Section 4.4
Biological Resources

4.4.1 Overview

This section describes existing conditions at the project site, applicable laws and regulations with respect to biological resources, the biological resources present within the project site, and the impacts and mitigation measures required for implementation of the project.

4.4.2 Existing Conditions

A biological resource analysis was conducted for the project by reviewing literature and records from available databases and resources and conducting biological resource surveys within the Biological Survey Area (BSA). The BSA includes the entirety of the approximately 96.6-acre project site. Note that only 94.2 net acres required surveys because 2.4 acres of the parcel is within the public right-of-way along South Grade Road. Vegetation surveys, special-status plant surveys, and invasive plant mapping were conducted in February and March 2019. Special-status plant surveys and special-status wildlife surveys were conducted in the BSA between February and September 2019, with the second-year Quino checkerspot butterfly (QCB) (*Euphydryas editha quino*) study conducted in March 2020 and a specialized survey for chocolate lily (*Fritillaria biflora*) conducted in late March 2021. Additional Engelmann oak surveys and mapping were conducted in June and September 2020. An additional vegetation survey was conducted in June and July 2022 to update vegetation conditions within the BSA and confirm that the mapping met a 0.10-acre minimum mapping unit requirement. Focused surveys for western spadefoot were also conducted in 2022. The methods used during these biological resource surveys are provided in the Biological Resources Report (BRR), which is included as Appendix D to this EIR.

4.4.2.1 Physical Conditions

The BSA is in the central foothills of San Diego County, within the unincorporated community of Alpine. The natural setting of the southern portion of the BSA consists of relatively flat grasslands that slope slightly from northeast to a low point to the southwest. The terrain is rougher to the north; boulders and rock outcrops are dominated by scrub, chaparral, and woodland vegetation. Furthermore, the hills are steeper to the north; a small hilltop is present just east of the northeast corner of the BSA. Land surrounding the BSA is relatively flat, partially because of grading for developments. Steeper mountains with canyons, ravines, and drainages are found farther to the north and the south, outside of Alpine. Nearby reservoirs include El Capitan Reservoir to the north and Loveland Reservoir to the south. Elevations range from approximately 1,900 feet above mean sea level at the southwest corner of the BSA along South Grade Road to approximately 2,100 feet above mean sea level at the northeast corner of the BSA.

Several dirt trails traverse the BSA, most notably in the northern portion. Other trails connect the eastern portion of the property, in areas where many hikers begin their treks to the north, south,

and west and into Wright's Field. South Grade Road, a paved two-lane road, borders the BSA to the south and east.

4.4.2.2 Current Fire Fuel Reduction Zones

In accordance with the County Consolidated Fire Code and the Alpine Fire Protection District Ordinance, the County is clearing vegetation within the fire fuel reduction zones listed below, which, historically, have been cleared per the direction of the Alpine Fire District. These recommendations are also contained within the Fire and Emergency Operational Assessment (FEOA) prepared by Rohde & Associates.

- At the far northeast edge of the County's parcel where it abuts residences along Engelmann Oak Lane, 100 feet south of their property lines. This area is currently cleared of all vegetation and mapped as disturbed habitat.
- Along South Grade Road, within 30 feet of the edge of the road. This area along the County's parcel includes predominantly Valley needlegrass grassland and smaller stands of open Engelmann oak woodland at the northern and eastern edges that transitions to denser scrub vegetation. Moderate to steep slopes are found toward the southern and western edges of the County's parcel. No Engelmann oaks have been removed as part of clearing, but the trees are limbed in coordination with a certified arborist, as needed, to prevent wildfires from spreading along contiguous tree canopies.

4.4.2.3 Vegetation Communities/Land Cover

Vegetation mapping within the BSA was conducted by ICF biologists in February and March 2019 by walking meandering transects and observing the area from selected vantage points that allowed an expansive view of the BSA. An additional vegetation survey was conducted in June and July 2022 to update vegetation conditions within the BSA and confirm that the mapping met a 0.10-acre minimum mapping unit requirement.

Vegetation communities were mapped pursuant to County guidelines (County of San Diego 2010b). These communities were described and assigned numerical codes, according to the *Terrestrial Natural Communities of California* (Holland 1986), as modified by Oberbauer et al. (2008). The 11 general vegetation communities/land cover types observed within the BSA were disturbed habitat; Diegan coastal sage scrub; Diegan coastal sage scrub, *Baccharis* dominated; flat-topped buckwheat; coastal sage-chaparral transition; southern mixed chaparral; Valley needlegrass grassland; non-native grassland; open Engelmann oak woodland; non-native woodland; and eucalyptus woodland (Figure 4.4-1). A full description of each vegetation community/land cover type present within the BSA can be found in the BRR, which is included as Appendix D to this EIR. Valley needlegrass grassland is the most common vegetation community, composing approximately 26.1 acres of the BSA.

4.4.2.4 Candidate, Sensitive, and Special-Status Species

Special-status species are those plants or animals that have been officially listed, proposed for listing, or identified as candidates for listing as threatened or endangered under provisions of the federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA). Included is any animal listed as a Species of Special Concern or a fully protected species by the state or any plant ranked according to the Rare Plant Ranking System of the California Native Plant Society (CNPS).

Special-status species also include those listed on the County's Sensitive Plant List and Sensitive Animal List.

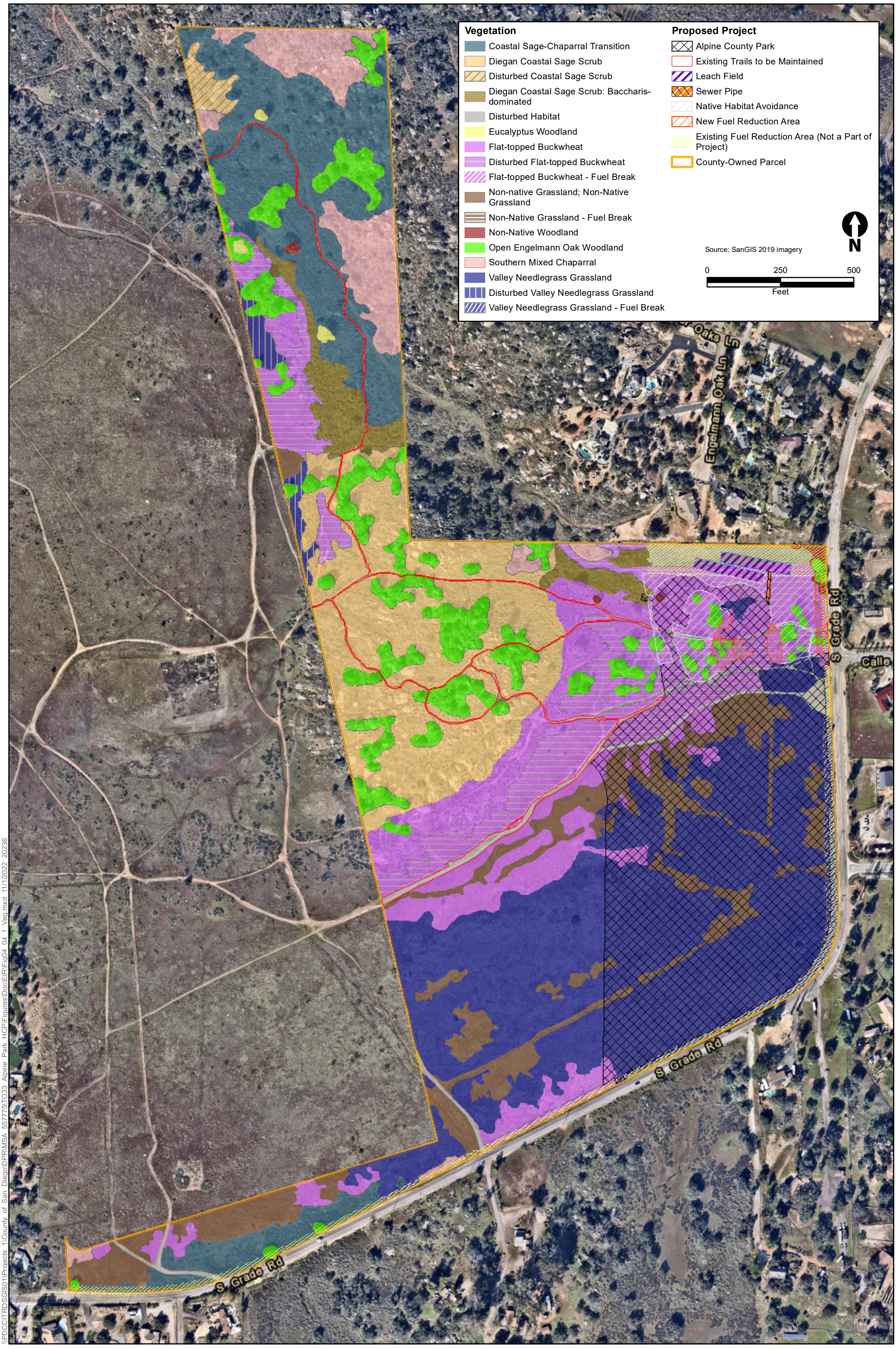

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Figure 4.4-1
Vegetation Communities
Alpine Park Project

Table 4.4-1. Vegetation Communities Occurring Within the BSA

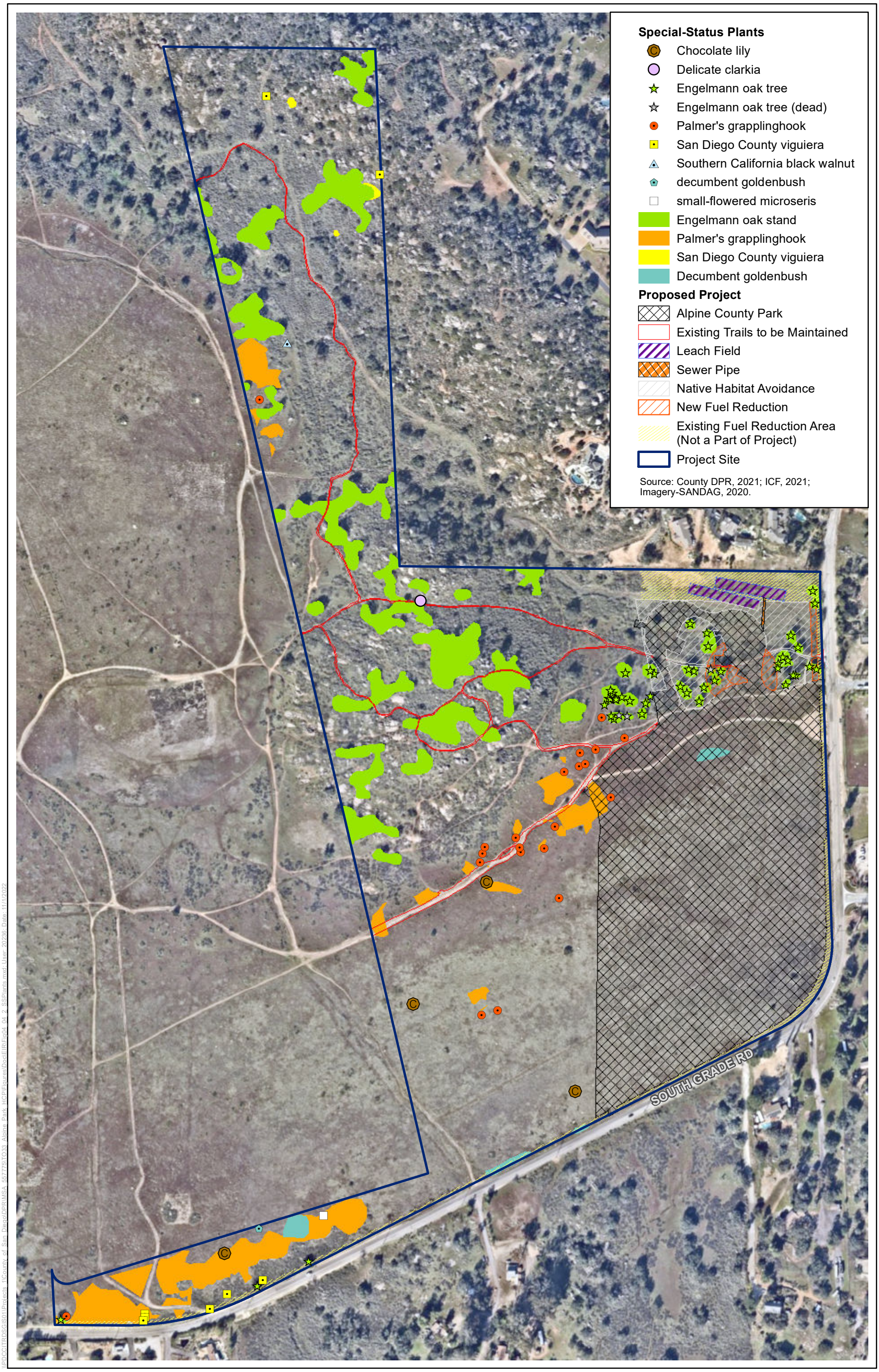
Oberbauer Code	Vegetation Community	Area in BSA (acres)
11300	Disturbed Habitat	2.7
32500	Diegan Coastal Sage Scrub	12.2
	Disturbed Diegan Coastal Sage Scrub	0.5
32530	Diegan Coastal Sage Scrub, Baccharis dominated	2.5
32800	Flat-topped Buckwheat	10.1
	Disturbed Flat-topped Buckwheat	9.1
	Flat-topped Buckwheat – Existing Fire Fuel Reduction Zone	0.2
37G00	Coastal Sage-Chaparral Transition	11.0
37120	Southern Mixed Chaparral	4.0
42110	Valley Needlegrass Grassland	24.4
	Disturbed Valley Needlegrass Grassland	0.7
	Valley Needlegrass Grassland – Existing Fire Fuel Reduction Zone	1.1
42200	Non-Native Grassland	8.4
	Non-native Grassland – Existing Fire Fuel Reduction Zone	< 0.1
71181	Open Engelmann Oak Woodland	7.1
79000	Non-Native Woodland	0.2
79100	Eucalyptus Woodland	0.1
Total[1a]		94.2

[a.] Sum of values does not equal total because of rounding.

Special-Status Plant Species

The desktop analysis for sensitive plant species was performed for this project by reviewing the California Natural Diversity Database (CNDDB) and CNPS database. The CNDDB and CNPS record search for sensitive plant species was conducted using the U.S. Geological Survey's Alpine 7.5-minute quadrangle map and the nine surrounding quadrangle maps. The search identified 83 species with potential to occur within the BSA (see Appendix I of the BRR, which is included as Appendix D to this EIR).

Special-status plant surveys were conducted within the BSA by qualified ICF botanists between April and August 2019. ICF botanists traversed the BSA from meandering transects to identify the locations of special-status plants. A specialized survey for chocolate lily (*Fritillaria biflora*) was conducted in late March of 2021, during the peak time for this species to bloom throughout the BSA. Species that were not observed within the BSA were determined to have little to no potential to occur on site because three thorough special-status plant surveys were conducted in 2019, which was an excellent rain year for Southern California. The surveys concluded that no federally or state-listed endangered or threatened plant species were observed within the BSA. Eight sensitive plant species were observed in the BSA, including seven sensitive plant species from the CNPS Rare Plant Inventory (Figure 4.4-2). The seven sensitive species were decumbent goldenbush (*Isocoma menziesii* var*. decumbens*), delicate clarkia (*Clarkia delicata*), Engelmann oak (*Quercus engelmannii*), Palmer's grapplinghook (*Harpagonella palmeri*), San Diego County viguiera (*Bahiopsis laciniata*), small-flowered microseris (*Microseris douglasii* ssp*. platycarpha*), and Southern California black



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1 in = 300 ft

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Figure 4.4-2
Special-Status Plants
Alpine Park Project

walnut (*Juglans californica*). Chocolate lily (*Fritillaria biflora*), which was observed within the BSA, is a County List D plant, indicating it has a limited distribution or is uncommon but not presently rare or endangered. A complete list of potentially occurring special-status plants is provided in Appendix I of the BRR (Appendix D to this EIR).

Special-Status Wildlife Species

Following a thorough literature and records search (see the BRR, which is included as Appendix D to this EIR), special-status wildlife surveys for the project were conducted between February and September 2019, with second-year QCB and Hermes copper butterfly (HCB) (*Lycaena hermes*) studies conducted in 2020. ICF biologists conducted focused wildlife surveys for locally endemic and listed San Diego and Riverside fairy shrimp (*Streptocephalus woottoni*, *Branchinecta sandiegonensis*), QCB, HCB, burrowing owl (*Athene cunicularia*), coastal California gnatcatcher (CAGN) (*Polioptila californica californica*), and locally endemic listed bat species. In 2022, focused surveys for western spadefoot were conducted, verification and refinement to the vegetation map was completed, and an additional bat survey was conducted. The BRR (Appendix D to this EIR) provides details on the methods used for these surveys. QCB was observed during both 2019 and 2020 (Figure 4.4-3).

The following special-status bats were observed during bat surveys: big free-tailed bat (*Nyctinomops macrotis*), pallid bat (*Antrozous pallidus*), pocketed free-tailed bat (*Nyctinomops femorosaccus*), Townsend's big-eared bat (*Corynorhinus townsendii*), western long-eared myotis (*Myotis evotis*), western mastiff bat (*Eumops perotis*), western red bat (*Lasiurus blossevillii*), western small-footed myotis (*Myotis ciliolabrum*), western yellow bat (*Lasiurus xanthinus*), and Yuma myotis (*Myotis yumanensis*). Western spadefoot adults were observed within the BSA but outside the project footprint. No evidence of breeding western spadefoot was observed in 2022. In 2019, which was an exceptionally wet year, western spadefoot eggs were observed within one seasonally inundated basin during one survey.

The following special-status wildlife species were incidentally observed within the BSA during surveys conducted in 2019 and 2020: Belding's orange-throated whiptail (*Aspidoscelis hyperythra*), Blainville's (coast) horned lizard (*Phrynosoma blainvillii*), coastal western whiptail (*Aspidoscelis tigris stejnegeri*), red-diamond rattlesnake (*Crotalus ruber*), a wintering migrant burrowing owl, Cooper's hawk (*Accipiter cooperii*), red-shouldered hawk (*Buteo lineatus*), and western bluebird (*Sialia mexicana*) (Figure 4.4-3).

Although not observed, the following special-status species were determined to have moderate or high potential to occur within the BSA, based on habitat types and range distribution: Baja California coachwhip (*Masticophis fuliginosus*), California glossy snake (*Arizona elegans occidentalis*), coast patch-nosed snake (*Salvadora hexalepis virgultea*), Coronado skink (*Plestiodon skiltonianus interparietalis*), Southern California legless lizard (*Anniella stebbinsi*), Bell's sage sparrow (*Artemisiospiza belli belli*), burrowing owl (breeding occurrence), ferruginous hawk (*Buteo regalis*), grasshopper sparrow (*Ammodramus savannarum*), Lawrence's goldfinch (*Spinus lawrencei*), Oregon vesper sparrow (*Pooecetes gramineus affinis*), Southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), white-tailed kite (*Elanus leucarus*), northwestern San Diego pocket mouse (*Chaetodipus fallax fallax*), San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), and Bryant's (San Diego desert) woodrat (*Neotoma bryanti*).

Protocol surveys for both listed fairy shrimp and CAGN were negative. Based on survey results and a literature review, the following species were determined to have low potential to occur; therefore, impacts on these species are not evaluated in this EIR: HCB, locally endemic and listed San Diego and

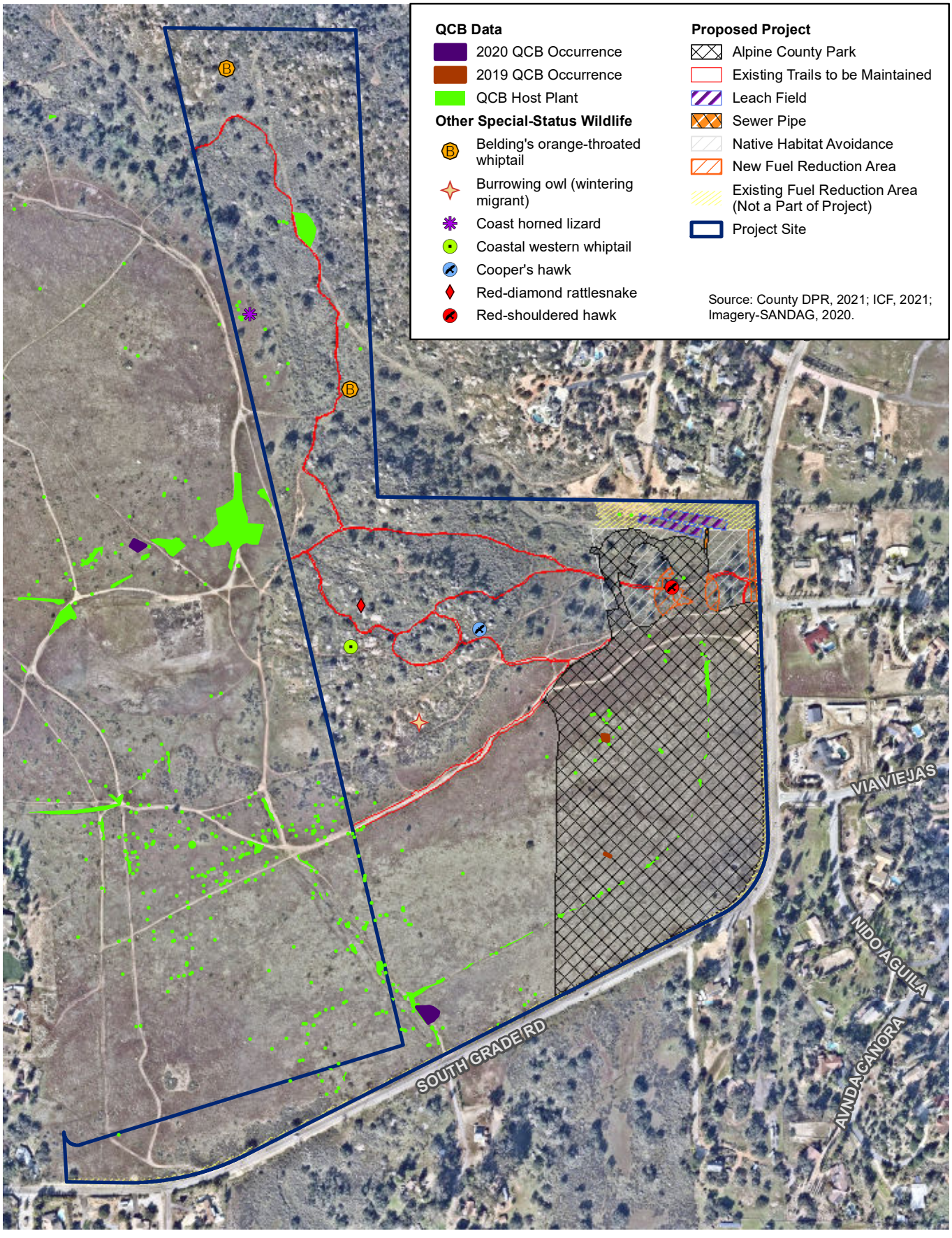

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Figure 4.4-3
Special-Status Wildlife
Alpine Park Project

Riverside fairy shrimp, and CAGN. Appendix I in the BRR (Appendix D to this EIR) provides a complete discussion regarding all special-status wildlife species with potential to occur and those that were observed.

4.4.2.5 Jurisdictional Waters and Wetlands

During the vegetation mapping conducted in February and March 2019, ICF biologists searched the BSA for any indication of surface water flows to determine if a delineation of potentially jurisdictional aquatic features was required. No such surface water features were observed on-site; as a result, no formal delineation of jurisdictional water features was required or conducted.

4.4.3 Applicable Laws and Regulations

4.4.3.1 Federal

Endangered Species Act of 1973

The ESA was enacted in 1973 to provide protection to threatened and endangered species and their associated ecosystems. "Take" of a listed species is prohibited, except when authorization has been granted through a permit under Section 4(d), 7, or 10(a) of the act. *Take* means to harass, harm, shoot, wound, kill, trap, capture, or collect or to attempt to engage in any of these activities without a permit.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) was enacted in 1918. Its purpose is to prohibit the killing or transport of covered native migratory birds—or any part, nest, or egg of any such bird—unless allowed by another regulation adopted in accordance with the MBTA. The list of species that are protected by this act includes almost all native non-game species.

Clean Water Act

In 1948, Congress first passed the Federal Water Pollution Control Act. This act was amended in 1972 and became known as the Clean Water Act (CWA). The CWA regulates the discharge of pollutants into the waters of the U.S. Under Section 404, permits need to be obtained from the U.S. Army Corps of Engineers (USACE) for discharge of dredge or fill material into waters of the U.S. Under Section 401 of the act, water quality certification from the Regional Water Quality Control Board (RWQCB) needs to be obtained if there are to be any impacts on waters of the U.S.

4.4.3.2 State

California Endangered Species Act

The CESA prohibits the take of any species that the California Fish and Game Commission determines to be a threatened or endangered species; CESA is administered by the California Department of Fish and Wildlife (CDFW). The CESA is found in California Fish and Game Code (FGC) Sections 2050–2116. Incidental take of these listed species can be approved by CDFW. The CESA definition of take means to hunt, pursue, catch, capture, or kill or attempt to hunt, pursue, catch, capture, or kill.

California Fish and Game Code

The California FGC regulates the taking or possessing of birds, mammals, fish, amphibians, and reptiles. It also provides additional protections for endangered species and regulations regarding lakes and streams and associated fish and wildlife habitat. Provisions regarding the protections for nesting birds are described in California FGC Section 3503; these make it unlawful to take, possess, or needlessly destroy the nest or eggs of most wild birds.

4.4.3.3 Local

County General Plan

The 2011 County General Plan Update is the first comprehensive update to the County General Plan since the 1970s. The County General Plan Update, which applies to all unincorporated portions of San Diego County, directs population growth and provides plans for infrastructure needs, development, and resource protection. The County General Plan Update guides the growth and development of unincorporated San Diego County by using innovative planning principles that have been designed to create livable communities and balance environmental objectives with the need for adequate infrastructure, housing, agriculture, and economic viability. The County General Plan Update consists of six elements: Land Use, Mobility, Housing, Conservation and Open Space, Safety, and Noise.

The goals and policies from the County General Plan listed below are applicable to the discussion of biological resources.

Land Use

GOAL LU-2 Maintenance of the County's Rural Character. Conservation and enhancement of the unincorporated County's varied communities, rural setting, and character.

LU-2.2 Relationship of Community Plans to the General Plan. Community Plans are part of the General Plan. These plans focus on a particular region or community within the overall General Plan area. They are meant to refine the policies of the General Plan as they apply to a smaller geographic region and provide a forum for resolving local conflicts. As legally required by state law, Community Plans must be internally consistent with General Plan goals and policies of which they are a part. They cannot undermine the policies of the General Plan. Community Plans are subject to adoption, review and amendment by the Board of Supervisors in the same manner as the General Plan.

LU-2.8 Mitigation of Development Impacts. Require measures that minimize significant impacts to surrounding areas from uses or operations that cause excessive noise, vibrations, dust, odor, aesthetic impairment and/or are detrimental to human health and safety.

GOAL LU-6 Development—Environmental Balance. A built environment in balance with the natural environment, scarce resources, natural hazards, and the unique local character of individual communities.

LU-6.1 Environmental Sustainability. Require the protection of intact or sensitive natural resources in support of the long-term sustainability of the natural environment.

LU-6.6 Integration of Natural Features into Project Design. Require incorporation of natural features (including mature oaks, indigenous trees, and rock formations) into proposed development and require avoidance of sensitive environmental resources.

LU-6.7 Open Space Network. Require projects with open space to design contiguous open space areas that protect wildlife habitat and corridors; preserve scenic vistas and areas; and connect with existing or planned recreational opportunities.

GOAL LU-10 Function of Semi-Rural and Rural Lands. Semi-Rural and Rural Lands that buffer communities, protect natural resources, foster agriculture, and accommodate unique rural communities.

LU-10.2 Development—Environmental Resource Relationship. Require development in Semi-Rural and Rural areas to respect and conserve the unique natural features and rural character, and avoid sensitive or intact environmental resources and hazard areas.

Conservation and Open Space

GOAL COS-2 Sustainability of the Natural Environment. Sustainable ecosystems with long-term viability to maintain natural processes, sensitive lands, and sensitive as well as common species, coupled with sustainable growth and development.

COS-2.1 Protection, Restoration and Enhancement. Protect and enhance natural wildlife habitat outside of preserves as development occurs according to the underlying land use designation. Limit the degradation of regionally important natural habitats within the Semi-Rural and Rural Lands regional categories, as well as within Village lands where appropriate.

COS-2.2 Habitat Protection through Site Design. Require development to be sited in the least biologically sensitive areas and minimize the loss of natural habitat through site design.

GOAL COS-21 Park and Recreational Facilities. Park and recreation facilities that enhance the quality of life and meet the diverse active and passive recreational needs of County residents and visitors, protect natural resources, and foster an awareness of local history, with approximately ten acres of local parks and 15 acres of regional parks provided for every 1,000 persons in the unincorporated County.

COS-21.4 Regional Parks. Require new regional parks to allow for a broad range of recreational activities and preserve special or unique natural or cultural features when present.

COS-21.5 Connections to Trails and Networks. Connect public parks to trails and pathways and other pedestrian or bicycle networks where feasible to provide linkages and connectivity between recreational uses.

GOAL COS-23 Recreational Opportunities in Preserves. Acquisition, monitoring, and management of valuable natural and cultural resources where public recreational opportunities are compatible with the preservation of those resources.

COS-23.1 Public Access. Provide public access to natural and cultural (where allowed) resources through effective planning that conserves the County's native wildlife, enhances and restores a continuous network of connected natural habitat and protects water resources.

Alpine Community Plan

The Alpine Community Plan (ACP) implements the goals and policies of the County General Plan for the Alpine area (County of San Diego 1979). The plan was prepared in accordance with Section 65101 of the Government Code, State of California, and Board of Supervisors Policy I-1. The ACP represents a specific guide for land use, conservation, and circulation; a guide for use by service delivery specialists; and recommendations to facilitate the coordination of plans of other public agencies as well as the private sector. The goals, policies, and recommendations listed below from the ACP are applicable to land use.

Chapter 1, Community Character

Policy/Recommendation 1: Regulatory agencies shall ensure that future projects are consistent with the goals, policies and recommendations contained in the Alpine Community Plan. [PP]

Policy/Recommendation 4: Site designs should:

a. Grading shall not unduly disrupt the natural terrain, or cause problems associated with runoff, drainage, erosion, or siltation. Landscape disturbed by grading shall be revegetated. [PP, C, DPW]

b. Have grading plans that maximize retention of sensitive native vegetation, existing tree stands, and rock outcroppings, and natural topography. [PP, DPW]

Policy/Recommendation 6: Require retention of mature trees in all public and private development projects, wherever possible. [PP, DPW]

Chapter 9, Conservation

Goal 1: Promote the well-planned management of all valuable resources, natural and man-made, and prevent the destruction and wasteful exploitation of natural resources, where feasible.

Policy/Recommendation 1: Encourage the protection and conservation of unique resources in the Alpine Planning Area. [AP]

Policy/Recommendation 2: Important plant, animal, mineral, water, cultural and aesthetic resources in the Alpine Plan area shall be protected through utilization of the Resource Conservation Area designations and appropriate land usage. [AP]

Policy/Recommendation 6: Utilize all measures to preserve rare, threatened, or endangered plant life, including on-site protection through open space easement. Off-site propagation for reintroduction of suitable habitat to be coordinated by the Conservation Subcommittee. [AP, PP]

Policy/Recommendation 7: Protect the rare Engleman [sic] oak, wherever possible. [AP, PP]

Chapter 10, Open Space

Goal: Provide a system of open space that preserves the unique natural elements of the community, retains and extends areas in open space that are recognized as valuable for conservation of resources, open space uses that promote public health and safety. Open space areas, along with

areas which are inappropriate for urbanization or required as buffers for urban development, that harmonize with and help integrate conservation and recreation components, creating a well-balanced community of natural plant and animal habitat and humans alike.

Policy/Recommendation 1: Encourage the development and preservation of a system of open space for wildlife corridors linking residential areas to permanent open space in the Cleveland National Forest and nearby lakes and wildlife preservation areas. [County DPR, AP]

Policy/Recommendation 3: Incorporation of open space areas as integral parts of project site designs, preserving environmental resources, providing recreation for residents, and buffers to maintain neighborhood identities. [PP]

Policy/Recommendation 5: Incorporate publicly-owned land into a functional recreation/open space system, wherever feasible. [County DPR, AP]

Policy/Recommendation 11: Enhance health and safety and conserve natural resources through the preservation of open space. [GEN, County DPR, AP]

Policy/Recommendation 12: Provide recreational opportunities through the preservation of open space areas. [County DPR, AP]

Policy/Recommendation 13: Preserve and encourage publicly and privately-owned open space easements. [County DPR, AP]

Chapter 11, Recreation

Policy/Recommendation 9: Encourage the acquisition and development of park lands which will protect outstanding scenic and riparian areas, cultural, historical and biological resources. [County DPR, PP]

4.4.4 Project Impact Analysis

This section addresses direct and indirect impacts on biological resources that would result from implementation of the project. The impact analysis is focused on project components that would occur within the BSA, including fire management activities, construction and operation of Alpine Park, formalization of approximately 1 acre of existing multi-use trails, establishment of a Native Habitat Avoidance Area, construction of public restroom facilities, and establishment of an open space/preserve on the project site. Each component is described in detail below:

- Alpine Park: The County DPR is proposing development of Alpine Park, an approximately 22.2-acre active park within 96.6 acres of undeveloped land. The active park would include amenities such as multi-use turf areas, a baseball field, an all-wheel park, a bike skills area, recreational courts (i.e., basketball, pickleball), fitness stations, a leash-free dog area, restroom facilities, an administrative facility/ranger station, equestrian staging area and a corral, a nature play area, a community garden, a volunteer pad, picnic areas with shade structures and picnic tables, game table plaza, and multi-use trails.
- New Fire Fuel Reduction Zones: In accordance with the County Consolidated Fire Code and the Alpine Fire Protection District Ordinance, the County will clear vegetation along South Grade Road, providing an additional 20 feet beyond the existing 30-foot fire fuel modification zone

along South Grade Road where it is adjacent to the project footprint and north to the end of the County parcel (see Section 4.4.2.2). The County will also clear vegetation within 100 feet of the volunteer parking pad in the northern portion of the proposed park. This includes "landscape replacement" clearing within 30 feet of the volunteer parking pad in Zone A. No Engelmann oaks are in this zone. Within Zone B, the County will achieve a 75 percent reduction in fire-line intensity out to approximately 100 feet from the volunteer parking pad. Zone B fire fuel reductions will include removing shrub fuels (predominantly flat-topped buckwheat) by a minimum of 50 percent and grass/herb fuels by a minimum of 80 percent. Four Engelmann oak canopies are located in Zone B areas, and three Engelmann oak canopies are located within the additional 20-foot-wide clearing along South Grade Road as described above. Although Engelmann oaks will not be removed for fire fuel reduction purposes, these oaks may be limbed to prevent fire from spreading through the canopies, as needed, in coordination with a certified arborist. These recommendations are also contained in the FEOA prepared by Rohde & Associates, provided as Appendix J of this EIR.

- Multi-Use Trails: In addition to the active park, the project would result in the maintenance of 1 acre of existing multi-use trails throughout the project site. A number of smaller informal trails that are currently in use will be closed as part of the project, as well.
- Native Habitat Avoidance Area: These areas are within the generalized boundary of Alpine Park, but they would not be subject to mass grading or vegetation removal during site preparation activities. These areas are at the northern end of the proposed park, adjacent to the proposed equestrian staging area.
- Public Restroom Facilities: Implementation of the project would include construction of public restroom facilities. The County DPR may implement a septic system and associated leach field to accommodate sewage from the proposed restroom facilities. Another option under consideration is for the County DPR to extend a sewer line into the proposed Alpine Park, which would preclude the need for the septic system. For purposes of this analysis, both the sewer line and septic system are considered.
- Open Space/Preserve: Approximately 67.5 acres of the undeveloped 96.6-acre parcel would be conserved as open space/preserve land.

4.4.4.1 Methodology

Biological resource impacts can be considered direct, indirect, or cumulative. They are also either permanent or temporary in nature.

Direct: Occur when biological resources are altered, disturbed, or destroyed during project implementation. Examples include clearance of vegetation, encroachment into wetland buffers (not applicable on this project), diversion of surface water flows, and the loss of individual species and/or their habitats.

Indirect: Occur when project-related activities affect biological resources in a manner that is not direct. Examples include elevated noise and dust levels, increased human activity, decreased water quality, changes to hydrological conditions not resulting in type conversion of vegetation community, and the introduction of invasive wildlife (domestic cats and dogs) and plants.

Cumulative: Occur when biological resources are either directly or indirectly affected to a minor extent as a result of a specific project, but the project-related impacts are part of a larger pattern of

similar minor impacts. The overall result of these multiple minor impacts from separate projects is considered a cumulative impact on biological resources.

Temporary: Temporary impacts can be direct or indirect and are considered reversible. Examples include the removal of vegetation from areas that will be revegetated, elevated noise levels, and increased levels of dust.

Permanent: Permanent impacts can be direct or indirect and are not considered reversible. Examples include removing vegetation from areas that will have permanent structures placed on them or landscaping an area with non-native plant species.

All potential project-related impacts (direct, indirect, and cumulative) were evaluated as a part of this assessment. The project would have primarily three classes of impacts: (1) permanent direct impacts on vegetation communities, sensitive plants species, and habitat for sensitive animals; (2) indirect temporary effects on certain sensitive natural communities, sensitive animals, or sensitive plant species from construction-related activities such as dust deposition, increased human presence, and noise associated with construction equipment; and (3) indirect permanent effects resulting from operation of the regional park system, such as an increased public presence that may indirectly affect animal movement or behaviors. Table 4.4-2 summarizes the types of impacts associated with this project.

Table 4.4-2. Summary of Project Components and Associated Impacts

General Location	Project Component	Impact Type	Sum of Acres
County Park and Trails	Active Park	Permanent	22.2
	Leach Field	Permanent	0.4
	New Fire Fuel Modification Zones	Permanent	0.5
Total Permanent Impacts			23.1
Open Space/Preserve	Native Habitat Avoidance Area	Temporary Indirect	2.1
	Pipe leading to leach field	Temporary Direct	< 0.1
	All other areas	Resource Management/ Habitat Enhancement Activities Only	65.4
Total Preserved			67.5
Existing Trails to Be Maintained		Impact Neutral	1.0
Existing Fuel Reduction Areas (not a part of project)		N/A	2.6
Grand Total			**94.2**

4.4.4.2 Thresholds of Significance

Appendix G of the CEQA Guidelines

The following significance criteria, based on Appendix G of the CEQA Guidelines, provide the basis for determining the significance of impacts associated with biological resources resulting from the implementation of the project. The determination of whether a biological resource impact would be significant is based on the professional judgment of the County DPR as Lead Agency, supported by

the recommendations of qualified personnel at ICF, and substantial evidence in the administrative record.

Impacts are considered significant if the project would result in any of the following:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by CDFW or U.S. Fish and Wildlife Service (USFWS).
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS.
- Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal areas, etc.) through direct removal, filling, hydrological interruption, or other means.
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

County of San Diego Guidelines for Determining Significance

According to the County Guidelines for Determining Significance, any of the following conditions would be considered significant (County of San Diego 2010b):

- 3.A. The project would impact one or more individuals of a species listed as federally or state endangered or threatened.
- 3.B. The project would impact an on-site population of a County List A or B plant species, or a County Group I animal species, or a species listed as a state Species of Special Concern.
- 3.C. The project would impact the local long-term survival of a County List C or D plant species or a County Group II animal species.
- 3.D. The project may impact arroyo toad aestivation, foraging, or breeding habitat.
- 3.E. The project would impact golden eagle habitat.
- 3.F. The project would result in a loss of functional foraging habitat for raptors.
- 3.G. The project would impact the viability of a core wildlife area, defined as a large block of habitat that supports a viable population of a sensitive wildlife species or an area that supports multiple wildlife species.
- 3.H. The project would cause indirect impacts to levels that would likely harm sensitive species over the long term.
- 3.I. The project would impact occupied burrowing owl habitat.
- 3.J. The project would impact occupied coastal cactus wren habitat.
- 3.K. The project would impact occupied Hermes copper habitat.

- 3.L. The project would impact nesting success of sensitive animals (as listed in the Guidelines for Determining Significance) through grading, clearing, fire fuel modification, and/or noise generating activities such as construction.
- 4.A. Project-related grading, clearing, construction or other activities would temporarily or permanently remove sensitive native or naturalized habitat on or off the project site.
- 4.B. Any of the following will occur to or within jurisdictional wetlands and/or riparian habitats as defined by USACE, CDFW and the County of San Diego: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity and abundance.
- 4.C. The project would draw down the groundwater table to the detriment of groundwater-dependent habitat, typically a drop of 3 feet or more from historical low groundwater levels.
- 4.D. The project would cause indirect impacts to levels that would likely harm sensitive habitats over the long term.
- 4.E. The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.
- 5.A. Any of the following will occur to or within jurisdictional wetlands as defined by USACE: removal of vegetation; grading; obstruction or diversion of water flow; adverse change in velocity, siltation, volume of flow, or runoff rate; placement of fill; placement of structures; construction of a road crossing; placement of culverts or other underground piping; any disturbance of the substratum; and/or any activity that may cause an adverse change in native species composition, diversity and abundance.
- 5.B. The project would draw down the groundwater table to the detriment of groundwater-dependent federal wetlands, typically a drop of 3 feet or more from historical low groundwater levels.
- 5.C. The project does not include a wetland buffer adequate to protect the functions and values of existing wetlands.
- 6.A. The project would prevent wildlife access to foraging habitat, breeding habitat, water sources, or other areas necessary for their reproduction.
- 6.B. The project would substantially interfere with connectivity between blocks of habitat or would potentially block or substantially interfere with a local or regional wildlife corridor or linkage.
- 6.C. The project would create artificial wildlife corridors that do not follow natural movement patterns.
- 6.D. The project would increase noise and/or nighttime lighting in a wildlife corridor or linkage to levels proven to affect the behavior of the animals identified in a site-specific analysis of wildlife movement.

- 6.E. The project does not maintain an adequate width for an existing wildlife corridor or linkage and/or would further constrain an already narrow corridor through activities such as (but not limited to) reduction of corridor width, removal of available vegetative cover, placement of incompatible uses adjacent to it, and placement of barriers in the movement path.
- 6.F. The project does not maintain adequate visual continuity (i.e., long lines-of-site) within wildlife corridors or linkage.
- 7.A. For lands outside of the MSCP, the project would impact coastal sage scrub vegetation in excess of the County's 5 percent habitat loss threshold as defined by the Southern California Coastal Sage Scrub Natural Community Conservation Planning (NCCP) Guidelines.
- 7.B. The project would preclude or prevent the preparation of the subregional NCCP. For example, the project proposes development within areas that have been identified by the County or resource agencies as critical to future habitat preserves.
- 7.C. The project will impact any amount of sensitive habitat lands as outlined in the Resource Protection Ordinance (RPO).
- 7.D. The project would not minimize and/or mitigate coastal sage scrub habitat loss in accordance with Section 4.3 of the NCCP Guidelines.
- 7.E. The project does not conform to the goals and requirements as outlined in any applicable Habitat Conservation Plan (HCP), Habitat Management Plan (HMP), Special Area Management Plan (SAMP), Watershed Plan, or similar regional planning effort.
- 7.F. For lands within the MSCP, the project would not minimize impacts to BRCAs, as defined in the BMO.
- 7.G. The project would preclude connectivity between areas of high habitat values, as defined by the Southern California Coastal Sage Scrub NCCP Guidelines.
- 7.H. The project does not maintain existing movement corridors and/or habitat linkages as defined by the BMO.
- 7.I. The project does not avoid impacts to MSCP narrow endemic species and would impact core populations of narrow endemics.
- 7.J. The project would reduce the likelihood of survival and recovery of listed species in the wild.
- 7.K. The project would result in the killing of migratory birds or destruction of active migratory bird nests and/or eggs (Migratory Bird Treaty Act).
- 7.L. The project would result in the take of eagles, eagle eggs or any part of an eagle (Bald and Golden Eagle Protection Act).

4.4.4.3 Project Impacts and Mitigation Measures

Threshold 1: The project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

County Park and Trails

Impact Discussion

Construction

Construction of the active park would require grading equipment for site preparation as well as standard construction equipment, such as earthmoving equipment, tractors, excavators, backhoes, a water truck, drill rig, bobcat, forklift, rollers, a rubber tire loader, wheel tractor scrapers, an air compressor, a generator set, crane, and concrete truck. Construction would result in temporary direct and indirect impacts on the area due to an increase in noise levels, truck traffic, and ground-disturbing activities. Construction would have direct permanent impacts through the removal of native vegetation and habitat with construction of the active park.

Impacts on 22.4 acres of native habitats (see Table 4.3-4, below, under Threshold 2) are anticipated from construction of the proposed park. The impacts represent approximately 4.9 percent of the total available open space and conserved lands within the immediate vicinity of the County's parcel. These existing open space and conserved lands include 1) the Wright's Field Preserve; 2) contiguous privately held open space lands, including some with conservation easements; and 3) the proposed preserve lands within the remainder of the County's parcel.

Special-Status Plant Species

Of the eight sensitive plant species found within the BSA, two would be permanently and directly affected by implementation of the project: decumbent goldenbush and Palmer's grappling hook. Decumbent goldenbush would be directly affected at one location in the north-central portion of the active park, within an area that supports approximately 110 individuals covering approximately 3,500 square feet. This represents approximately half of the individuals observed on-site; these individuals are located at the far eastern range for this taxon. As a result, the project would have the potential to contribute to the regional long-term decline of this species, and the impacts would be significant (**Impact-BIO-1**).

Approximately 13,857 Palmer's grapplinghook individuals were observed during special-status plant surveys in 2019. Of the 13,857 individuals, 200 would be affected by the construction of the active park, representing approximately 1 percent of the on-site population. Individuals would be removed during grading and site preparation for the project. Because of the low number of individuals affected, as well as the relatively large number of individuals in the entirety of the BSA, impacts would not result in a regional decline in the species and therefore would be less than significant. Chocolate lily, delicate clarkia, small-flowered microseris, and Southern California black walnut were all observed within the BSA. These species are not expected to be directly affected by

implementation of the project Because of the widespread nature of this species, as well as the relatively low number of individuals that would be directly removed by the project, these impacts would be less than significant.

The County redesigned the project's equestrian staging area to avoid impacts on Engelmann oaks. Areas identified as a "Native Habitat Avoidance Area" would not be subject to grading or vegetation removal during site preparation activities (see Figure 4.4-6). As a result, no Engelmann oak individuals or their associated canopies would be within the proposed grading limits of the project, and no direct temporary or direct permanent impacts on Engelmann oaks would occur with construction. Grading and site development would occur entirely outside of the canopy dripline of all Engelmann oaks.

The County is proposing grading and site development within 0.94 acre of land within a 50-foot root protection zone[1] where Engelmann oak root zones are located. Activities within the root protection zone would include grading/site preparation (e.g., compaction) and construction of park infrastructure (Figure 4.4-6). These activities would occur within the root protection zone of approximately 25 Engelmann oak trees, including one individual that was noted by the County's arborist in 2020 to be in very poor health and/or dying. Although grading activities would occur within the root protection zone, as mentioned above, none of those activities would occur directly under the canopy of any Engelmann oaks, and no Engelmann oaks would be removed as a result of construction activities associated with the project. However, activities within the root protection zone have the potential to result in indirect impacts and decline in these 25 Engelmann oaks over time. Although indirect impacts during construction would be temporary, it is possible that, within the root protection zone, they could cause damage to the oaks that would not be visible during or even immediately after construction activities occur. This damage could cause a permanent decline in these oaks, resulting in mortality. In addition, fire fuel modification activities would occur within approximately 0.1 acre of Engelmann oak woodland. Approximately seven Engelmann oak tree canopies are within the area where fire fuel management would occur. Four of these oaks are in the Zone B fire fuel reduction zone where canopy thinning of some oaks may be required, in coordination with a certified arborist. The other three oaks are directly west of South Grade Road, in the 20-foot area where fire fuel management would be extended from the existing fire fuel management area along South Grade Road. Impacts within the root protection zone could potentially be significant, absent mitigation (**Impact-BIO-2)**.

Short-term indirect impacts could occur on decumbent goldenbush, Palmer's grapplinghook, and Engelmann oak during construction activities because each of these sensitive species would occur within 200 feet of the active park. Construction-related indirect impacts could include dust deposition that could alter the photosynthetic vigor of these individual plants and the potential spread of invasive species into the open space preserve from the construction area. These short-term indirect impacts could become permanent if invasive species become established and are not eradicated. Potential erosion of the soil around these special-status plants also could occur from stormwater runoff associated with construction (grading) activities. Dust control measures would be required for this project (see Section 4.3, *Air Quality*), as would stormwater pollution prevention best management practices (BMPs). These would reduce impacts from dust and erosion. As part of the County's long-term management of the preserve, invasive species and noxious weeds would be

[1] Root protection zones are defined in Section 3.5.5 of the County's Report Format and Content Requirements document as 50 feet "outward from the outside edge of the oak canopy" (County of San Diego 2010a).

managed abated. As a result, these indirect impacts on special-status plants are not expected to result in a long-term decline of any of these species and would be less than significant.

All special-status species present in the BSA, with the possible exception of Southern California black walnut, have the potential to be trampled from unauthorized users within the proposed Alpine Preserve, which could result in plant decline or mortality. Unauthorized off-trail activities (e.g., off-trail trampling, building of jumps/berms within the trails) also could occur. These activities also could result in the decline or mortality of special-status plants. However, the public is currently walking and, at times, parking on the County's property as well as engaging in unauthorized off-trail activities (e.g., off-trail trampling, building of jumps/berms within the trails). These impacts are not expected to be appreciably greater after construction of the proposed park. Moreover, the County has proposed additional signage, a live-in volunteer and park rangers to monitor the Alpine Preserve and Alpine Park, as well as a formalized staging area for parking, which would minimize impacts on these special-status species from unauthorized activities (e.g., off-trail trampling, building of jumps/berms within the trails, parking in unauthorized areas). After implementation of the proposed project, it is anticipated that fewer long-term impacts on special-status plants would occur compared to baseline conditions.

Special-Status Wildlife Species

The following special-status wildlife species were observed within the BSA during surveys and are included in the impact analysis for the project (see below): QCB, Belding's orange-throated whiptail, Blainville's (coast) horned lizard, coastal western whiptail, red-diamond rattlesnake, western spadefoot, burrowing owl (wintering migrant), Cooper's hawk, red-shouldered hawk, western bluebird, big free-tailed bat, pallid bat, pocketed free-tailed bat, Townsend's big-eared bat, western long-eared myotis, western mastiff bat, western red bat, western small-footed myotis, western yellow bat, and Yuma myotis. In addition, the following special-status species, which were determined to have moderate or high potential to occur within the BSA, are also included in the impact analysis below: Baja California coachwhip, California glossy snake, coast patch-nosed snake, Coronado skink, Southern California legless lizard, Bell's sage sparrow, burrowing owl (breeding occurrence), ferruginous hawk, grasshopper sparrow, Lawrence's goldfinch, Oregon vesper sparrow, Southern California rufous-crowned sparrow, white-tailed kite, Northwestern San Diego pocket mouse, San Diego black-tailed jackrabbit, and Bryant's (San Diego Desert) woodrat.

Invertebrates

The project is not within a recovery area or designated critical habitat for QCB (USFWS 2003). The project would result in impacts on two of seven locations (29 percent) where QCB adults were observed in the past on the project site or in Wright's Field, including an observation made in 2010, as documented in the USFWS Carlsbad Fish and Wildlife Office data (2019) and during surveys in 2019 and 2020 (**Impact-BIO-3**). Both locations would be affected by construction of Alpine Park. No locations would be affected by maintenance of the existing trails. Five locations (71 percent) where QCB adults were observed in the past would be permanently protected within either the Wright's Field Preserve or the proposed open space/preserve.

Incidental take of QCB could occur in the form of harassment, harm, injury, or mortality during construction. Direct impacts that could result in incidental take of QCB would occur through the permanent removal of 22.4 acres of occupied habitat. Direct impacts on QCB adult locations and host plants (e.g., dot-seed plantain [*Plantago erecta*]) are shown in Figure 4.4-3. Because of the configuration of the proposed park, which would have a straight western extent and an eastern edge

defined by South Grade Road, it is not anticipated that QCB would experience additional edge effects compared to baseline conditions. The BSA currently experiences edge effects along South Grade Road, an area where the highest concentration of invasive species was observed and where fuel modification activities are currently conducted within approximately 30 feet of the edge of South Grade Road. After park construction, the edge effects would be moved to the western edge of the park and similar in severity on QCB to baseline conditions.

Indirect impacts on QCB also would occur because of the project. The loss of native forbs that provide QCB with nectar would occur within the 22.4 acres of occupied QCB habitat where the active park would be constructed. The loss of these nectar plants would reduce the carrying capacity of the site to support QCB in perpetuity. During construction, QCB also may avoid habitat along the western edge of the proposed active park because of an increased presence of noise, dust deposition on plants adjacent to the construction areas, and human presence. Indirect effects associated with noise and fugitive dust are not expected to be significant after completion of grading and construction activities.

HCB was not observed within the project site during comprehensive surveys in 2019 and 2020. In addition, HCB has not been documented on the County's property in publicly available databases, such as San Diego Association of Governments (SANDAG) (2011) and CNDDB (2020). Occurrences nearby have been documented at the northern portion of Wright's Field, in an area where spiny redberry is much more abundant than on the County's property, and on a privately held parcel south of Wright's Field. There are approximately 68 spiny redberry within the County's parcel, representing approximately 4 percent of the 1,679 spiny redberry individuals mapped during the HCB surveys on both the County's parcel and Wright's Field. Furthermore, no impacts on spiny redberry would occur from construction of the proposed Alpine Park, activities in the new fire fuel reduction areas, or the associated maintenance of existing trails. As a result, no impacts on HCB individuals are anticipated.

Although development of the active park would result in project activities (i.e., construction of the active park, potential installation of the septic system, and maintenance of the trails) occurring on 20.3 acres of designated critical habitat for HCB, only 4 acres contain the physical and biological features critical to conservation of the species, such as areas with flat-topped buckwheat, including disturbed flat-topped buckwheat. The County's Guidelines for Determining Significance (2010b) considers impacts on occupied HCB habitat to be significant. Because the site is currently unoccupied by HCB, impacts on critical habitat for the species would be less than significant. The USFWS would consider impacts on HCB critical habitat resulting from the project as part of its review of the Habitat Conservation Plan the County is preparing to address impacts on QCB.

Amphibians

Western spadefoot may also be affected by the project. One breeding pool of approximately 157 square feet (AP-7) was documented within the active park development footprint. This breeding pool may be utilized by western spadefoot when seeking to expand from the core population in Wright's Field Preserve during exceptionally wet years, such as 2019 when an egg mass was observed in AP-7. AP-7 will be filled in during construction of the active park (**Impact-BIO-4**). Impacts on this potential breeding pool would be significant absent mitigation.

As described in the Western Spadefoot Survey Report (Appendix D), the core breeding population of western spadefoot is located within seasonally inundated basins in Wright's Field Preserve. A recent study (Baumberger et al. 2019) that documented the distances from breeding pools to burrow locations led to a determination that burrows and estivating adults could be expected to occur

within approximately 262 meters of the known breeding pools in Wright's Field Preserve. The area within this 262-meter distance includes the western portion of the BSA but not areas within the proposed active park where grading would occur (see Figure 4.4-4). As a result, it is not anticipated that western spadefoot individuals would burrow/estivate within the proposed development footprint for the active park; therefore, it is unlikely that individuals would be crushed or killed during construction activities such as grading.

Adult western spadefoot also emerge a few nights per year to forage and breed (San Diego Management and Monitoring Program 2022). These activities are most likely to occur within the same general area as burrowing habitat, although the presence of eggs within basin AP-7 during 2019 demonstrates that they can migrate farther east and into the area proposed for park development during these nocturnal breeding events but only during particularly wet years. Because these foraging and breeding events happen in the evening when construction equipment would not be active, it is unlikely that direct impacts on western spadefoot, such as crushing or illegal collecting, would occur during foraging and breeding events.

Reptiles

Orange-throated whiptail, coast horned lizard, coastal western whiptail, and red-diamond rattlesnake were observed within the BSA. Baja California coachwhip, California glossy snake, coast patch-nosed snake, Coronado skink, and Southern California legless lizard were not observed but could occur within the project site. These nine species would be directly and indirectly affected through implementation of the active park during construction (**Impact-BIO-5**). Direct impacts include the conversion of all native and naturalized habitats within the proposed active park footprint that could support these species. Direct impacts could occur during construction of the active park if individuals are in the construction footprint.

Indirect impacts on these species could occur during construction of the project. Indirect temporary impacts during construction include increased dust from grading and construction, increased noise from construction crews and equipment, and increased foot traffic during construction. However, dust control measures would be required for this project (see Section 4.3) and would reduce these impacts to less-than-significant levels.

Birds

Construction of the active park would have permanent direct and indirect impacts on avian species that are endemic to the region, including special-status avian species. A wintering burrowing owl was observed incidentally during surveys in 2019. Cooper's hawk, a California Species of Special Concern; red-shouldered hawk, a County Group I species; and western bluebird, a County Group II species, were observed in the BSA during protocol surveys in 2019 and 2020 and are expected to be affected by the project. Bells' sage sparrow, burrowing owl (breeding occurrence), ferruginous hawk, grasshopper sparrow, Lawrence's goldfinch, Oregon vesper sparrow, Southern California rufous-crowned sparrow, and white-tailed kite have either moderate or high potential to occur (either breeding or foraging, or both) within the BSA.

Legend

- County Parcel
- Western Spadefoot Adult (# of individuals)

Proposed Project

- Alpine County Park
- Existing Trails to be Maintained
- Leach Field
- Sewer Pipe
- Native Habitat Avoidance Area
- New Fuel Reduction Area
- Existing Fuel Reduction Area (Not a Part of Project)
- 262 m from Basins WF-6 and WF-7
- Clay Soils

Seasonally Inundated Basin

- Filled in 2022
- Basins mapped in 2019 that did not fill in 2022
- Basins Mpped by BCLT

WF-11, WF-10, WF-9, WF-8, WF-7, WF-6, WF-5, WF-1, WF-12, WF-13, WF-4, WF-3, WF-2

BCLT-1, BCLT-2, BCLT-3, BCLT-4

AP-25, AP-21X, AP-22X, AP-20X, AP-23Xa, AP-23Xb, AP-4, AP-3, AP-2, AP-6, AP-7, AP-5, AP-1e, AP-1b, AP-1a, AP-1d, AP-1c, AP-12, AP-8a, AP-8b, AP-20, AP-14, AP-21, AP-22, AP-10, AP-16, AP-9, AP-13, AP-11, AP-15, AP-17, AP-23, AP-18, AP-19, AP-24

Source: Esri, DigitalGlobe (2018)

0 150 300 Feet

1:2,099

Figure 4.4-4
Western Spadefoot
Alpine Park Project

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Table 4.4-3 summarizes the proposed impacts on habitat for special-status avian species and raptors, grouped by habitat requirements. These impacts are presented in the context of the regionally available habitat for these species groups in the adjacent Wright's Field Preserve and within privately held, directly contiguous open space lands in the immediate vicinity of the proposed project. This analysis shows that the 18 acres of impacts on grassland habitat from the proposed project reflect approximately 14 percent of the available grassland habitat in the immediate habitat block west, north, and south of the project site. By comparison, only 2 percent of the available scrub habitat in the immediate vicinity would be affected by the proposed project. Impacts on habitat for all special-status avian species, most of which are either California Species of Special Concern or Group I species, would be significant, absent mitigation (**Impact-BIO-6**).

Table 4.4-3. Avian Species Impacts and Availability of Habitat in Immediate Vicinity

Avian Species Group	Species Included in Group	Permanent Direct Impacts on Habitat	Available Open Space/ Preserve Land		Percent Impact Compared to All Available Open Space/Preserve Land[b]
			Habitat in Alpine Preserve (acres)	Habitat in Immediate Vicinity[a]	
Generalist Avian Species	Cooper's hawk, red-shouldered hawk, white-tailed kite, raptors	22.4	67.2	379.6	5%
Grassland Obligates/ Open Habitat	Burrowing owl (wintering and breeding), grasshopper sparrow, Oregon vesper sparrow, ferruginous hawk	18.4	15.4	113.4	14%
Scrub Habitat Specialists	Bell's sage sparrow, Southern California rufous-crowned sparrow	4.0	44.7	127.8	2%
Woodland Specialists	Lawrence's goldfinch, western bluebird	0.1 (No direct removal of Engelmann oaks)	6.6	135.5	0.1%

a. Includes areas within Wright's Field Preserve as well as privately held open spaces, some of which are permanently conserved through conservation easements. Source: SANDAG Conserved Lands GIS data; SANDAG 2012 Vegetation Data for Western San Diego County GIS data.

b. Vegetation data for this analysis included the site-specific vegetation mapping conducted for the proposed project in the BSA and SANDAG 2012 Vegetation Data for Western San Diego County GIS data for all areas outside the BSA. Vegetation data outside of the BSA is not as precise as field-verified vegetation data, but for the general habitat types (i.e., grassland, shrubland, etc.) required in this analysis, the SANDAG vegetation data is sufficiently accurate to estimate the relative extent of impacts from the proposed project.

Direct mortality of nesting avian species, including both common species protected under the MBTA and special-status avian species, also could occur during construction. Direct mortality could occur if eggs, chicks, or adults are crushed or destroyed by construction equipment or if nests are abandoned because of an increase in noise and human presence during construction. This impact (**Impact-BIO-7**) would be significant.

Although the burrowing owl that was observed was a transient winter migrant and breeding season surveys were negative, burrowing owl could still occur within the BSA and possibly within the areas proposed for grading for the active park. Ground squirrel burrows exist throughout the BSA; if breeding burrowing owls are present during construction activities, direct mortality of this species, including eggs or chicks, could occur. Impacts on breeding burrowing owl would be significant absent mitigation (**Impact-BIO-8**).

Implementation of the project would also result in the loss of approximately 22.4 acres of functional foraging habitat for raptors. Valley needle grassland and non-native grassland both serve as prime foraging habitat for raptors, as do the open scrub habitats on the site. The project footprint would affect these types of habitats, resulting in a loss of functional foraging habitat for raptors. Impacts on functional foraging habitat for raptors would be significant, absent mitigation (**Impact-BIO-9**).

Temporary direct impacts would occur during construction of the project. Expected impacts include increased dust from grading and construction, increased noise from construction crews and equipment, increased foot traffic during construction, and increased noise from crews and equipment. This may temporarily alter the natural behaviors of avian species in the area. However, dust control measures would be required for this project and would reduce impacts to less-than-significant levels.

Mammals

Special-Status Bats

Fifteen of the 22 known bat species in San Diego County were detected on the property, 10 of which are considered special-status species. Seven are listed as California Species of Special Concern: pallid bat, Townsend's big-eared bat, western red bat, western yellow bat, western mastiff bat, pocketed free-tailed bat, and big free-tailed bat (Figure 4.4-5). Three County Group II bat species were also observed in the BSA: western long-eared myotis, western small-footed myotis, and Yuma myotis. Permanent direct and temporary indirect impacts on these species would be expected to occur from construction activities that permanently remove habitat for these species. These bat species were observed foraging over most of the native habitats in the BSA, especially within the open Engelmann oak woodland, flat-topped buckwheat, and native and non-native grasslands within the project footprint. Direct impacts on up to 22.4 acres of native habitats would remove foraging and possibly roosting habitat for these bat species during vegetation clearing associated with construction of Alpine Park (**Impact-BIO-10**).

As mentioned above, impacts on pallid bat foraging habitat would be significant. This species is particularly vulnerable to impacts associated with the proposed project because of the rarity of known roost sites in San Diego County (there are only two known pallid bat colony sites) (Stokes 2018). The individual pallid bats observed during focused bat surveys may belong to a maternal colony that roosts in Viejas at a private residence or in a yet-unknown location. Pallid bat also has a very specific foraging strategy; it utilizes grasslands and open oak woodlands as its main foraging habitat. In addition, this species has characteristics that affect its success with increased urbanization. This includes its tendency to fly at low altitude, its inability to fly for prolonged distances, and its specialized foraging strategies.

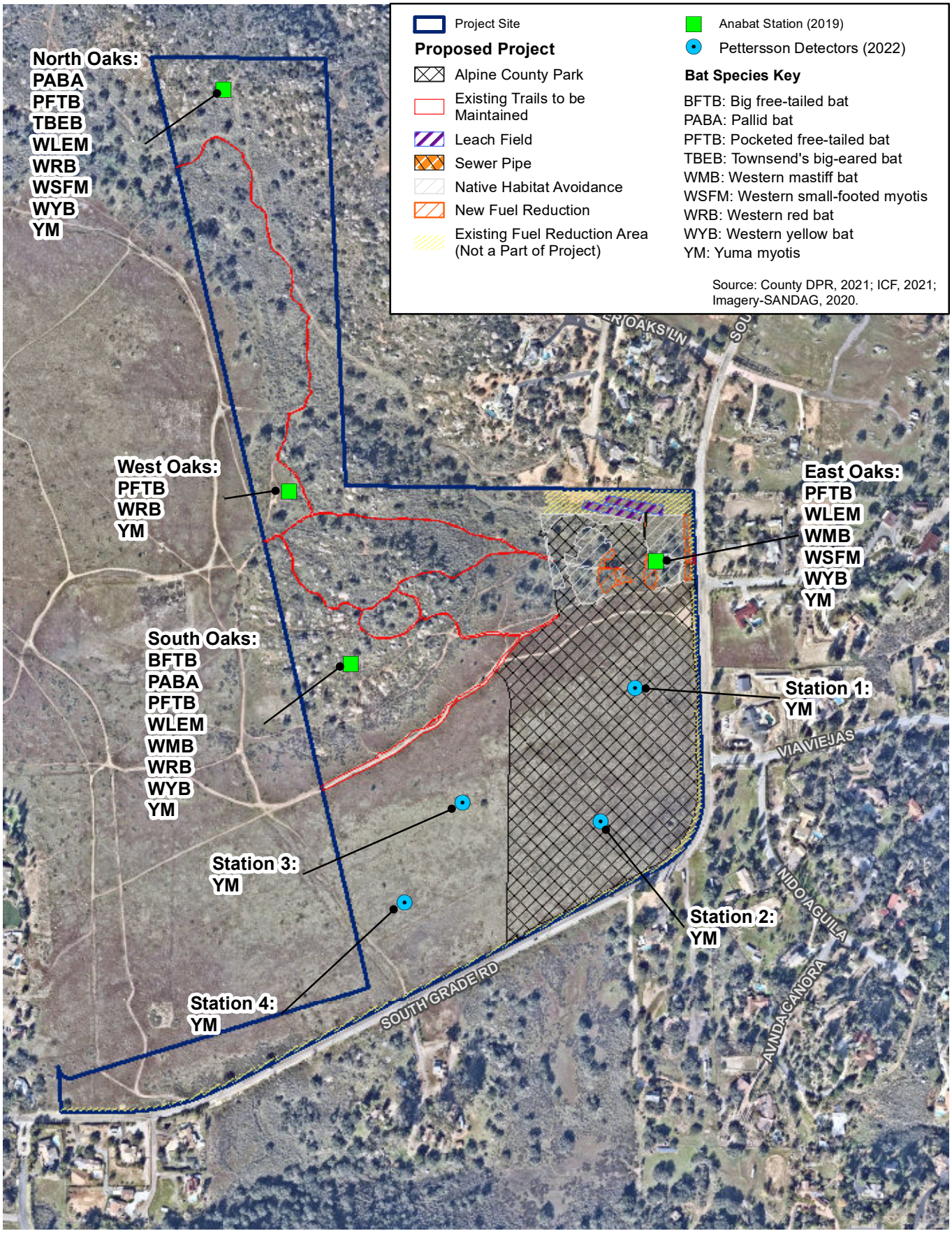

Figure 4.4-5
Special-Status Bats
Alpine Park Project

Implementation of the project would not affect any known roosting habitat or maternal colony sites; however, roost sites for some of these species are very difficult to detect. There may be some potential for bats, such as pallid bat, to use rock outcrops as roost sites. Pallid bats also may roost in very small crevices within rocks. Rock outcrops that pallid bats may use for roosting were observed west of proposed construction areas, which is close enough for roosting females to potentially experience distress during critical developmental periods, such as when they are pregnant or caring for young. Western red bats may also roost within the foliage of the Engelmann oaks on the site, making them very difficult to detect visually. Bat biologists often require telemetry tracking to positively identify western red bat.

No large rock outcrops or trees would be removed as part of construction of the project. However, construction activities may occur directly adjacent to Engelmann oaks and within approximately 200 feet of rock outcrops. Bat species are particularly vulnerable to impacts on maternal roost sites, such as within oaks or rock crevices. Although direct removal of trees or large boulders is not proposed as part of construction for the active park, high-pitched frequencies (e.g., from surveying equipment) could harm maternal roost sites, resulting in roost abandonment or thermal shock. These impacts could cause direct mortality of pregnant females or pups. The impacts would be significant under the County's guidelines (County of San Diego 2010b), absent mitigation (**Impact-BIO-11**).

Indirect impacts on bat species, such as disruption of foraging behavior, could occur if construction takes place during evening hours. Because bats are nocturnal species and construction is expected to occur during daytime hours, indirect impacts on these species due to construction activities would be minimal and would not be expected to alter natural behaviors. Maintenance of existing trails near or within oak woodlands is not expected to alter the quality of foraging habitat or affect roosting habitat for these species because the trails occur within already-disturbed areas of bare ground.

Other Special-Status Mammals

The northwestern San Diego pocket mouse, San Diego black-tailed jackrabbit, and Bryant's (San Diego Desert) woodrat were determined to have moderate potential to occur within the BSA and be affected by implementation of the project. Suitable habitat for all three species can be found in the Valley needlegrass grasslands, non-native grasslands, and open flat-topped buckwheat scrub habitats within the BSA as well as the construction footprint of Alpine Park. Grasslands and flat-topped buckwheat within the construction footprint would be directly affected and converted to a developed park, removing it as habitat that could support the species (**Impact-BIO-12**).Temporary direct and indirect impacts on the species are expected to occur during and post-construction of the project. Temporary direct impacts on these species include possible accidental take due to construction activities, increased dust from grading and construction, increased foot traffic during construction, and increased noise pollution from crews and equipment. Natural behaviors of these species would be affected. However, dust control measures would be required for this project and would reduce these impacts to less-than-significant levels.

Because these species are active mostly at night (Tremor et al. 2017), foraging habits are not expected to be significantly affected, but construction activities may cause them to be active during the day to avoid construction activities. The San Diego pocket mouse is known to utilize burrows for shelter. Because this species is less active during the day, the time when construction would be most active, direct impacts on this species, including the potential for direct mortality through crushing, is possible because San Diego pocket mouse individuals might be resting in burrows.

Operation

Operation of Alpine Park includes maintenance of the park and existing trail system, fire fuel management activities (i.e., vegetation trimming and clearing), as well as ongoing usage of the park and trails by the public. The equestrian staging area would contain receptacles for waste and equestrian manure; a Manure Management Plan would be prepared for the project to control disease vectors and pests, such as mosquitoes and other animals/insects that are vectors for disease or impacts on human health. The County has proposed additional signage and a live-in volunteer and park rangers to monitor the Alpine Preserve and Alpine Park. As such, it is anticipated that fewer long-term impacts on special-status plants and animals would occur after implementation of the proposed project compared to baseline conditions. The sections below provide additional details on this conclusion.

Impacts on Wright's Field

Operation of Alpine Park and its associated trails has the potential to increase usage on trails within the adjacent Wright's Field Preserve. This increased usage would have the potential to increase impacts on special-status plants and wildlife, consistent with the impacts described below. However, the proposed Alpine Park would be approximately 600 to 800 feet away from the eastern edge of Wright's Field. At that distance, impacts from operation of the active park and formalization of the trails would dissipate considerably and be considered less than significant. Night lighting would not be used during operation of the park; therