berberis nevinii</i>)	CNPS Rare Plant Rank 1B.1 FE, SE	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not required for the subject property. This perennial evergreen shrub was listed as federally endangered on 13 October 1998 and as state endangered in January 1987. It blooms from March through June, and occasionally as early as February. It occurs in sandy or gravelly conditions in washes, coastal scrub, chaparral, cismontane woodland, and riparian scrub from 70 to 825 meters. This species was not detected on-site.
Johnston's rockcress (<i>Boechea johnstonii</i>) Formerly known as <i>Arabis johnstonii</i>	CNPS Rare Plant Rank 1B.2 This species has no formal federal or state governmental listing status	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. This perennial herb blooms from February through June and often occurs on eroded clay in chaparral and lower montane coniferous forest between 1,350 and 2,150 meters in elevation. According to the CNPS, Johnston's rockcress is only known from the southern San Jacinto Mountains. The subject property, therefore, is outside of this species' known geographic distribution. This herb was not detected on-site.
thread-leaved brodiaea (<i>Brodiaea filifolia</i>)	CNPS Rare Plant Rank 1B.1 FT, SE	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not required for the subject property. This species was listed as federally threatened on 13 October 1998 and as state endangered in January 1982. This bulbiferous perennial herb blooms from March through June and is known to occur in chaparral openings, cismontane woodland, coastal scrub, playas, valley and foothill grasslands, and most often in vernal pool complexes and clay soils between 25 and 1120 meters. The nearest known occurrence to the project site is located near Elsinore Peak in the Elsinore Mountains. This species was not detected on-site.
Orcutt's brodiaea (<i>Brodiaea orcuttii</i>)	CNPS Rare Plant Rank 1B.1 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial bulbiferous herb blooms from May through July and occurs on mesic and clay soils in closed-cone coniferous forest, chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland and vernal pools between 30 and 1,692 meters in elevation. Suitable habitat is not present on-site, and the subject property is not located within the known geographic distribution of this species. Orcutt's brodiaea was not detected on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
round-leaved filaree (<i>California macrophylla</i>)	CNPS Rare Plant Rank CBR This species has no formal federal or state governmental listing status	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. This annual, biennial herb blooms from March through July and occurs in vertic clay and occasionally serpentine soils in scrub, cismontane woodland and valley and foothill grassland between 15 and 1200 meters above msl. It has a broad distribution throughout central and southern California. The CNPS changed the rare plant rank on this species from 1B.2 to CBR on 11 December 2017 because CNPS considers this species to be too common statewide to include in the rare plant inventory. Clay or serpentine soils required by this species are not present on-site. This species was not detected on-site.
San Jacinto mariposa lily (<i>Calochortus palmeri</i> var. <i>munzii</i>) Formerly known as Munz's mariposa lily	CNPS Rare Plant Rank 1B.2 This variety has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial bulbiferous herb blooms from April through July and occurs in chaparral, lower montane coniferous forest and meadows and seeps between 855 and 2,200 meters in elevation. According to the CNPS, this variety is known only from a few occurrences in the San Jacinto Mountains. The subject property, therefore, is located outside of this variety's known geographic distribution. Habitat on-site is not suitable for this mariposa lily, and it was not detected on the subject property.
Plummer's mariposa lily (<i>Calochortus plummerae</i>)	CNPS Rare Plant Rank 4.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial bulbiferous herb is considered to be rare by the <i>Jepson Manual</i> ; however CNPS notes that this species is more common than originally known. This plant is generally found on granitic, rocky slopes within chaparral, cismontane woodland, coastal scrub, and grassland from 100 to 1700 meters. Suitable habitat is not present, and this species was not detected on-site.
intermediate mariposa lily (<i>Calochortus weedii</i> var. <i>intermedius</i>)	CNPS Rare Plant Rank 1B.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial bulbiferous herb blooms from May through July and occurs in rocky, calcareous areas in chaparral, coastal scrub and grassland between 105 and 855 meters in elevation. Suitable habitat is not present on-site, and this variety was not detected on the subject property.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
Payson's jewelflower (<i>Caulanthus simulans</i>)	CNPS Rare Plant Rank 4.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This annual herb occurs between 90 and 2200 meters, and is generally associated with sandy and granitic areas in chaparral, coastal scrub, and pinyon/juniper woodland. Payson's jewelflower blooms from February through June. According to Jepson, the nearest occurrence to the subject site occurred east of I-15 and south of Bundy Canyon Road. This species would not be expected to occur on-site due to the lack of suitable habitat.
Vail Lake ceanothus (<i>Ceanothus ophiochilus</i>)	CNPS Rare Plant Rank 1B.1 FT, SE	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. Vail Lake ceanothus was listed as federally threatened on 13 October 1998 and as state endangered in January 1994. This perennial evergreen shrub blooms from February through March and occurs on gabbroic or pyroxenite-rich outcrops in chaparral from 580 to 1,065 meters in elevation. According to the CNPS, this species is known from only three (3) occurrences near Vail Lake. Habitat on-site is not suitable for this species, and the subject property is outside this shrub's known geographic distribution. Vail Lake ceanothus does not occur on-site.
smooth tarplant (<i>Centromadia pungens</i> ssp. <i>laevis</i>)	CNPS Rare Plant Rank 1B.1 This subspecies has no formal federal or state governmental listing status	Low. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not required for the subject property. This annual herb blooms from April through September and occurs below 640 meters in elevation. According to Jepson, smooth tarplant occurs in open, poorly drained flats, depressions, waterway banks and beds, grassland and disturbed sites. CNPS states that this subspecies occurs in alkaline areas in chenopod scrub, meadows and seeps, playas, riparian woodland and grassland. As shown in the attached <i>Exhibit 8 – CNDDDB Occurrences</i> , several detections of smooth tarplant have occurred within the vicinity of the project site; the nearest being on the west side of Mission Trail in 2013, 0.75 mile north of the subject site. This subspecies was not present on-site during August surveys.
peninsular spineflower (<i>Chorizanthe leptotheca</i>)	CNPS Rare Plant Rank 4.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This annual herb blooms from May through August and occurs on alluvial fans and granitic areas in chaparral, coastal scrub and lower montane coniferous forests from 300 to 1,900 meters in elevation. Suitable habitat for this species is not present, and this spineflower was not detected on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
Parry's spineflower (<i>Chorizanthe parryi</i> var. <i>parryi</i>)	CNPS Rare Plant Rank 1B.1 This variety has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This annual herb occurs in sandy or rocky openings in chaparral, cismontane woodland, coastal scrub and grassland between 275 and 1220 meters in elevation. It blooms from April through June and is currently known from approximately 20 occurrences in Riverside County. As shown in the attached <i>Exhibit 8 – CNDDDB Occurrences</i> , Parry's spineflower was detected in 2006 as near as 1.75 miles, south of Bundy Canyon Road and east of Monte Vista Road. Habitat on-site is considered to be too disturbed for this varietal to occur on the subject property.
long-spined spineflower (<i>Chorizanthe polygonoides</i> var. <i>longispina</i>)	CNPS Rare Plant Rank 1B.2 This species has no federal or state formal governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This annual herb occurs in sandy and often clayey areas in chaparral, coastal scrub, meadows and seeps, grassland and vernal pools between 30 and 1530 meters in elevation. This variety flowers from April through July. As shown in the attached <i>Exhibit 8 – CNDDDB Occurrences</i> , long-spined spineflower has been detected in the Elsinore Mountains. Habitat on-site is considered to be too disturbed for this varietal to occur on the subject property.
prostrate spineflower (<i>Chorizanthe procumbens</i>)	CNPS Rare Plant Rank CBR This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This annual herb occurs in sand or gravel from approximately sea level to 1,300 meters in elevation and is considered common by Jepson. Habitat on-site is considered to be too disturbed for this species to occur on the subject property.
San Miguel savory (<i>Clinopodium chandleri</i>) Formerly known as <i>Satureja chandleri</i>	CNPS Rare Plant Rank 1B.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not required for the subject property. This perennial shrub occurs in rocky, gabbroic or metavolcanic areas in chaparral, cismontane woodland, coastal scrub, riparian woodland and grassland between 120 and 1075 meters in elevation. It blooms from March through July. Habitat on-site is considered to be too disturbed for this species to occur on the subject property, and it was not detected.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
small-flowered morning-glory (<i>Convolvulus simulans</i>)	CNPS Rare Plant Rank 4.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This annual herb occurs on wet clay and serpentine ridges within openings in chaparral, coastal scrub, and grasslands between 30 and 740 meters. It blooms from March through July. The CNPS notes that it is rare in southern California. Moist clay and serpentine soils are not present. This species was not detected on-site.
Mojave tarplant (<i>Deinandra mohavensis</i>)	CNPS Rare Plant Rank 1B.3 SE	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This annual herb blooms from May through January and occurs in mesic areas in chaparral, coastal scrub and riparian scrub between 640 and 1,600 meters in elevation. The subject property is outside this species' known geographic distribution, and this tarplant was not detected on-site.
Cleveland's bush monkeyflower (<i>Diplacus clevelandii</i>) Formerly known as <i>Mimulus clevelandii</i>	CNPS Rare Plant Rank 4.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial rhizomatous herb blooms from April through July and occurs in gabbroic, often in disturbed areas, openings and rocky areas in chaparral, cismontane woodland and lower montane coniferous forest between 450 and 2000 meters in elevation. Suitable habitat is not present, and the subject property is outside this species' known geographic range. This species was not detected on-site.
slender-horned spineflower (<i>Dodecahema leptoceras</i>)	CNPS Rare Plant Rank 1B.1 FE, SE	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not required for the subject property. Listed as federally endangered on 28 September 1987 and state endangered in January 1982, this annual herb requires flood deposited terraces and washes in chaparral, alluvial fan sage scrub and cismontane woodland between 200 and 760 meters. It blooms from April through June and is known to occur as near as Lake Elsinore. Habitat on-site is considered to be too disturbed for this species to occur on the subject property. This species was not detected on-site.
many-stemmed dudleya (<i>Dudleya multicaulis</i>)	CNPS Rare Plant Rank 1B.2 This species has no formal federal or state governmental listing status	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. This dudleya grows in heavy or clayey soils and sandstone outcrops in chaparral, coastal scrub and valley and foothill grassland, below 790 meters throughout the south coast (Los Angeles, Orange, San Bernardino, San Diego, and Riverside Counties). It blooms from April through July. Clay and other heavy soils are not present on-site. This species was not detected on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
sticky dudleya (<i>Dudleya viscida</i>) Formerly known as sticky-leaved dudleya	CNPS Rare Plant Rank 1B.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial herb blooms from May through June and occurs in rocky areas in coastal bluff scrub, chaparral, cismontane woodland and coastal scrub between ten (10) and 550 meters in elevation. The subject property is outside of this species' known geographic distribution. This dudleya was not detected on-site.
Santa Ana River woollystar (<i>Eriastrum densifolium</i> ssp. <i>sanctorum</i>)	CNPS Rare Plant Rank 1B.1 FE, SE	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. Listed as federally endangered on 28 September 1987 and state endangered in January 1987, this perennial herb occurs in sandy or gravelly washes, floodplains, and dry riverbeds in chaparral and alluvial fan sage scrub from 91 to 610 meters in elevation. It blooms from April through September. This subspecies primarily occurs along the Santa Ana River from San Bernardino to Riverside. Suitable habitat is not present on-site. Further, Santa Ana River woollystar was not detected on the subject property.
San Diego button-celery (<i>Eryngium aristulatum</i> var. <i>parishii</i>)	CNPS Rare Plant Rank 1B.1 FE, SE	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. Listed as federally endangered on 03 August 1993 and state endangered in July 1979, this herb blooms from April through June and occurs in mesic areas in coastal scrub, valley and foothill grassland, vernal pools and marshes between 20 and 620 meters in elevation. Suitable habitat is not present on-site, and the subject property is located outside of this variety's known geographic distribution. San Diego button-celery was not detected on-site.
Palomar monkeyflower (<i>Erythranthe diffusa</i>) Formerly known as <i>Mimulus diffusus</i>	CNPS Rare Plant Rank 4.3 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This annual herb blooms from April through June and occurs on sandy or gravelly substrates in chaparral and lower montane coniferous forest between 1220 and 1830 meters in elevation. Suitable habitat is not present on-site, and the subject property is outside this species' known geographic range. This species was not detected on the subject site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
San Jacinto Mountains bedstraw (<i>Galium angustifolium</i> ssp. <i>jacinticum</i>)	CNPS Rare Plant Rank 1B.3 This subspecies has no formal federal or state governmental listing status	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. This perennial herb blooms from June through August and occurs in lower montane coniferous forest between 1350 and 2100 meters in elevation. The subject property is outside of this subspecies' known geographic distribution, and suitable habitat is not present on-site. This bedstraw was not detected on the subject site.
Alvin Meadow bedstraw (<i>Galium californicum</i> ssp. <i>primum</i>) Formerly known as California bedstraw	CNPS Rare Plant Rank 1B.2 This subspecies has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This subspecies is found on granitic or sandy substrates in chaparral and lower montane coniferous forests. Its blooming period is May through July and elevation range is 1350 to 1700 meters above sea level. Suitable habitat is not present, and the subject property is outside the subspecies' known geographic range. This subspecies was not detected on-site.
Palmer's grappling hook (<i>Harpagonella palmeri</i>)	CNPS Rare Plant Rank 4.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This annual herb grows on clay substrates and open grassy areas in shrubland in chaparral, coastal scrub, and grassland below 955 meters. It blooms from March through May. The species has a broad distribution throughout the south coast, the Peninsular Ranges, Arizona, and into Mexico. Suitable habitat is not present on-site, and this species was not detected on the subject property.
shaggy-haired alumroot (<i>Heuchera hirsutissima</i>)	CNPS Rare Plant Rank 1B.3 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in western Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial rhizomatous herb blooms from May through July and occurs in rocky and granitic areas in subalpine coniferous forest and upper montane coniferous forest between 1520 and 3500 meters in elevation. The subject property is outside of this species' known geographic range, and suitable habitat is not present on-site. This species was not detected on the subject site.
graceful tarplant (<i>Holocarpha virgata</i> ssp. <i>elongata</i>)	CNPS Rare Plant Rank 4.2 This subspecies has no formal federal or state governmental listing status	Not Present. This MSHCP-covered subspecies can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This annual herb blooms from May through November and occurs in chaparral, cismontane woodland, coastal scrub, and valley and foothill grassland between 60 and 1100 meters in elevation. Habitat on-site is considered to be too disturbed for this subspecies to occur on the subject property, and it was not detected on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
bobtail (vernal) barley (<i>Hordeum intercedens</i>)	CNPS Rare Plant Rank 3.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This species occurs in vernal pools, alkali flats and ephemeral saline streams within coastal dunes, coastal scrub and grasslands below 1000 meters throughout southwestern California. This annual herb blooms from March through June. Suitable habitat is not present on-site, and this species was not detected on the subject property.
beautiful hulsea (<i>Hulsea vestita</i> ssp. <i>callicarpa</i>)	CNPS Rare Plant Rank 4.2 This subspecies has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial herb blooms from May through October and occurs on open gravel, talus slopes, rocky and granitic areas in montane chaparral and coniferous forest between 915 and 3050 meters in elevation. Suitable habitat is not present on-site, and the subject property is outside of this subspecies' known geographic range. Beautiful hulsea was not detected on the site.
Southern California black walnut (<i>Juglans californica</i>) Formerly <i>Juglans californica</i> var. <i>californica</i>	CNPS Rare Plant Rank 4.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial deciduous tree occurs on slopes and in canyons between 50 and 900 meters along the south coast, south Transverse Ranges, and north Peninsular Ranges. It blooms from March through August. Walnut forest is a much fragmented, declining natural community. This species was not detected on-site.
Coulter's goldfields (<i>Lasthenia glabrata</i> ssp. <i>coulteri</i>)	CNPS Rare Plant Rank 1B.1 This subspecies has no formal federal or state governmental listing status	Not Present. The MSHCP does not require focused surveys for this subspecies for this area because it has no potential to occur on-site. Although now quite rare, this subspecies was historically widely distributed across southwestern California and into the western Mojave desert. It occurs in moist saline areas, primarily vernal pools. This plant blossoms February through June. The attached <i>Exhibit 8 – CNDCB Occurrences</i> shows that this plant was detected in the Lake Elsinore area in 1922. Suitable habitat is not present on-site. This subspecies was not detected on-site.
heart-leaved pitcher sage (<i>Lepechinia cardiophylla</i>)	CNPS Rare Plant Rank 1B.2 This species has no formal federal or state governmental listing status	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. This perennial shrub blooms from April through July and occurs in closed-cone coniferous forest, chaparral and cismontane woodland between 520 and 1370 meters in elevation. Suitable habitat is not present, and the subject property is outside of this species' known geographic distribution. This species was not detected on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
ocellated Humboldt lily (<i>Lilium humboldtii</i> ssp. <i>ocellatum</i>)	CNPS Rare Plant Rank 4.2 This subspecies has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial bulbiferous herb blooms from March through August and occurs in openings within chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest and riparian woodland between 30 and 1800 meters in elevation. Suitable habitat is not present on-site, and the subject property is outside this subspecies' known geographic range. This lily was not detected on-site.
lemon lily (<i>Lilium parryi</i>)	CNPS Rare Plant Rank 1B.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial bulbiferous herb blooms from July through August and occurs in mesic areas within lower and upper montane coniferous forest, meadows and seeps, and riparian forest between 1220 and 2745 meters in elevation. The subject property is located outside of this species' known geographic range, and suitable habitat is not present on-site. Lemon lily was not detected on the project site.
Parish's meadowfoam (<i>Limnanthes alba</i> ssp. <i>parishii</i>) Formerly known as <i>Limnanthes gracilis</i> var. <i>parishii</i>	CNPS Rare Plant Rank 1B.2 SE	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. Parish's meadowfoam was listed as state endangered in July 1979. This annual herb blooms from April through June and occurs in vernal mesic areas and along edges of ephemeral streams in lower montane coniferous forest, meadows and seeps, and vernal pools between 600 and 2000 meters in elevation. Suitable habitat is not present on-site, and the subject property is outside this subspecies' known geographic distribution. This subspecies was not detected on-site.
small-flowered microseris (<i>Microseris douglasii</i> ssp. <i>platycarpa</i>)	CNPS Rare Plant Rank 4.2 This subspecies has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. Found in clay soils associated with vernal pools, grasslands and similar habitats, this annual herb blooms from March through May and occurs below 1070 meters in the South Coast region, Peninsular Ranges and San Jacinto Mountains. Suitable habitat is not present, and this subspecies was not detected on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
Hall's monardella (<i>Monardella macrantha</i> ssp. <i>hallii</i>)	CNPS Rare Plant Rank 1B.3 This subspecies has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial rhizomatous herb blooms from June through October and occurs in broad-leafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and valley and foothill grassland between 730 and 2195 meters in elevation. The subject property is outside this subspecies' known geographic range, and Hall's monardella was not detected on-site.
California muhly (<i>Muhlenbergia californica</i>)	CNPS Rare Plant Rank 4.3 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This now uncommon perennial rhizomatous herb blooms from June through September and occurs in seeps and streambanks in chaparral, forests, scrub and meadows throughout the western Transverse Ranges and south coast regions. Its elevation range is between 100 and 2000 meters. Habitat on-site is considered to be too disturbed for this species to occur on the subject property, and it was not detected on-site.
little mouseltail (<i>Myosurus minimus</i> ssp. <i>apus</i>)	CNPS Rare Plant Rank 3.1 This subspecies has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not required for the subject property. This annual herb blooms from March through June and occurs in valley and foothill grassland and alkaline vernal pools between 20 and 640 meters in elevation. Habitat on-site is considered to be too disturbed for this subspecies to occur on the subject property, and it was not detected on-site.
mud nama (<i>Nama stenocarpa</i>) Formerly known as <i>Nama stenocarpum</i>	CNPS Rare Plant Rank 2B.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not required for the subject property. This herb blooms from January through July and occurs on marshes, swamps, lake margins and streambanks between 5 and 500 meters. Habitat on-site is not suitable, and this species was not detected on-site.
spreading navarretia (<i>Navarretia fossalis</i>)	CNPS Rare Plant Rank 1B.1 FT	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not required for the subject property. Listed as federally threatened on 13 October 1998, this annual blooms from April through June and occurs in vernal pools, ditches, chenopod scrub, marshes and swamps with assorted shallow freshwater, and playas. Habitat on-site is not suitable for this species, and it was not detected on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
prostrate vernal pool navarretia (<i>Navarretia prostrata</i>) Formerly known as prostrate navarretia	CNPS Rare Plant Rank 1B.1 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not required for the subject property. This annual herb blooms from April through July and occurs in mesic areas in coastal scrub, meadows and seeps, alkaline valley and foothill grassland, and vernal pools between three (3) and 1210 meters in elevation. Suitable habitat is not present on-site, and this species was not detected on the subject property.
California Orcutt grass (<i>Orcuttia californica</i>)	CNPS Rare Plant Rank 1B.1 FE, SE	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. This species is broadly distributed geographically, but confined to vernal pool complexes between fifteen (15) and 660 meters. It blooms from April through August. As depicted by the attached <i>Exhibit 8 – CNDDDB Occurrences</i> , California Orcutt grass was detected east of the San Jacinto River convergence with Lake Elsinore in 1998. This detection occurred approximately two (2) miles north of the subject property. No vernal pools are present on-site; therefore habitat on the subject property is unsuitable for this species. Further, this annual herb was not detected on-site.
California beardtongue (<i>Penstemon californicus</i>)	CNPS Rare Plant Rank 1B.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial herb blooms from May to August and occurs on sandy substrates in chaparral, lower montane coniferous forest, and pinyon and juniper woodland between 1170 and 2300 meters in elevation. Suitable habitat is not present on-site, and the subject property is outside this species' known geographic range. California beardtongue was not detected on the subject site.
Brand's star phacelia (<i>Phacelia stellaris</i>) Formerly known as Brand's phacelia	CNPS Rare Plant Rank 1B.1 This species has no formal federal or state governmental listing status	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. This annual herb blooms from March through June and occurs in open areas within coastal dunes and coastal sage scrub below 400 meters. Habitat on-site is not suitable, and the subject property is outside of this species' known geographic range. Further, this species was not detected on-site.
Fish's milkwort (<i>Polygala cornuta</i> var. <i>fishiae</i>)	CNPS Rare Plant Rank 4.3 This variety has no formal federal or state governmental listing status	Not Present. This MSHCP-covered variety can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial deciduous shrub blooms from May through August and occurs in chaparral, oak woodland and riparian woodland between 100 and 1000 meters in elevation. Suitable habitat is not present on-site, and this varietal was not detected on the subject property.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
cliff cinquefoil (<i>Potentilla rimicola</i>)	CNPS Rare Plant Rank 2B.3 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial herb occurs in granitic and rocky crevices in subalpine coniferous forest and upper montane coniferous forest between 2400 and 2800 meters in elevation. This species blooms from July through September. According to the CNPS, cliff cinquefoil is known only to occur in the San Jacinto Mountains. Suitable habitat is not present on-site, and the subject property is outside of this species' known geographic range. This species was not detected on-site.
Engelmann oak (<i>Quercus engelmannii</i>)	CNPS Rare Plant Rank 4.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This once common southern California oak occurs in chaparral, cismontane woodland, riparian woodland and valley and foothill grassland. Its elevation range is 50 to 1300 meters. This perennial deciduous tree blooms from March through June. The subject property is outside of this species' known geographic range. This species was not detected on-site.
Coulter's matilija poppy (<i>Romneya coulteri</i>)	CNPS Rare Plant Rank 4.2 This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This perennial rhizomatous herb is distinctive in that it has the largest flowers of any plant native to California. It typically blooms from March to July, and occasionally as late as August. It is often found in burns in chaparral and coastal scrub in the Peninsular Ranges, Western Transverse Ranges, and the south coast area from 20 to 1200 meters in elevation. Suitable habitat is not present, and this species was not detected on-site.
Hammitt's clay-cress (<i>Sibaropsis hammittii</i>)	CNPS Rare Plant Rank 1B.2 This species has no formal federal or state governmental listing status	Not Present. The MSHCP does not require focused surveys for this species for this area because it has no potential to occur on-site. This annual herb blooms from March through April and occurs on clay soils in chaparral openings and valley and foothill grassland between 720 and 1065 meters in elevation. The attached <i>Exhibit 8 – CNDDDB Occurrences</i> shows that Hammitt's clay-cress was detected near Elsinore Peak in the Elsinore Mountains in 2016. Clay soils are not present on-site; therefore suitable habitat on the subject property is absent. Further, the project site is outside of this species' known geographic range. This species was not detected on the subject site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
chickweed oxytheca (<i>Sidotheca caryophylloides</i>) Formerly known as <i>Oxytheca caryophylloides</i>	CNPS Rare Plant Rank 4.3 This species has no formal federal or state governmental listing status.	Not Present. This MSHCP-covered species can occur in western Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This annual herb occurs on sandy substrates in lower montane coniferous forest. It blooms from July to October and its elevation range is 1114 to 2600 meters. The subject property is outside of this species' known geographic range, and suitable habitat is not present on-site. This species was not detected on the subject site.
Wright's trichocoronis (<i>Trichocoronis wrightii</i> var. <i>wrightii</i>)	CNPS Rare Plant Rank 2B.1 The variety has no formal federal or state governmental listing status	Not Present. The MSHCP does not require focused surveys for this variety for this area because it has no potential to occur on-site. This annual herb blooms from May through September and occurs at elevations of five (5) to 435 meters. Habitats for this variety include moist and alkaline places, drying riverbeds, meadows and seeps, marshes and swamps, riparian forests and vernal pools. The subject property does not contain suitable habitat for this variety. This variety was not detected on-site.
INVERTEBRATES		
vernal pool fairy shrimp (<i>Branchinecta lynchi</i>)	FT	Not Present. The property was determined to be unsuitable for this species in the Habitat Suitability Assessment and no focused surveys were conducted. Potential habitat includes short lived, cool temperature vernal pools. No vernal pools are present on-site; therefore suitable habitat for this fairy shrimp is not present on the subject property.
Quino checkerspot butterfly (<i>Euphydryas editha quino</i>)	FE	Not Present. The property was determined to be unsuitable for this species; therefore no focused surveys were conducted. The quino checkerspot butterfly occurs in sunny openings in chaparral and coastal sage shrublands in parts of Riverside and San Diego Counties. This subspecies frequents hills and mesas near the coast and requires high densities of food plants including <i>Plantago erecta</i> , <i>Plantago ovata</i> var. <i>insularis</i> and <i>Castilleja exserta</i> ssp. <i>exserta</i> . None of the quino checkerspot butterfly's host plants are present on-site; therefore this subspecies would not be expected to occur on the project site.
Santa Rosa Plateau fairy shrimp (<i>Linderiella santarosae</i>)	This species has no formal federal or state governmental listing status	Not Present. The property was determined to be unsuitable for this species in the Habitat Suitability Assessment and no focused surveys were conducted. This species of fairy shrimp is restricted to cool-water vernal pools which are formed on Southern Basalt Flows. In the Plan Area, this species and its microhabitat are only known to occur on the Santa Rosa Plateau. Habitat on the subject property is not suitable, and the project site is outside of this species' known geographic range. Santa Rosa Plateau fairy shrimp was not detected on the subject site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
Delhi Sands flower-loving fly (<i>Rhaphiomidas terminatus abdominalis</i>)	FE	Not Present. The property was determined to be unsuitable for this species; therefore no focused surveys were conducted. Suitable habitat includes fine, sandy soils, often with wholly or partly consolidated dunes referred to as the "Delhi" series. The fly is typically found in relatively intact, open, sparse, native habitats with less than 50% vegetative cover and is restricted to the Colton Dunes in northwestern Riverside and southwestern San Bernardino Counties. The subject property is outside this subspecies' known geographic range; therefore the flower-loving fly would not be expected to occur on-site.
Riverside fairy shrimp (<i>Streptocephalus woottoni</i>)	FE	Not Present. The property was determined to be unsuitable for this species in the Habitat Suitability Assessment and no focused surveys were conducted. This species of fairy shrimp is endemic to western Riverside, Orange, and San Diego Counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. It inhabits seasonally astatic pools filled by winter/spring rains, and hatches in warm water later in the season. Suitable habitat is not present as vernal pools are not present on the subject property. This species is not present on-site.
FISH		
Santa Ana sucker (<i>Catostomus santaanae</i>)	FT	Not Present. The property was determined to be unsuitable for this species in the Habitat Suitability Assessment and no focused surveys were conducted. There are no aquatic resources for fish on-site. This species is not present on the subject property.
arroyo chub (<i>Gila orcutti</i>)	SSC	Not Present. The property was determined to be unsuitable for this species and no focused surveys were conducted. There are no aquatic resources for fish on-site. This species is not present on the subject property.
REPTILES		
orange-throated whiptail (<i>Aspidoscelis hyperythra</i>) Formerly known as the Belding's orange-throated whiptail (<i>Cnemidophorus hyperythrus beldingi</i>)	SWL	Low. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. This species inhabits washes, streams, terraces, and other sandy areas often where there are rocks and patches of brush and rocky hillsides. Orange-throated whiptail frequents coastal chaparral, thornscrub, and streamside growth. As depicted by the attached <i>Exhibit 8 – CNDDDB Occurrences</i> , the nearest detection of this species was approximately 0.5 mile south of Bundy Canyon Road in 2001, 1.25 miles southeast of the subject property. Marginally suitable habitat is present, although this whiptail was not detected on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
coastal whiptail <i>(Aspidoscelis tigris stejnegeri)</i> Formerly known as the coastal western whiptail <i>(Cnemidophorus tigris multiscutatus)</i>	SSC	Low. This MSHCP-covered subspecies could occur on-site, but the property is not in a conservation cell and not designated for conservation. This species inhabits deserts and semiarid habitats, usually where plants are sparse and there are open areas for running. It ranges from deserts to montane pine forests where it prefers warmer, drier areas. Coastal whiptail is also found in woodland and streamside growth and avoids dense grassland and thick growth of shrubs. It uses firm, sandy or rocky soil. Marginally suitable habitat is present, although this whiptail was not detected on-site during several August surveys.
southern rubber boa <i>(Charina umbratica)</i> Formerly known as <i>Charina bottae umbratica</i>	ST	Low. This MSHCP-covered species is unlikely to occur on-site. The property is not in a conservation cell and not designated for conservation. The southern rubber boa frequents grassland, broken chaparral, woodland, and forest, in and beneath rotting logs, under rocks, and under bark of fallen and standing dead trees. Necessary micro-habitat is not present, and this species has not been detected on-site.
San Diego banded gecko <i>(Coleonyx variegatus abbotti)</i>	SSC	Not Present. This MSHCP-covered subspecies can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This subspecies can live in extremely dry parts of the desert due to nocturnal and subterranean habits. It ranges from creosote bush flats and sagebrush desert to pinyon-juniper belt, and from catclaw-cedar-grama grass plant community in the eastern part of its range to chaparral areas in its western range. This gecko is often associated with rocks, and may seek shelter under them or in crevices. Suitable habitat is not present, and this subspecies was not detected on-site.
red-diamond rattlesnake <i>(Crotalus ruber)</i> Formerly known as the northern red-diamond rattlesnake <i>(Crotalus ruber ruber)</i>	SSC	Low. This MSHCP-covered species might potentially occur on-site, but the property is not in a conservation cell and not designated for conservation. This species frequents chaparral, woodland, grassland, and desert areas from coastal San Diego County to the eastern slopes of the mountains. It occurs in rocky areas and dense vegetation and utilizes rodent burrows, rock cracks or surface cover objects. Marginally suitable habitat is on-site; however this species has not been detected on the subject property.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
western pond turtle <i>(Emys marmorata)</i> Formerly known as <i>Clemmys marmorata pallida</i>	SSC	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The western pond turtle inhabits permanent or nearly permanent bodies of water in a number of habitat types below 1830 meters. It requires basking sites such as logs, rocks, vegetation mats, or open mud banks. As depicted by the attached <i>Exhibit 8 – CNDDB Occurrences</i> , this turtle was detected near Elsinore Peak in the Elsinore Mountains in 1970. Suitable habitat is not present on the subject property. This species is not present on-site.
California mountain kingsnake (San Bernardino population) <i>(Lampropeltis zonata [parvirubra])</i> Formerly known as the San Bernardino mountain kingsnake <i>(Lampropeltis zonata parvirubra)</i> California mountain kingsnake (San Diego population) <i>(Lampropeltis zonata [pulchra])</i> Formerly known as the San Diego mountain kingsnake <i>(Lampropeltis zonata pulchra)</i>	SWL	Not Present. These MSHCP-covered subspecies can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The California mountain kingsnake inhabits mountainous regions across southern California. It prefers moist woods, coniferous forests, oak woodlands, and chaparral above 1000 meters. They are quite secretive, residing in rock crevices or beneath rock and debris piles. They may also utilize rotting logs and seek cover under dense shrubs. Habitat on-site is not suitable, and the subject property is located outside of this snake's elevational range.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
coast horned lizard <i>(Phrynosoma blainvillii)</i> Formerly known as the coast (San Diego) horned lizard (<i>Phrynosoma coronatum</i>) – <i>blainvillii</i> population	SSC	Low. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. Favorable habitat for this lizard includes open, flat, sandy areas in which several colonies of harvester ants (<i>Pogonomermex</i> sp.) are established. Harvester ants are the coast horned lizard's preferred prey item. Plant communities associated with habitation of the coast horned lizard include coastal sage scrub. Slopes do not favor this animal and no harvester ant colonies were noted on-site. The attached <i>Exhibit 8 – CNDDDB Occurrences</i> shows that this species was detected in the lower foothills of the Elsinore Mountains, southwest of Grand Avenue, in 1989. This detection occurred approximately two (2) miles southwest of the project site. Marginally suitable habitat for this species is present on the subject property, although coast horned lizard was not detected on-site.
southern sagebrush lizard <i>(Sceloporus graciosus vandenburgianus)</i>	This subspecies has no formal federal or state governmental listing status	Not Present. This MSHCP-covered subspecies can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This lizard is found within the San Jacinto and Santa Rosa Mountains above 1,524 meters in elevation. Suitable habitat includes montane chaparral, sagebrush (<i>Artemisia</i> sp.), hardwood and conifer forests and woodlands and juniper woodlands. Habitat on-site is not suitable, and the subject property is outside of this subspecies' known geographic range.
granite spiny lizard <i>(Sceloporus orcutti)</i>	This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. This widespread species occurs in a wide variety of habitats but is restricted to granite outcrops and boulder fields in chaparral, coastal sage scrub, riparian areas, yellow pine forest, and pinyon-juniper woodlands at all elevation levels. Requisite micro-habitat is not present on-site, and this species has not been detected on the subject property.
granite night lizard <i>(Xantusia henshawi)</i> Formerly known as <i>Xantusia henshawi henshawi</i>	This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can potentially occur in Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This lizard occurs in localized populations distributed east of Interstate 215, but primarily within the eastern portion of the Plan Area. This organism is often found in flaking granite, rock outcrops, and boulder fields most commonly in chaparral, sage scrub, mixed conifer forest, and oak woodland. The subject property is outside of this species' known geographic range. The granite night lizard has not been detected on the project site.
AMPHIBIANS		

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
arroyo toad <i>(Anaxyrus californicus)</i> Formerly known as <i>(Bufo californicus)</i>	FE, SSC	Not Present. The MSHCP does not require focused surveys for the arroyo toad in this area because this species has no potential to occur on-site. The arroyo toad breeds in sandy river washes and arroyos; hence the name arroyo toad. This species has a very specialized breeding habitat in that it requires shallow, slow moving water or overflow pools within a stream system comprised of silt-free sandy or gravelly substrates. This species also requires streamside terraces for burrowing. Suitable breeding habitat is not present on the subject property, however, the organism is known to occur substantial distances (greater than one [1] mile) from its breeding habitat where it remains. This species does not occur on-site.
California red-legged frog <i>(Rana draytonii)</i> Formerly known as <i>Rana aurora draytonii</i>	FT, SSC	Not Present. The MSHCP does not require focused surveys for the California red-legged frog in this area because this species has no potential to occur on-site. Populations of this frog are in serious decline primarily due to the introduction of non-native predators such as the American bullfrog (<i>Lithobates catesbeianus</i>), habitat loss, and pollutants. This species prefers pond habitats for breeding; however, it will also utilize slow, permanent streams. Preferred breeding habitat is not present on-site. This species is not present on-site.
southern mountain yellow-legged frog <i>(Rana muscosa)</i> Formerly known as the mountain yellow-legged frog	FE, SE, SWL	Not Present. The MSHCP does not require focused surveys for the southern mountain yellow-legged frog in this area because this species has no potential to occur on-site. This frog species, once abundant, has lost approximately 99% of its former range. Chytrid fungus, introduction of bullfrogs and trout species, airborne pollution, fires, ozone depletion, and cattle grazing are just a few of the suspected causes of this, likely fatal, decline of the species. Suitable habitat is not present. This species is not present on-site.
western spadefoot <i>(Spea hammondi)</i> Formerly known as <i>Scaphiopus hammondi)</i>	SSC	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This species is generally found in washes, lowlands stream courses, floodplains, and vernal pools. Preferred habitat associations include chaparral, oak woodland, coastal sage scrub, riparian woodland, and grassland. The western spadefoot breeds in seasonal ponds and vernal pools in both upland and lowland areas. This species is active later in the season than other amphibians (i.e., April - June). The habitat on the subject property is not suitable due to the lack of sustained water resources on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
coast range newt (<i>Taricha torosa</i>) Formerly known as <i>Taricha torosa</i> <i>torosa</i>	SSC	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. Populations of the coast range newt are scattered throughout the south coast, and are confined to slow-moving streams and pools in which surface flows last year-round, as their larvae require one (1) year to develop. The habitat on the subject property is not suitable due to lack of year-round water sources. This species is not present on-site.
BIRDS		
Cooper's hawk (<i>Accipiter cooperii</i>)	SWL (Nesting)	Low. This MSHCP-covered species occurs in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The Cooper's hawk is a crow-sized raptor and typically breeds throughout the state. It is somewhat tolerant of human activity and population numbers appear to be on the rise. It nests in open forests, groves, or trees along rivers, or low scrub of treeless areas. The wooded area is often near the edge of a field or water opening. Marginally suitable habitat is present on-site; however this raptor has not been detected on the subject property.
northern goshawk (<i>Accipiter gentilis</i>)	SSC (Nesting) Third Priority	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. Northern goshawks nest in mature and old-growth forests with more than 60% closed canopy. Breeding sites in its western range include Douglas-fir and pine forests, aspen groves, and stands of paper birch (in Alaska). Goshawks often build nests near breaks in the canopy, such as a forest trail, jeep road, or openings created by a downed tree, and prefer sites with a nearby creek, pond or lake. This species hunts in the forest, along riparian corridors, and in more open habitat such as sagebrush steppes. Suitable nesting habitat is not present, and this hawk is not expected to forage on-site.
sharp-shinned hawk (<i>Accipiter striatus</i>)	SWL (Nesting)	Low (Not Nesting – Winter Resident). This MSHCP-covered species could forage on-site, but the property is not in a conservation cell and not designated for conservation. This species is a common winter visitor to southern California. It prefers forested or woodland riparian habitats, but will also occur in urban areas. Garrett and Dunn cite nesting records in the San Gabriel Mountains, San Bernardino Mountains, San Diego County, and the San Jacinto Mountains. This species is unlikely to nest on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
tricolored blackbird (<i>Agelaius tricolor</i>)	SCE, SSC (Nesting Colonies Only) First Priority	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The tricolored blackbird occurs in southern California along the coast and at some inland localities. Nesting habitat for the tricolored blackbird includes both brackish and freshwater marshes. Foraging habitats include cultivated fields, feedlots associated with dairy farms, and wetlands. This species forms the largest nesting colonies of any Passerine bird in the United States. The species has declined primarily from habitat loss, which often results in enormous nest failure due to the colonial nesting habit of this species. Suitable habitat is not present on-site. This species has not been detected on the subject property nor are there any reported occurrences within the vicinity of the site.
Southern California rufous-crowned sparrow (<i>Aimophila ruficeps canescens</i>)	SWL	Low. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. This secretive, medium-sized sparrow inhabits mainly coastal sage scrub habitats, preferring those dominated by California sagebrush (<i>Artemisia californica</i>), and mixed chaparral. It frequents relatively steep, often rocky hillsides with grass and forb patches. The attached <i>Exhibit 8 – CNDDDB Occurrences</i> shows three (3) reported detections within the project site's vicinity, the nearest one occurring south of Bundy Canyon Road and east of Monte Vista Road, approximately one (1) mile southeast of the subject property. Marginally suitable habitat is present on-site, although this species has not been detected on the subject property.
grasshopper sparrow (<i>Ammodramus savannarum</i>)	SSC (Nesting) Second Priority	Low (Nesting). This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. This species, in the west, prefers grasslands with sparse shrub cover. It occurs mainly on hillsides and mesas in coastal districts, but has bred up to 1500 meters in the San Jacinto Mountains. Marginally suitable habitat is present on-site, but this sparrow is uncommonly observed. It was not detected on the subject property.
golden eagle (<i>Aquila chrysaetos</i>)	SFP, SWL (Nesting and Wintering)	Not Present. This MSHCP-covered species occurs in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This species nests and winters in cliff walls, large trees, and foothill and mountain areas supporting sage-juniper and desert vegetation. Suitable foraging habitat is not present on-site, and the golden eagle would not be expected to utilize the project site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
great blue heron (<i>Ardea herodias</i>)	SSA (Nesting Colony)	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This species is the most widespread heron in North America. It commonly occurs along river and lake edges, and forages for fish, amphibians, reptiles, and mammals. Suitable habitat is not present on the subject property, and this species does not forage on-site.
Bell's sage sparrow (<i>Artemisiospiza belli belli</i>) Formerly known as <i>Amphispiza belli belli</i>	SWL	Low. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. This subspecies prefers coastal sage scrub and open chaparral habitats in southern California. It nests on the ground beneath shrubs or in shrubs six (6) to 18 inches above ground. The attached <i>Exhibit 8 – CNDDDB Occurrences</i> shows that Bell's sage sparrow was detected south of Bundy Canyon Road and east of Monte Vista Road, approximately one (1) mile southeast of the subject property, in 2001. Marginally suitable habitat is present on-site, although this sparrow has not been detected on the subject property.
burrowing owl (<i>Athene cunicularia</i>) Formerly known as <i>Athene cunicularia hypugaea</i>	SSC (Burrow Sites and some Wintering Sites) Second Priority	Moderate. Focused surveys for this organism were required under the MSHCP; however the species was not detected on-site. This species is found in appropriate habitats throughout California, excluding the humid northwest coastal forests and high mountains. It occurs as high as 1600 meters in Lassen County. It is found throughout the state during fall and spring migration. The habitat for this species consists of open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. The burrowing owl is a subterranean nester, and is dependent upon burrowing mammals, most notably the California ground squirrel. This species may utilize a site for breeding, wintering, foraging, and/or migration stopovers. This species often exhibits high site fidelity, with family groups reusing burrows year after year. As depicted by the attached <i>Exhibit 8 – CNDDDB Occurrences</i> , this owl was detected between Mission Trail and Corydon Road in 2007, 0.25 mile west of the subject property. Suitable habitat, including burrows, is present and, although burrowing owl was not detected on-site during focused breeding season surveys.
American bittern (<i>Botaurus lentiginosus</i>)	SSA	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. American bitterns in California are found almost exclusively in emergent habitat of freshwater marshes and vegetated borders of ponds and lakes, and occasionally sparsely vegetated wetlands. Habitat on-site is not suitable for this species. American bittern has not been detected on the property.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
ferruginous hawk (<i>Buteo regalis</i>)	SWL (Wintering)	Low. This MSHCP-covered species could forage in the general area, but the property is not in a conservation cell and not designated for conservation. This raptor frequents open grasslands, sagebrush flats, desert scrub, low foothills and fringes of pinyon and juniper habitats. It eats mostly lagomorphs (rabbits), ground squirrels, and mice. The ferruginous hawk breeds in the northern Midwest in the U.S. and southern Canada, and is only known to occur in California during the winter. Marginally suitable foraging habitat is present, although ferruginous hawk has not been detected.
Swainson's hawk (<i>Buteo swainsoni</i>)	ST (Nesting)	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This raptor is a summer migrant to North America, and spends the winter in South America, making it the longest migrant of any North American raptor. Swainson's hawk generally migrates in flocks along established flyways. Habitat preferences for this species include broken woodlands, savannah, higher deserts with scattered groves of trees, and ranch lands with scattered trees. Prey items for this species range from small mammals to insects with small birds and reptiles taken occasionally. The subject property is located outside of this species' known breeding range; therefore, this species does not utilize the project site.
cactus wren (<i>Campylorhynchus brunneicapillus</i>)	This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This species is narrowly distributed at relatively few locations within the Plan Area. Preferred habitat includes cactus-dominated coastal sage scrub, desert scrub, and Riversidean alluvial fan sage scrub in the Riverside Lowland and San Jacinto Foothill Bioregions of the Plan Area. Suitable habitat is not present on-site, and this species was not detected on the subject property.
Wilson's warbler (<i>Cardellina pusilla</i>) Formerly <i>Wilsonia pusilla</i>	This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The Wilson's warbler has a sparse and widespread distribution within almost every habitat within the MSHCP Plan Area. This species forages in lowlands and foothills as a transient in the spring and fall and breeds within the mountains in shrub and scrub habitat, wet and montane meadow, and edges of riparian and forested habitats. It is not known to winter within the Plan Area. The subject property is outside of this warbler's known breeding range, and this species would not be expected to occur on-site due to the lack of suitable habitat on the subject property.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
turkey vulture - breeding (<i>Cathartes aura</i>)	This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species might forage for road kill on-site, but the property is not in a conservation cell and not designated for conservation. The turkey vulture is generally widely distributed throughout the Plan Area. In western North America, the turkey vulture tends to occur most regularly in areas of pastured rangeland, non-intensive agriculture, or wild areas, with rock outcrops suitable for nesting but generally not in the high mountains. Suitable habitat consists of extensive open areas with protected nest and roost sites provided by large trees, snags, thickets, shrubs, and rock outcrops. Nesting habitat may occur in forests, rocky cliffs or slopes, deciduous forests, and brushy or grassy habitat. This species would not be expected to utilize the subject property.
mountain plover (<i>Charadrius montanus</i>)	SSC (Wintering) Second Priority	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. A winter resident in California, the mountain plover is currently primarily found in the Imperial Valley, California. Historically, large numbers of mountain plovers wintered on dry plain between the Pacific Ocean and Los Angeles. Wintering populations prefer agricultural fields, such as alfalfa; however, historically this species preferred native grassland plains. Suitable habitat is not present on the subject property. This species is not present on-site.
northern harrier (<i>Circus cyaneus</i>)	SSC (Nesting) Third Priority	Low. This MSHCP-covered species could forage in the area, but the property is not in a conservation cell and not designated for conservation. The subject property is located within this species' current breeding range. The northern harrier has a worldwide distribution and a wide range during migration. This species prefers expansive open, treeless areas. Marginally suitable nesting habitat is present. This species was not detected utilizing the project site.
western yellow-billed cuckoo (<i>Coccyzus americanus occidentalis</i>)	FT, SE (Nesting)	Not Present. The property was determined to be unsuitable for this species in the Habitat Suitability Assessment and no focused surveys were conducted. The western yellow-billed cuckoo prefers dense riverine woodlands. This subspecies is common in parts of its range, but has experienced serious declines due to habitat loss and fragmentation. The habitat on-site is not suitable for this cuckoo. This subspecies is not present on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
black swift (<i>Cypseloides niger</i>)	SSC (Nesting) Third Priority	Not Present (Low Migratory Occurrence Potential). This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. In southern California this species breeds in the San Gabriel Mountains, San Bernardino Mountains and San Jacinto Mountains. Most breeding sites are associated with steep cliffs, or near and behind waterfalls. Suitable nesting habitat is not present, and the subject property is located outside of this species' known breeding range.
white-tailed kite (<i>Elanus leucurus</i>)	SFP (Nesting)	Low. This MSHCP-covered species could forage in the area, but the property is not in a conservation cell and not designated for conservation. This species is a common to uncommon, yearlong resident in coastal and valley lowlands throughout California. It occurs in low elevation grassland, agricultural, wetland, or oak-woodland habitats. Riparian areas adjacent to open areas are also used by this species. Marginally suitable habitat is present on-site, although the white-tailed kite has not been detected utilizing the subject property.
southwestern willow flycatcher (<i>Empidonax traillii extimus</i>)	FE, SE (Nesting)	Not Present. The property was determined to be unsuitable for this species in the Habitat Suitability Assessment and no focused surveys were conducted. The subspecies southwestern willow flycatcher occupies the southernmost breeding range of the willow flycatcher. It was listed as federally endangered in 1993, and it is estimated that only 900 to 1000 breeding pairs remain. Habitat loss and parasitism from brown-headed cowbirds have reduced the populations to the threshold of extinction. The habitat on-site is not suitable for this subspecies. This species would not utilize the site.
California horned lark (<i>Eremophila alpestris actia</i>)	SWL	Moderate. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. The California horned lark is fairly common throughout California; however, numbers have been recently declining near urbanized areas of southern California. This subspecies generally occurs in grasslands and open habitats. Suitable habitat is present, although this subspecies has not been detected on-site.
merlin (<i>Falco columbarius</i>)	SWL (Wintering)	Low. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. This species winters mainly in the western half and southern portion of California below 1500 meters. It is seldom found in heavily wooded areas or open deserts. It occurs in coastlines, open grasslands, savannahs, woodlands, lakes, wetlands, and various ecotones (edge habitats). Although somewhat suitable wintering habitat is present, this species was not detected foraging on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
prairie falcon (<i>Falco mexicanus</i>)	SWL (Nesting)	Low. This MSHCP-covered species occurs in the area, but the property is not in a conservation cell and not designated for conservation. This species occurs throughout California, and breeds in the northern, central and southeastern portions of the state. This species inhabits primarily open habitats such as grasslands, savannahs, and open shrub habitats. Although marginally suitable habitat is present, this species was not detected and probably does not forage on the site.
American peregrine falcon (<i>Falco peregrinus anatum</i>) Formerly known as the peregrine falcon (<i>Falco peregrinus</i>)	FDL, SDL, SFP (Nesting)	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This subspecies occurs along the coast year-round, breeding from Santa Barbara to northern California. This subspecies also breeds in the Sierra Nevadas and the Salton Sea. The wintering range for this subspecies extends into the Central Valley and more inland in southern California. Most commonly occupied habitats contain cliffs for nesting, with open gulfs of air and generally open landscapes for foraging. In addition to natural habitats, many artificial habitats are now used by this subspecies (urban, human-built environments such as towers, buildings, etc.). Suitable habitat is not present, and this raptor probably does not forage in this area any longer.
MacGillivray's warbler (<i>Geothlypis tolmiei</i>) Formerly known as <i>Oporornis tolmiei</i>	This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The MacGillivray's warbler has a sparse and widespread distribution throughout the MSHCP Plan Area within a variety of shrubby and riparian habitats. It occurs within the lowland and foothill regions of the Plan Area as a transient in spring and fall but does not winter within these regions. Breeding pairs are typically found in moist brushy areas within coniferous forests between 2,000 and 2,800 meters in elevation but may also be found in clear-cuts or mixed deciduous forests up to 3,000 meters in elevation. The species prefers secondary-growth woodlands, brushy areas near water and dense willow canyon drainages. The habitat on the project site is not suitable for this species, and the subject property is outside this warbler's known elevational range. MacGillivray's warbler would not be expected to occur on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
bald eagle (<i>Haliaeetus leucocephalus</i>)	FDL, SE, SFP (Nesting and wintering)	Not Present. This MSHCP-covered species occurs in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. Bald eagles typically nest in forested areas adjacent to large bodies of water and avoid heavily developed areas when possible. This species tolerates human activity when feeding, and may congregate around fish processing plants, dumps, and below dams where fish concentrate. Bald eagles prefer tall, mature coniferous or deciduous trees for perching, and can be seen in open, dry uplands if there is access to open water for fishing in winter. Despite the presence of Lake Elsinore, this eagle would not be expected to forage close to the site.
yellow-breasted chat (<i>Icteria virens</i>)	SSC (Nesting) Third Priority	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This species prefers shrubby riparian habitats, especially in the vicinity of lowland watercourses. No such habitat is present on-site, and this species has not been detected on-site.
loggerhead shrike (<i>Lanius ludovicianus</i>)	SSC (Nesting) Second Priority	Not Present. This MSHCP-covered species is very unlikely to occur on-site due to habitat conditions in the area. The property is not in a conservation cell and not designated for conservation. Even though the subject property lies within the loggerhead shrike's year-round range, habitat on-site is unsuitable. This species occurs in a variety of habitats, but prefers open areas with short vegetation. The loggerhead shrike is often referred to as the "butcher bird," because of its tendency to impale prey items on thorns or other sharp objects, to be consumed later. This species preys on arthropods, amphibians, and small reptiles, birds, and mammals. As depicted by the attached <i>Exhibit 8 – CNDDDB Occurrences</i> , the loggerhead shrike was detected on Rome Hill, south of Lake Elsinore, in 2001. This shrike has not been detected on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
Lincoln's sparrow - breeding <i>(Melospiza lincolnii)</i>	This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The Lincoln's sparrow has a sparse and widespread distribution throughout the MSHCP Plan Area within a wide variety of habitats. This species occurs within the lowland and foothills Bioregions of the Plan Area as a transient in the spring and fall and may winter within the area. This sparrow prefers dense, low underbrush often in disturbed edges with grasses and weeds mixed with shrubs. It occurs in a variety of habitats including willow-sedge swamp, scrub-meadow, and flat land aspen. Breeding in southern California occurs in wet montane meadows of corn lily, sedges and low willows. At lower elevations, this organism prefers mesic willow shrubs and can be found in mixed deciduous groves such as aspen and cottonwoods, mixed shrub-willows, bogs as well as a variety of other riparian habitats. Suitable habitat is not present on-site, and this secretive species would not be expected to utilize the subject site.
black-crowned night heron <i>(Nycticorax nycticorax)</i>	SSA (Nesting Colony)	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This bird is a fairly common year-round resident in lowlands and foothills throughout the state. It occurs in freshwater marshes, coastal mudflats, shores of lakes and rivers, estuaries, and rocky shores, where it forages on a variety of organisms including small fish, crustaceans, aquatic invertebrates, amphibians, reptiles, small mammals, and rarely young birds. It breeds from the Oregon border to San Diego County. They roost in tall bulrushes and tules, but will also roost in tall trees including conifers, oaks, and <i>Eucalyptus</i> . Suitable habitat is not present on-site, and this heron would not be present.
mountain quail <i>(Oreortyx pictus)</i>	This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The mountain quail has a wide distribution within all of the mountain ranges west of the deserts and of the northern interior of California. It inhabits montane chaparral and brushy vegetation within coniferous forests. This species may occur throughout a greater portion of suitable habitat within the MSHCP Plan Area, but no records exist in the MSHCP database. Suitable habitat is not present on-site, and the subject property is outside this species' known geographic range. The mountain quail is not present on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
Nashville warbler (<i>Oreothlypis ruficapilla</i>) Formerly <i>Vermivora ruficapilla</i>	This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. The Nashville warbler likely breeds in the San Bernardino National Forest within the Plan Area. This species is widely distributed but uncommon during migration periods. This warbler uses a variety of habitats within montane regions for breeding, including chaparral, riparian, deciduous woodland and coniferous woodland, and occurs in a variety of habitats during migration in all regions including brush and scrub habitats, desert scrub and wooded areas. The subject property is outside of this species' known breeding range. Nashville warbler is not present on-site.
osprey (<i>Pandion haliaetus</i>)	SWL (Nesting)	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This species is an uncommon winter visitor along the coast of southern California. Breeding for this species is largely limited to northern California. This species is associated strictly with large, fish-bearing waters. Suitable habitat is not present on the subject property. This species does not utilize the site.
double-crested cormorant (<i>Phalacrocorax auritus</i>)	SWL (Nesting Colony)	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The double-crested cormorant is a communal nester and rookeries are located on rock ledges on cliffs, rugged slopes, and tall trees. Rookeries must be within five (5) to ten (10) miles of a dependable food source. No suitable rookery habitat is present on the subject property. This species does not occur on-site.
downy woodpecker (<i>Picoides pubescens</i>)	This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The downy woodpecker is sparsely distributed throughout the MSHCP Plan Area. This species utilizes riparian scrub, forest and woodland, and oak woodland and forest. Suitable habitat is not present on-site, and this woodpecker would not occur on the subject property.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
white-faced ibis (<i>Plegadis chihi</i>)	SWL (Nesting Colony)	Not Present (Low Foraging Potential). This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. The white-faced ibis is sparsely distributed throughout the Riverside lowlands of the MSHCP Plan Area. It typically breeds in freshwater marshes. The species utilizes a wide variety of habitats for foraging during winter and transient visits including agricultural land, grassland, and areas at the edges of drainages. Marginally suitable foraging habitat is present on-site; however this species would not be expected to nest on the subject property. The white-faced ibis is not present on the project site.
coastal California gnatcatcher (<i>Poliophtila californica californica</i>)	FT, SSC	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The California gnatcatcher is a habitat specialist in that it requires coastal sage scrub. The attached <i>Exhibit 8 – CNDDDB Occurrences</i> shows that several detections of this subspecies have occurred throughout the general vicinity of the subject property. The detections nearest to the project site both occurred 1.25 miles from the site in 2001; one (1) detection occurred east of Sedco Hills northeast of the site, and the other detection occurred south of Bundy Canyon Road and east of Monte Vista Road southeast of the site. Palmer's goldenbush scrub on-site is too fragmented and limited in extent to be suitable for California gnatcatcher. This subspecies is not present on-site.
purple martin (<i>Progne subis</i>)	SSC (Nesting) Second Priority	Not Present. This MSHCP-covered species has become very rare in southern California. Focused surveys are not specified in the MSHCP and are not required for the subject property. The purple martin has been recorded in very low numbers spread widely over the Plan Area. This species is typically associated with water, either within a drainage or open water body. Potential nesting habitat includes riparian and oak woodland, and montane coniferous forests. Suitable habitat is not present on-site, and this species does not utilize the project site.
yellow warbler (<i>Setophaga petechia</i>) Formerly known as <i>Dendroica petechia brewsteri</i>	SSC (Nesting) Second Priority	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This species breeds in southern California in the dense understory of riparian thickets. Yellow warbler populations have been severely impacted by brown-headed cowbird (<i>Molothrus ater</i>) parasitism. Suitable riparian habitat is not present on the subject property. This species would not utilize the site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
Williamson's sapsucker (<i>Sphyrapicus thyroideus</i>)	This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. This species has declined rangewide, presumably from loss of large snags for nesting. Habitat includes montane coniferous forest dominated by lodge pole pines and firs, and oak woodlands and forests in the San Bernardino and San Jacinto Mountains. Suitable habitat is not present on-site, and the subject property is outside this species' known range. Williamson's sapsucker was not detected on the project site.
California spotted owl (<i>Strix occidentalis occidentalis</i>)	SSC Second Priority	Not Present. This MSHCP-covered subspecies can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The California spotted owl has a sparse distribution within the Santa Ana Mountains, San Bernardino Mountains and the San Jacinto Mountains within the MSHCP Plan Area within montane coniferous forest and oak-deciduous woodlands and forests. Suitable habitat is not present on-site, and the subject property is outside this owl's known geographic range. This subspecies could not occur on the subject property.
tree swallow (<i>Tachycineta bicolor</i>)	This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The tree swallow is widely but sparsely distributed throughout the MSHCP Plan Area. Habitat characteristics include open water for foraging and riparian scrub and water-associated woodland and forest for nesting. This species has not been detected on the subject property, nor would it be expected to occur due to lack of suitable habitat on-site.
least Bell's vireo (<i>Vireo bellii pusillus</i>)	FE, SE	Not Present. The property was determined to be unsuitable for this species in the Habitat Suitability Assessment and no focused surveys were conducted. This riparian-obligate subspecies generally requires less-disturbed areas of dense willow-associated riparian habitat and prefers areas with standing water. As depicted by the attached <i>Exhibit 8 – CNDDDB Occurrences</i> , two (2) least Bell's vireo detections have been recorded in the general vicinity of the subject property. The nearest and most recent detection occurred west of Skylark Airport on the south side of Lake Elsinore in 2010, approximately one (1) mile west of the project site. Suitable riparian habitat is not present on the subject property. This subspecies does not occur on-site.
MAMMALS		

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
coyote (<i>Canis latrans</i>)	This species has no formal federal or state governmental listing status	Moderate. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. The coyote is common and widespread throughout the Plan Area. It occurs in all areas of the Plan Area except the most highly urbanized areas. This species is highly tolerant of human activity and coexists well with humans unless trapped, hunted or otherwise harassed (e.g., disturbance of breeding dens). Somewhat suitable habitat is present on-site, although this species has not been detected on the subject property.
northwestern San Diego pocket mouse (<i>Chaetodipus fallax fallax</i>)	SSC	Low. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. The northwestern San Diego pocket mouse occurs in sandy, herbaceous areas, usually associated with rocks or coarse gravel in coastal scrub, chaparral, grasslands, and in western San Diego County, sagebrush. Marginally suitable habitat is present on-site, although trapping for this subspecies was not conducted.
Earthquake Merriam's kangaroo rat (<i>Dipodomys merriami collinus</i>) Formerly known as the Aguanga kangaroo rat	SSA	Not Present. The MSHCP does not require focused surveys for this subspecies in this area because it has no potential to occur on-site. The Earthquake Merriam's kangaroo rat has a narrow distribution within western Riverside County, with known localities in Temecula Creek in the Aguanga area and Wilson Creek in the Sage area. It is typically found in Riversidean alluvial fan sage scrub, but may occur in Riversidean sage scrub, chaparral and grassland in uplands and tributaries near Riversidean alluvial fan sage scrub habitats. Suitable habitat is not present on-site; therefore this subspecies would not be expected to occur on the subject property.
San Bernardino kangaroo rat (<i>Dipodomys merriami parvus</i>)	FE, SSC	Not Present. The MSHCP does not require focused surveys for this subspecies in this area because it has no potential to occur on-site. The San Bernardino kangaroo rat has a narrow distribution within western Riverside County, being primarily restricted to 1) the San Jacinto River from around Highway 79 (Lamb Canyon Road/Sanderson Avenue) and 2) Bautista Creek from around Bautista Dam to the north and the Hixon Flat trailhead to the south. This kangaroo rat primarily utilizes Riversidean alluvial fan sage scrub, but can also frequent nearby Riversidean upland sage scrub, chaparral and grassland in uplands and tributaries. Suitable habitat is not present on-site; therefore this subspecies would not occur on the subject property.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
Dulzura kangaroo rat (<i>Dipodomys simulans</i>)	SSA	Moderate. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. The Dulzura kangaroo rat occurs throughout western Riverside County in coastal sage scrub (including upland sage scrub and alluvial fan sage scrub), sage scrub/grassland ecotones, chaparral, and desert scrubs up to 2,600 feet in elevation. This species is considered fairly common in suitable habitat. Suitable habitat is present on-site, although trapping for this kangaroo rat was not required on-site.
Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)	FE, ST	Moderate. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. The Stephens' kangaroo rat occurs primarily in annual and perennial grasslands, but also occurs in open coastal sage scrub. Preferred habitat species include buckwheat (<i>Eriogonum</i> sp.), chamise (<i>Adenostoma fasciculatum</i>), brome and filaree (<i>Erodium</i> sp.). This kangaroo rat will also burrow into firm soil. As depicted in the attached <i>Exhibit 8 – CNDDDB Occurrences</i> , this species was detected in Sedco Hills east of I-15 in 1989, approximately one (1) mile north of the subject property. Suitable habitat is present on-site, although trapping for Stephens' kangaroo rat is not required on the project site.
San Bernardino flying squirrel (<i>Glaucomys oregonensis californicus</i>) Formerly <i>Glaucomys sabrinus californicus</i>	SSC	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. Habitat for the San Bernardino flying squirrel in the Plan Area only occurs in the San Jacinto Mountains. This squirrel therefore could not occur on the subject property.
San Diego black-tailed jackrabbit (<i>Lepus californicus bennettii</i>)	SSC Addition to List	Low. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. This subspecies of black-tailed jackrabbit occurs in intermediate canopy stages of shrub habitats and open shrub/herbaceous and tree/herbaceous edges in southern California coastal sage scrub habitats and agricultural lands. The black-tailed jackrabbit is common throughout the state; however, habitat loss and fragmentation in southern California has caused declines. This notwithstanding, all subspecies in California are legally hunted and seasons are open year-round with no limit of take. As depicted by the attached <i>Exhibit 8 – CNDDDB Occurrences</i> , this subspecies was detected on Rome Hill in 2001, approximately two (2) miles west of the subject property. Urbanization of the area likely precludes it on-site. San Diego black-tailed jackrabbit was not observed on the subject property.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
bobcat (<i>Lynx rufus</i>)	This species has no formal federal or state governmental listing status	Low. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. The bobcat is widespread throughout the Plan Area. This species requires large expanses of relatively undisturbed brushy and rocky habitats near springs or other perennial water sources. Marginally suitable foraging habitat is present on-site, although the bobcat is unlikely to occur on the subject property.
long-tailed weasel (<i>Mustela frenata</i>)	This species has no formal federal or state governmental listing status	Low. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. The long-tailed weasel occurs throughout the Plan Area in virtually all types of habitat, including agricultural and disturbed areas. It may occur wherever there is sufficient prey. Marginally suitable habitat is present on-site, although this species was not detected on the subject property.
San Diego desert woodrat (<i>Neotoma lepida intermedia</i>)	SSC Addition to List	Low. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. This subspecies is rather widely distributed throughout southern California in sage scrub, chaparral and desert regions. It prefers rocky areas, nesting in cracks and crevices. Marginally suitable habitat is present, although the San Diego desert woodrat has not been detected on-site.
Los Angeles pocket mouse (<i>Perognathus longimembris brevinasus</i>)	SSC Highest Priority	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not required for the subject property. Pocket mice are the smallest members of the family Heteromyidae. Los Angeles pocket mouse is generally believed to occur on open ground with fine, sandy soils in low elevation grasslands and sage scrub. This subspecies may not dig extensive burrows, and prefers hiding under weeds and dead leaves instead. The subject property is considered unsuitable for this subspecies due to site disturbances. Pocket mice have not been observed on-site, although trapping for this subspecies is not required.
mountain lion (<i>Puma concolor</i>)	This species has no formal federal or state governmental listing status	Not Present. This MSHCP-covered species can occur in southwest Riverside County; however, focused surveys are not specified in the MSHCP and are not required for the subject property. The mountain lion is known from the Santa Ana Mountains, San Bernardino Mountains, San Jacinto Mountains, Santa Rosa Mountains, and brushy foothills and riparian areas that may serve as habitat connections between mountainous areas. It has also been seen in lowland areas including Lake Mathews-Estelle Mountain, Lake Skinner-Diamond Valley Lake, the Badlands and the San Jacinto Wildlife Area. This species requires large expanses of relatively undisturbed brushy and rocky habitats where its main prey – mule deer – also occurs. Suitable habitat is not present, and mule deer and the mountain lion are not known to occur in the vicinity of the project site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
brush rabbit (<i>Sylvilagus bachmani</i>)	This species has no formal federal or state governmental listing status	Low. This MSHCP-covered species could occur on-site, but the property is not in a conservation cell and not designated for conservation. The brush rabbit occurs throughout the Plan Area. Suitable habitat includes chaparral, coastal sage scrub, riparian and woodland habitats, coniferous forest, and agricultural areas (grove/orchard and field crops). This species occurs at all elevations up to 6,000 feet. Marginally suitable habitat is present on-site, although the brush rabbit was not detected on the subject property.

6.0 MSHCP PROJECT IMPACTS AND RECOMMENDED MITIGATION MEASURES

MSHCP PROJECT IMPACTS

Project-associated impacts within the MSHCP-Plan Area are typically offset and mitigated via a number of established procedures and processes. Within conservation cells, when conservation is required, (the subject property is not within a Cell), various combinations of fee-payment, land dedication/purchase, and other mechanisms as applicable can be utilized to offset impacts to sensitive species and habitats of all types. Fee payment based on the adopted fee schedule funds acquisition and management of lands that are similar to those found within the project site, including upland scrub conservation lands.

The proposed project would result in impacts that include direct effects to on-site biological resources including several MSHCP-covered animal species. With the implementation of the mitigation measures described below, none of these effects are considered to be significant.

The entire subject property would be developed with project implementation. No areas on-site would be conserved, and no conservation is required.

MSHCP-Covered Species Impacts

Based on *Table 2 – MSHCP-Covered Species* above, we have prepared *Table 3 – Potentially Impacted MSHCP-Covered Species* (following page) that includes the MSHCP-covered species which contain either a moderate or high likelihood of occurrence on the project site, in addition to all of the other common species that may occur that have been discussed in this report, based on the Palmer's goldenbush scrub/annual non-native grassland that is present on the subject property. Table 3 does not include MSHCP-covered species which contain a low probability of occurrence on-site because any sustained use by or presence of such species does not warrant further consideration.

Table 3 – Potentially Impacted MSHCP-Covered Species

SPECIES	PROBABILITY OF OCCURRENCE	MITIGATION STATUS UNDER MSHCP
BIRDS		
burrowing owl (<i>Athene cunicularia</i>)	Moderate; determined not present in Summer 2018.	MSHCP will conserve suitable habitat and known nesting locations. Applicants will conduct pre-construction surveys, and MSHCP will identify and create translocation sites in the MSHCP Conservation Area. MSHCP Fee Payment by Project Applicant.
California horned lark (<i>Eremophila alpestris actia</i>)	Moderate; possibly present on a transitory basis.	MSHCP will conserve suitable foraging and nesting habitat in the MSHCP Conservation Area. MSHCP Fee Payment by Project Applicant.
MAMMALS		
coyote (<i>Canis latrans</i>)	Moderate; possibly present on a transitory basis.	MSHCP will conserve suitable habitat and habitat linkages between large habitat blocks in the MSHCP Conservation Area. MSHCP Fee Payment by Project Applicant.
Dulzura kangaroo rat (<i>Dipodomys simulans</i>)	Moderate; presence not determined.	MSHCP will conserve suitable habitat, including cores and linkages, in the MSHCP Conservation Area. MSHCP Fee Payment by Project Applicant.
Stephens' kangaroo rat (<i>Dipodomys stephensi</i>)	Moderate; presence not determined.	MSHCP will conserve occupied habitat within the MSHCP Conservation Area. Stephens' kangaroo rat and MSHCP Fee Payment by Project Applicant.

The habitat type (Palmer's goldenbush scrub/annual non-native grassland) which supports common species and sometimes sensitive MSHCP-covered species totals 1.72 acres on-site. The subject property is not targeted for conservation under the MSHCP. The MSHCP anticipates and allows for development of areas not targeted for conservation. The conservation land that is already set aside by the MSHCP is considered adequate to maintain populations of these species, and that land which could be acquired and/or managed via future fee payment of this and other projects renders the conversion of the 1.72 acres on-site not significant.

RECOMMENDED MITIGATION MEASURES

Proposed MSHCP Provisions

1. Prior to the commencement of grading activities, the Project Applicant shall make the appropriate mitigation fee payment into the MSHCP Stephens' kangaroo rat fee payment program for conservation of Stephens' kangaroo rat-occupied habitats in order to offset the conversion of potentially suitable Stephens' kangaroo rat habitat on-site through project implementation.
2. Prior to the commencement of grading activities, the Project Applicant shall make the appropriate

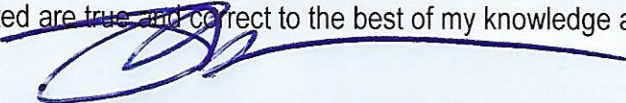
MSHCP mitigation fee payment that will contribute to conservation and management of conservation land for all MSHCP-covered organisms. The land type will include commercial development.

3. Prior to vegetation clearance and grading, the Project applicant shall retain a qualified biologist to conduct a pre-construction nesting bird survey in accordance with the following:
 - a) The survey shall be conducted no more than three (3) days prior to the initiation of clearance/construction work;
 - b) If pre-construction surveys indicate that bird nests are not present or are inactive, or if potential habitat is unoccupied, no further mitigation is required;
 - c) If active nests of birds are found during the surveys, a species-specific no-disturbance buffer zone shall be established by a qualified biologist around active nests until a qualified biologist determines that all young have fledged (no longer reliant upon the nest).
4. The Project applicant shall retain a qualified biologist to conduct a 30 day pre-construction survey for burrowing owl. The results of the survey would be submitted to the City of Wildomar prior to obtaining a grading permit. If burrowing owls are not detected during the pre-construction survey, no further mitigation is required. If burrowing owls are detected during the pre-construction survey, the Project applicant proposes to implement passive relocation to safely relocate burrowing owl out of harm's way.
5. In accordance with MSHCP provisions limiting the use of exotic and invasive plant species, the Project's landscape plan would exclude invasive species such as crimson fountain grass (*Pennisetum setaceum*), pampas grass (*Cortaderia selloana*), giant reed (*Arundo donax*) and tree of heaven (*Ailanthus altissima*).
6. The Project applicant would implement dust control and all other project-specific Storm Water Pollution Prevention Plan ("SWPPP") measures during grading and construction.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the proposed mitigation measures described above would reduce all the impacts to the biological resources discussed in this biological assessment to a level considered not significant.

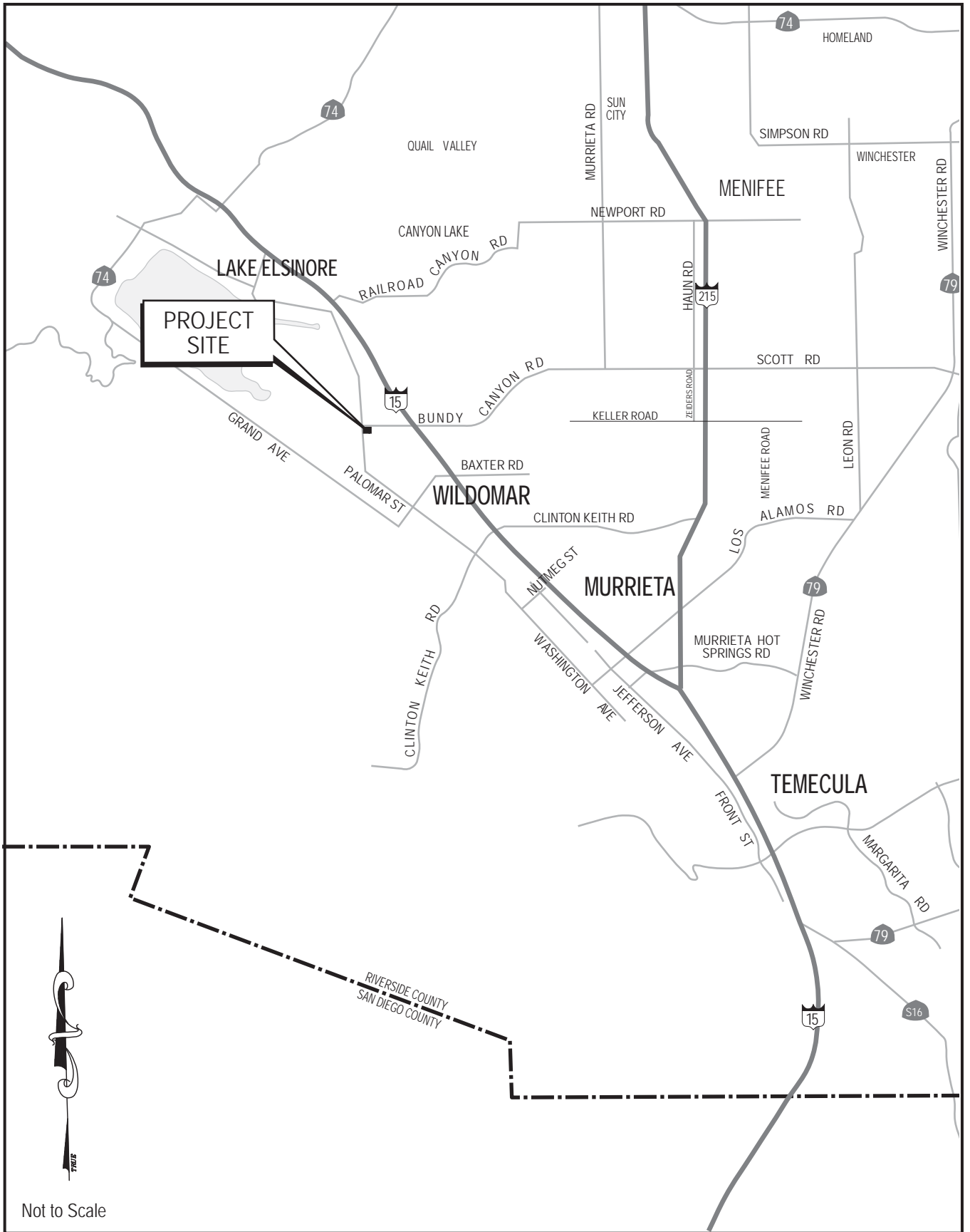
CERTIFICATION: I hereby certify that the statements and exhibits contained in this report present data and information required for this General Biological Assessment, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.



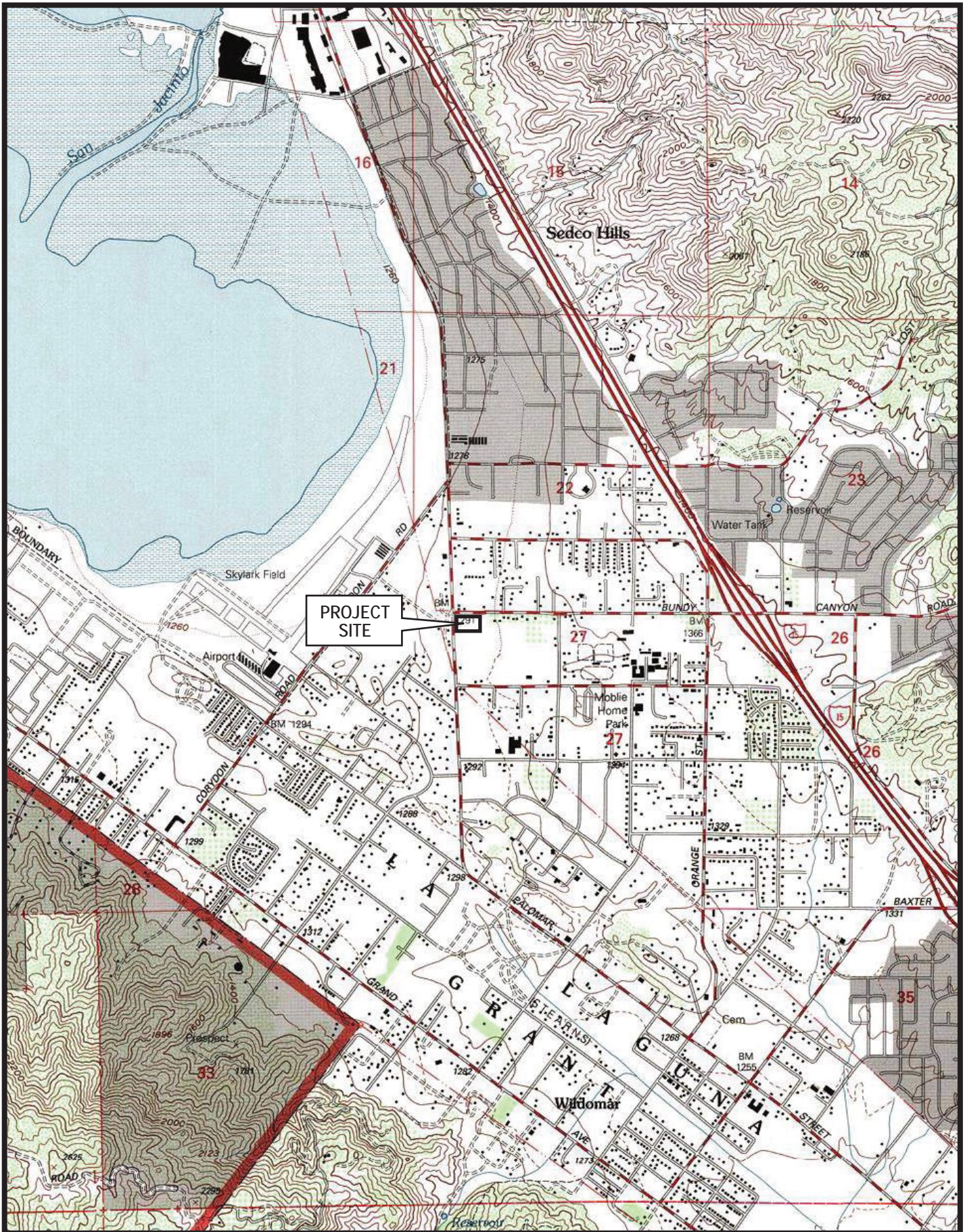
02 November 2018

Samuel Reed, Principal, Scientific Collecting Permit No. 002267
USFWS Recovery Permit No. TE839896-5

Date



Not to Scale



LEGEND

ReC2 - Ramona very fine sandy loam, 0 to 8 percent slopes, eroded



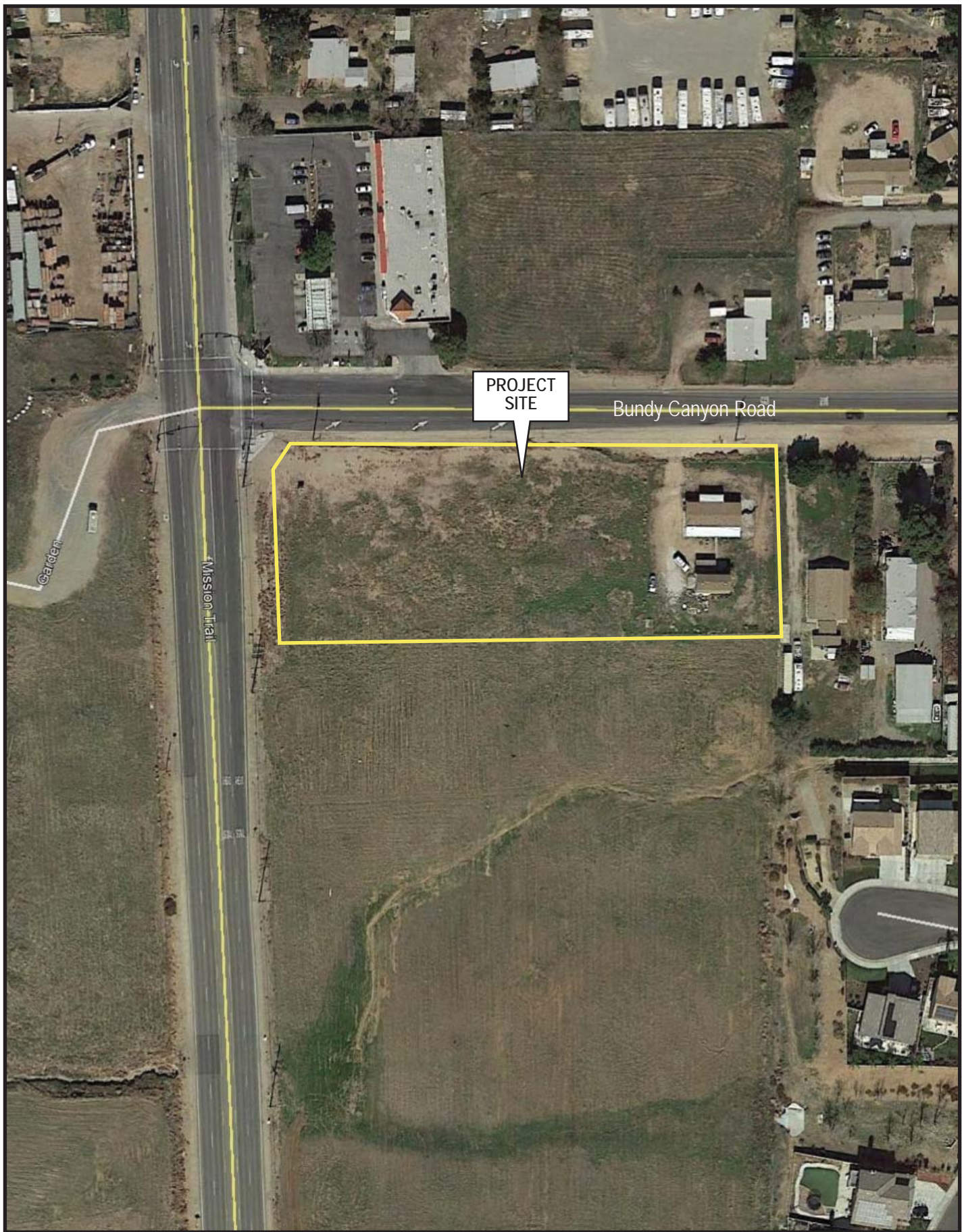






Photo 1 - This southwesterly view toward Mission Trail depicts the general conditions of the subject site. The majority of the property is comprised of Palmer's goldenbush scrub/annual non-native grassland.



Photo 2 - This northwest-facing view toward the Bundy Canyon Road/Mission Trail intersection shows the southern central portion of the subject property. This portion of the site is dominated by annual non-native grassland.



Photo 3 - A southeasterly view of the existing residence and barn in the eastern portion of the subject property is shown.



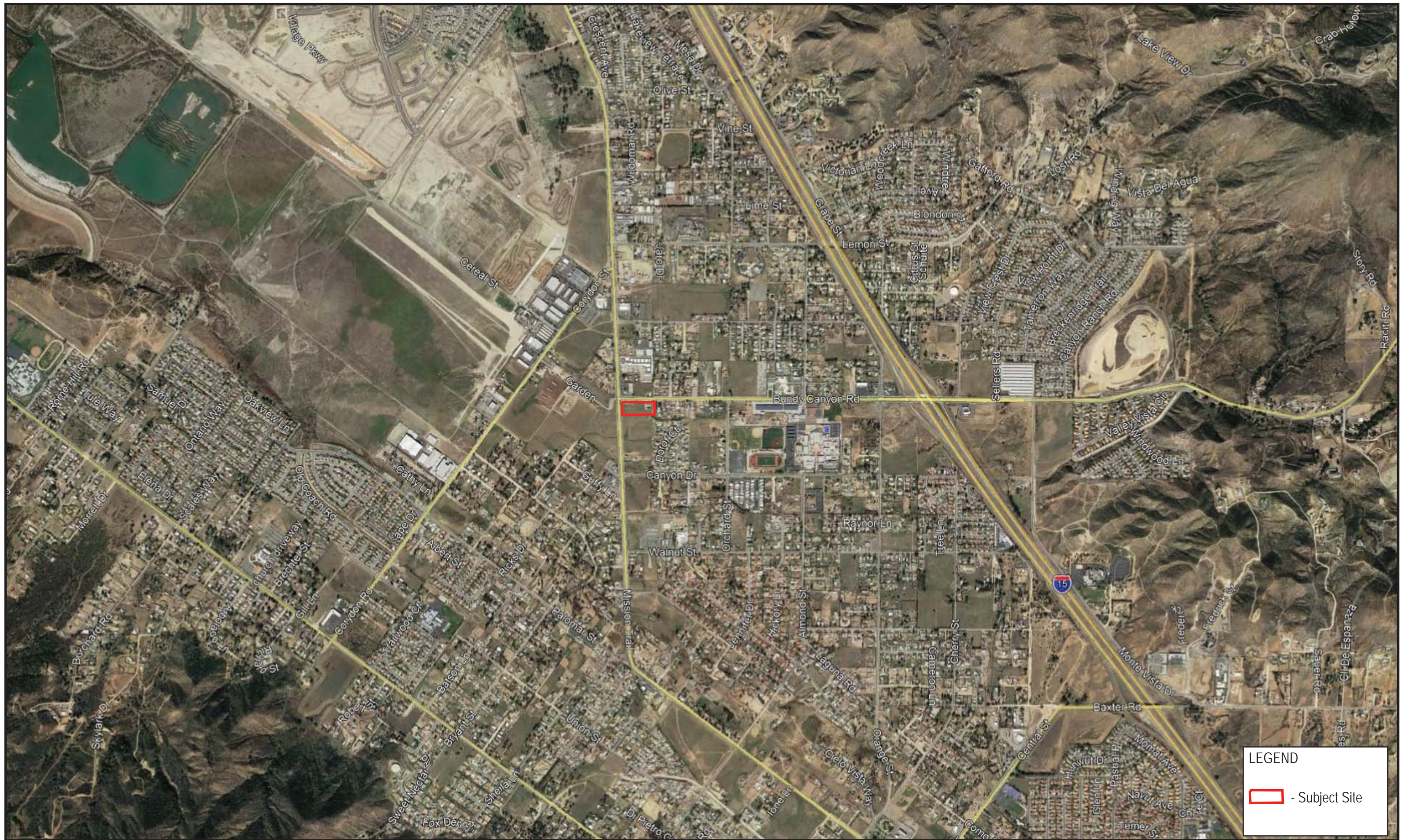
Photo 4 - A Cassin's kingbird was detected just south of the southern property boundary.

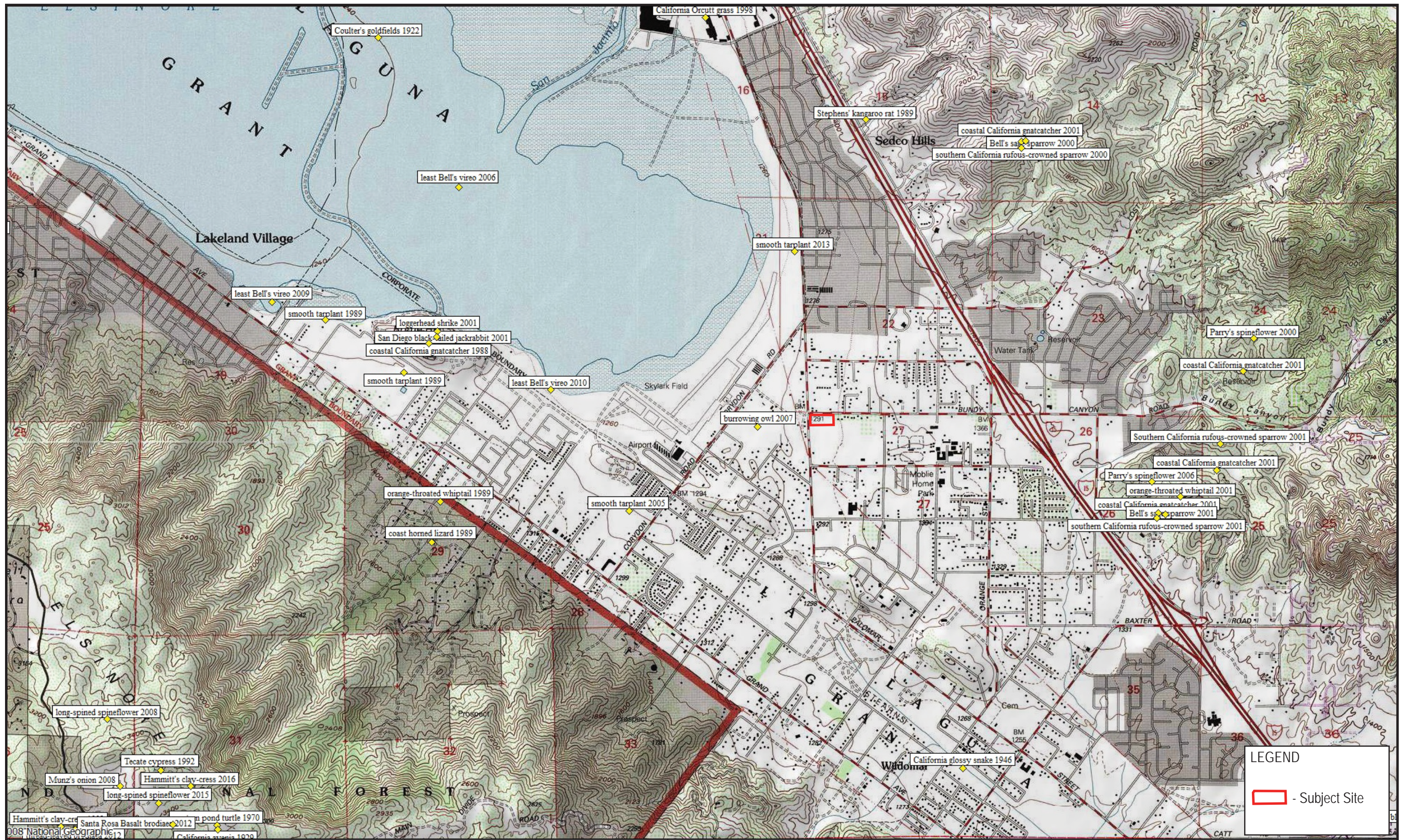


Photo 5 - A savannah sparrow was detected on one of the rock outcrops in the northern portion of the subject site.



Photo 6 - A northeast-facing view toward Bundy Canyon Road shows the northeastern portion of the subject property. The existing residence on-site is shown in the background.





APPENDIX A FLORAL COMPENDIUM

VEGETATION LIST

The species listed below were detected within the subject property during the July and August 2018 field surveys. Additional annual plants would be expected to be present and will be inventoried in Spring 2019. Field identifications are a composite list prepared by TERACOR personnel. Scientific names follow *The Jepson Manual, Vascular Plants of California - Second Edition*, 2012, and have been updated following the Jepson Online Interchange for California Floristics database (2014). Non-native species have been noted below with an asterisk (*) following the scientific name.

SCIENTIFIC NAME	COMMON NAME
Asteraceae	Sunflower Family
<i>Encelia farinosa</i>	brittlebush
<i>Ericameria palmeri</i> var. <i>pachylepis</i>	thickbracted goldenbush
Boraginaceae	Borage Family
<i>Amsinckia</i> sp.	fiddleneck
Brassicaceae	Mustard Family
<i>Hirschfeldia incana</i> *	short-pod mustard
Chenopodiaceae	Goosefoot Family
<i>Atriplex semibaccata</i> *	Australian saltbush
<i>Salsola tragus</i> *	Russian thistle
Euphorbiaceae	Spurge Family
<i>Croton setiger</i>	doveweed
Fabaceae	Legume Family
<i>Parkinsonia aculeata</i> *	Mexican palo verde
Poaceae	Grass Family
<i>Bromus</i> sp.*	brome
<i>Distichlis spicata</i>	salt grass
<i>Hordeum murinum</i> *	wall barley
Simaroubaceae	Simarouba Family
<i>Ailanthus altissima</i> *	tree of heaven

SCIENTIFIC NAME	COMMON NAME
Solanaceae	Nightshade Family
<i>Datura wrightii</i>	jimson weed

APPENDIX B FAUNAL COMPENDIUM

BIRDS

Birds were observed with 8x32 binoculars. Birds were identified following The Sibley Field Guide to Birds of Western North America (2003), and updated to conform to changes in nomenclature consistent with the most recent American Ornithological Society checklist. The species in the below table were considered to have at least a low potential of occurrence on-site. The potential of these species to occur on-site is also provided. Non-native species have been noted with an asterisk (*) following the scientific name.

SCIENTIFIC NAME	COMMON NAME	OCCURRENCE POTENTIAL (PRESENT, LIKELY, POSSIBLE, TRANSIENT, OR UNLIKELY)
Accipitridae	Hawks, Eagles, Kites	
<i>Buteo jamaicensis</i>	red-tailed hawk	Transient
<i>Buteo lineatus</i>	red-shouldered hawk	Unlikely
<i>Circus cyaneus</i>	northern harrier	Unlikely
<i>Elanus leucurus</i>	white-tailed kite	Unlikely
Aegithalidae	Bushtits	
<i>Psaltirparus minimus</i>	bushtit	Possible
Alaudidae	Larks	
<i>Eremophila alpestris actia</i>	California horned lark	Transient
Caprimulgidae	Nightjars, Goatsuckers	
<i>Phalaenoptilus nuttallii</i>	common poorwill	Unlikely
Cardinalidae	Cardinals	
<i>Pheucticus melanocephalus</i>	black-headed grosbeak	Unlikely
Charadriidae	Plovers	
<i>Charadrius vociferus</i>	killdeer	Likely
Columbidae	Pigeons, Doves	
<i>Columba livia</i>	rock pigeon	Present
<i>Columbina passerina</i>	common ground-dove	Unlikely
<i>Streptopelia decaocto</i> *	Eurasian collared-dove	Transient
<i>Zenaida macroura</i>	mourning dove	Present

SCIENTIFIC NAME	COMMON NAME	OCCURRENCE POTENTIAL (PRESENT, LIKELY, POSSIBLE, TRANSIENT, OR UNLIKELY)
Corvidae	Crows, Jays	
<i>Aphelocoma californica</i>	California scrub-jay	Present
<i>Corvus brachyrhynchos</i>	American crow	Present
<i>Corvus corax</i>	common raven	Likely
Cuculidae	Anis, Cuckoos, Roadrunners	
<i>Geococcyx californianus</i>	greater roadrunner	Unlikely
Falconidae	Falcons	
<i>Falco columbarius</i>	merlin	Unlikely
<i>Falco mexicanus</i>	prairie falcon	Unlikely
<i>Falco sparverius</i>	American kestrel	Present
Fringillidae	Finches	
<i>Haemorhous mexicanus</i>	house finch	Present
<i>Haemorhous purpureus</i>	purple finch	Unlikely
<i>Spinus lawrencei</i>	Lawrence's goldfinch	Unlikely
<i>Spinus psaltria</i>	lesser goldfinch	Transient
<i>Spinus tristis</i>	American goldfinch	Unlikely
Hirundinidae	Swallows, Martins	
<i>Hirundo pyrrhonota</i>	cliff swallow	Unlikely
<i>Hirundo rustica</i>	barn swallow	Unlikely
<i>Stelgidopteryx serripennis</i>	northern rough-winged swallow	Unlikely
<i>Tachycineta bicolor</i>	tree swallow	Unlikely
<i>Tachycineta thalassina</i>	violet-green swallow	Unlikely
Icteridae	Blackbirds	
<i>Euphagus cyanocephalus</i>	Brewer's blackbird	Possible
<i>Icterus bullockii</i>	Bullock's oriole	Unlikely
<i>Icterus cucullatus</i>	hooded oriole	Unlikely
<i>Quiscalus mexicanus</i>	great-tailed grackle	Unlikely
<i>Molothrus ater</i>	brown-headed cowbird	Unlikely
<i>Sturnella neglecta</i>	western meadowlark	Transient
Laridae	Gulls, Terns, and Skimmers	
<i>Larus argentatus</i>	herring gull	Unlikely
<i>Larus californicus</i>	California gull	Unlikely

SCIENTIFIC NAME	COMMON NAME	OCCURRENCE POTENTIAL (PRESENT, LIKELY, POSSIBLE, TRANSIENT, OR UNLIKELY)
<i>Larus delawarensis</i>	ring-billed gull	Unlikely
Mimidae	Mockingbirds, Thrashers	
<i>Mimus polyglottos</i>	northern mockingbird	Transient
Parulidae	Wood Warblers	
<i>Setophaga coronata</i>	yellow-rumped warbler	Unlikely
Passerellidae	New World Sparrows	
<i>Aimophila ruficeps canescens</i>	Southern California rufous-crowned sparrow	Unlikely
<i>Ammodramus savannarum</i>	grasshopper sparrow	Unlikely
<i>Amphispiza bellii bellii</i>	Bell's sage sparrow	Unlikely
<i>Chondestes grammacus</i>	lark sparrow	Transient
<i>Junco hyemalis</i>	dark-eyed junco	Unlikely
<i>Melospiza melodia</i>	song sparrow	Unlikely
<i>Melospiza crissalis</i>	California towhee	Present
<i>Passerculus sandwichensis</i>	savannah sparrow	Unlikely
<i>Pipilo chlorurus</i>	green-tailed towhee	Unlikely
<i>Pipilo maculatus</i>	spotted towhee	Transient
<i>Pooecetes gramineus</i>	vesper sparrow	Transient
<i>Spizella passerina</i>	chipping sparrow	Transient
<i>Zonotrichia atricapilla</i>	golden-crowned sparrow	Transient
<i>Zonotrichia leucophrys</i>	white-crowned sparrow	Transient
Passeridae	Old World Sparrows	
<i>Passer domesticus</i> *	house sparrow	Likely
Ptiliognathidae	Silky Flycatchers	
<i>Phainopepla nitens</i>	phainopepla	Unlikely
Strigidae	Typical Owls	
<i>Athene cunicularia</i>	burrowing owl	Transient; not detected
Sturnidae	Starlings	
<i>Sturnus vulgaris</i> *	European starling	Likely

SCIENTIFIC NAME	COMMON NAME	OCCURRENCE POTENTIAL (PRESENT, LIKELY, POSSIBLE, TRANSIENT, OR UNLIKELY)
Threskiornithidae	Ibises and Spoonbills	
<i>Plegadis chihi</i>	white-faced ibis	Unlikely
Trochilidae	Hummingbirds	
<i>Archilochus alexandri</i>	black-chinned hummingbird	Unlikely
<i>Calypte anna</i>	Anna's hummingbird	Transient
<i>Calypte costae</i>	Costa's hummingbird	Unlikely
<i>Selasphorus sasin</i>	Allen's hummingbird	Unlikely
Troglodytidae	Wrens	
<i>Catherpes mexicanus</i>	canyon wren	Unlikely
<i>Salpinctes obsoletus</i>	rock wren	Unlikely
<i>Thryomanes bewickii</i>	Bewick's wren	Transient
<i>Troglodytes aedon</i>	house wren	Possible
Turdidae	Thrushes	
<i>Sialia mexicana</i>	western bluebird	Unlikely
<i>Turdus migratorius</i>	American robin	Unlikely
Tyrannidae	Tyrant Flycatchers	
<i>Sayornis nigricans</i>	black phoebe	Present
<i>Sayornis saya</i>	Say's phoebe	Likely
<i>Tyrannus verticalis</i>	western kingbird	Likely
<i>Tyrannus vociferans</i>	Cassin's kingbird	Present
Tytonidae	Barn Owls	
<i>Tyto alba</i>	barn owl	Possible

MAMMALS

Records included herein were derived from TERACOR field observations and peer-reviewed literature. Nomenclature follows *Peterson Field Guides: Mammals of North America* (Reid 2006). The species in the below table were considered to have at least a low potential of occurrence on-site. The potential of these species to occur on-site is also provided. Non-native species have been noted with an asterisk (*) following the scientific name.

SCIENTIFIC NAME	COMMON NAME	OCCURRENCE POTENTIAL (PRESENT, LIKELY, POSSIBLE, TRANSIENT, OR UNLIKELY)
Canidae	Coyotes, Dogs, Foxes, Jackals, and Wolves	
<i>Canis latrans</i>	coyote	Transient
Cricetidae	Hamsters, Voles, New World Rats and Mice	
<i>Microtus californicus</i>	California vole	Unlikely
<i>Mus musculus</i> *	house mouse	Likely
<i>Neotoma lepida intermedia</i>	San Diego desert woodrat	Unlikely
<i>Neotoma macrotis</i>	big-eared woodrat	Unlikely
<i>Peromyscus californicus</i>	California mouse	Unlikely
<i>Peromyscus maniculatus</i>	American deer mouse	Possible
<i>Rattus norvegicus</i>	Norway rat	Likely
<i>Rattus rattus</i>	black rat	Likely
<i>Reithrodontomys megalotis</i>	western harvest mouse	Unlikely
Didelphidae	American Opossums	
<i>Didelphis virginiana</i> *	Virginia opossum	Transient
Felidae	Cats	
<i>Felis silvestris catus</i> *	domestic cat	Transient
<i>Lynx rufus</i>	bobcat	Unlikely
Geomyidae	Pocket Gophers	
<i>Thomomys bottae</i>	Botta's pocket gopher	Likely
Heteromyidae	Pocket Mice and Kangaroo Rats	
<i>Chaetodipus californicus</i>	California pocket mouse	Unlikely
<i>Chaetodipus fallax fallax</i>	northwestern San Diego pocket mouse	Unlikely
<i>Dipodomys simulans</i>	Dulzura kangaroo rat	Possible
<i>Dipodomys stephensi</i>	Stephens' kangaroo rat	Possible
Leporidae	Rabbits and Hares	
<i>Lepus californicus bennettii</i>	San Diego black-tailed jackrabbit	Unlikely
<i>Sylvilagus audubonii</i>	Audubon's cottontail	Likely
<i>Sylvilagus bachmani</i>	brush rabbit	Unlikely

SCIENTIFIC NAME	COMMON NAME	OCCURRENCE POTENTIAL (PRESENT, LIKELY, POSSIBLE, TRANSIENT, OR UNLIKELY)
Mephitidae	Skunks and Stink Badgers	
<i>Mephitis mephitis</i>	striped skunk	Transient
<i>Spilogale gracilis</i>	western spotted skunk	Transient
Mustelidae	Badgers, Otters, Weasels, and Relatives	
<i>Mustela frenata</i>	long-tailed weasel	Unlikely
<i>Taxidea taxus</i>	American badger	Unlikely
Procyonidae	Raccoons and Relatives	
<i>Procyon lotor</i>	northern raccoon	Possible
Sciuridae	Squirrels, Chipmunks and Marmots	
<i>Ostospermophilus beecheyi</i>	California ground squirrel	Present

REPTILES

Identification of amphibians and reptile species were made visually, with nomenclature following R.C. Stebbins (2003) *A Field Guide to Western Reptiles and Amphibians*, third edition, updated to conform to the most recent changes in nomenclature utilizing The Center for North American Herpetology. The species in the below table were considered to have at least a low potential of occurrence on-site. The potential of these species to occur on-site is also provided. Non-native species have been noted with an asterisk (*) following the scientific name.

SCIENTIFIC NAME	COMMON NAME	OCCURRENCE POTENTIAL (PRESENT, LIKELY, POSSIBLE, TRANSIENT, OR UNLIKELY)
REPTILES		
Lizards		
Anguidae	Glass Lizards and Alligator Lizards	
<i>Elgaria multicarinata webbii</i>	San Diego alligator lizard	Possible

SCIENTIFIC NAME	COMMON NAME	OCCURRENCE POTENTIAL (PRESENT, LIKELY, POSSIBLE, TRANSIENT, OR UNLIKELY)
Anniellidae	North American Legless Lizards	
<i>Anniella stebbinsi</i>	Southern California or San Diegan legless lizard	Unlikely
Phrynosomatidae	Zebra-tailed, Fringe-toed, Spiny, Tree, Side-Blotched, and Horned Lizards	
<i>Phrynosoma blainvillii</i>	coast horned lizard	Unlikely
<i>Sceloporus occidentalis</i>	western fence lizard	Likely
<i>Uta stansburiana</i>	common side-blotched lizard	Possible
Scincidae	Skinks	
<i>Plestiodon gilberti rubricaudatus</i>	western red-tailed skink	Transient
<i>Plestiodon skiltonianus skiltonianus</i>	Skilton's skink	Transient
Teiidae	Whiptails and Allies	
<i>Aspidoscelis hyperythra</i>	orange-throated whiptail	Unlikely
<i>Aspidoscelis tigris stejnegeri</i>	coastal whiptail	Unlikely
Snakes		
Boidae	Boas	
<i>Charina umbratica</i>	southern rubber boa	Unlikely
Colubridae	Harmless Egg-Laying Snakes	
<i>Arizona elegans occidentalis</i>	California glossy snake	Transient
<i>Masticophis flagellum piceus</i>	red racer	Transient
<i>Masticophis lateralis lateralis</i>	California striped racer	Unlikely
<i>Pituophis catenifer annectens</i>	San Diego gophersnake	Possible
<i>Rhinocheilus lecontei</i>	long-nosed snake	Unlikely
<i>Salvadora hexalepis virgultea</i>	coast patch-nosed snake	Transient
<i>Tantilla planiceps</i>	western black-headed snake	Transient
Crotalidae	Pitvipers	
<i>Crotalus oreganus helleri</i>	southern Pacific rattlesnake	Possible
<i>Crotalus ruber</i>	red-diamond rattlesnake	Transient

SCIENTIFIC NAME	COMMON NAME	OCCURRENCE POTENTIAL (PRESENT, LIKELY, POSSIBLE, TRANSIENT, OR UNLIKELY)
Dipsadidae	Rear-Fanged Snakes	
<i>Hypsiglena ochrorhyncha</i>	coast nightsnake	Unlikely

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APPENDIX D

STATE SPECIAL ANIMALS

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
INVERTEBRATES		
Crotch bumble bee (<i>Bombus crotchii</i>)	SSA	Low. This species ranges from coastal California east to the Sierra-Cascade Crest and south into Mexico. Food plant genera include <i>Antirrhinum</i> , <i>Phacelia</i> , <i>Clarkia</i> , <i>Dendromecon</i> , <i>Eschscholzia</i> , and <i>Eriogonum</i> . According to the CNDDDB, this bumble bee was detected in 1975 in Quail Valley. This species has not been detected on-site.
monarch – California overwintering population (<i>Danaus plexippus</i> pop. 1) Formerly known as monarch butterfly (<i>Danaus plexippus</i>)	SSA	Not Present. The monarch is perhaps the most well-known insect in North America. This species spends summers in the northern portion of the United States and southern Canada, and migrates several thousand miles south to overwinter in Southern California, Mexico, and many southern states in the United States. They host on several species of milkweed (<i>Asclepias</i> spp.), and sequester cardiac glycosides from these plants, making them unpalatable to predators. Milkweed has not been detected on-site, thus suitable habitat for this species is absent from the subject property. Roosting sites are generally coastal, and do not occur on-site.
REPTILES		
San Bernardino ring-necked snake (<i>Diadophis punctatus modestus</i>)	SSA	Not Present. This small, slender snake is a secretive subspecies. It prefers moist areas and will inhabit moist meadows, rocky hillsides, gardens, grassland, chaparral, and mixed woodlands. Suitable habitat is not present on the subject property. This subspecies was not detected on-site.
BIRDS		
great egret (<i>Ardea alba</i>)	SSA (Nesting Colony)	Not Present. The great egret is found worldwide. They nest in colonies in trees and shrubs over water, and on islands. They prefer to feed in wetland habitats including streams, lakes, ponds, marshes, and tide flats, but will take prey opportunistically. Prey items include fish, reptiles, amphibians, birds, and small mammals. Suitable habitat is not present on-site, and this species was not detected on the subject property.
oak titmouse (<i>Baeolophus inornatus</i>)	SSA (Nesting)	Not Present. The oak titmouse resides in warm, open, dry oak or oak-pine woodlands from southern Oregon to Baja California. It will use scrub oaks or other brush as long as woodlands are nearby. Oak titmice eat seeds and other plant materials as well as insects and other invertebrates. Oak trees are not present on-site; therefore this species has no potential of occurrence on-site.
Costa's hummingbird (<i>Calypte costae</i>)	SSA (Nesting)	Low. The subject property is located within the year-round range of this hummingbird species. Costa's hummingbird primarily occurs in the desert and semi-desert; but also occurs in arid brushy foothills and chaparral, and in adjacent mountains, open meadows and gardens during migration and winter. This species has a low probability of occurrence on-site.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
snowy egret (<i>Egretta thula</i>)	SSA (Nesting Colony)	Not Present. The snowy egret is generally found along the coast, but does occasionally occur inland along rivers, streams, and the Salton Sea. Preferred habitats include saltwater marshes, tidal flats, coastal lagoons, and the margins of lakes, rivers, and streams. Their preferred diet is aquatic invertebrates and insects. Nesting colonies are not present on the subject property. Habitat on-site is unsuitable. This species has not been detected on-site.
red-breasted sapsucker (<i>Sphyrapicus ruber</i>)	SSA (Nesting)	Not Present. This sap-dependent species occurs in mixed coniferous forests near the coast, and mixed deciduous woodlands in the interior mountains of California. They forage by drilling holes in trees, then later returning to drink sap and eat insects attracted to the sap. They commonly breed in Northern California and the Sierra-Nevada Mountains from sea level to about 2750 meters in elevation. In Southern California this species is limited to breeding in higher mountainous regions (i.e., San Gabriel Mountains, San Bernardino Mountains, and San Jacinto Mountains). Suitable nesting habitat is not present, and the subject property is located outside of this species' known breeding range; therefore, this species does not nest on the subject property.
Lawrence's goldfinch (<i>Spinus lawrencei</i>)	SSA (Nesting)	Low (Moderate Migratory Occurrence Potential). This species occurs in the vicinity of the subject property during the nesting season. Suitable habitat is comprised of open woodlands, chaparral and weedy fields. Although marginally suitable nesting habitat is present, this species has a low probability of nesting on the subject property due to the limited extent of suitable habitat present. Additionally, this species has not been detected on-site. This notwithstanding, Lawrence's goldfinch has a moderate potential of utilizing the subject property as a migratory stopover.
MAMMALS		
silver-haired bat (<i>Lasionycteris noctivagans</i>)	SSA	Not Present. This species occurs primarily within or near forested or woodland areas, usually near a water source. It roosts in loose bark, secondary cavities (i.e., unused woodpecker holes), and hollow trees. Suitable habitat is not present on-site.
hoary bat (<i>Lasiurus cinereus</i>)	SSA	Not Present. This species prefers deciduous and coniferous forests, and often roosts in those types of trees. Moths are the preferred food item; however, other species of flying insects and occasionally small bat species will be consumed. Suitable habitat for this species is not present on-site.
western small-footed myotis (<i>Myotis ciliolabrum</i>)	SSA	Not Present. The western small-footed myotis roosts singly or in small communal groups in rock crevices, mines, caves, under exfoliating bark, or in buildings. This species consumes a wide variety of flying insects including moths and beetles. Suitable habitat includes desert, short-grass prairies, riparian areas, and coniferous forests. Suitable habitat is not present on the subject property.

SPECIES	REGULATORY STATUS	STATUS OF THE SPECIES ON THE SUBJECT PROPERTY/LIFE HISTORY/HABITAT DESCRIPTION
long-eared myotis (<i>Myotis evotis</i>)	SSA	Not Present. The long-eared myotis occurs mainly in forested areas up to 3000 meters. This species gleans moths and beetles from vegetation. Researchers believe that this species may rely more upon hearing to locate prey, rather than echolocation. The long-eared myotis roosts in a variety of areas. Suitable habitat for this myotis is not present on-site.
fringed myotis (<i>Myotis thysanodes</i>)	SSA	Not Present. The fringed myotis occurs in oak, pinyon, and ponderosa pine forests and desert scrub from 1,200 to 2,750 meters in elevation. This species captures prey in flight; however, it may also glean moths and beetles from vegetation. The fringed myotis roosts in caves, mines, and buildings. The habitat on the subject property is not suitable; therefore this bat would not be expected to occur on-site.
Yuma myotis (<i>Myotis yumanensis</i>)	SSA	Not Present. The Yuma myotis roosts in large groups in vertical cracks in cliff faces, buildings, and under bridges. This species' distribution is often closely tied to bodies of water. Suitable habitat includes humid forest to desert. Suitable habitat for this species is not present on-site.

APPENDIX E

LIST OF ABBREVIATIONS/ACRONYMS

ACRONYMS	
BUOW	Burrowing owl
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CNDDDB	California Natural Diversity Data Base
CNPS	California Native Plant Society
FC	Federal Candidate Species
FDL	Federally Delisted
FE	Federally listed as Endangered
FESA	Federal Endangered Species Act
FPD	Federally Proposed for Delisting
FPE	Federally Proposed as Endangered
FPT	Federally Proposed as Threatened
FT	Federally listed as Threatened
MSHCP	Western Riverside County Multiple Species Habitat Conservation Plan
MSL	Mean Sea Level
SCE	State Candidate for Endangered
SCT	State Candidate for Threatened
SDL	State Delisted
SE	State listed as Endangered
SFP	State Fully Protected
SSA	State Special Animal
SSC	State Species of Special Concern
ST	State listed as Threatened
SWL	State Watch List Species
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey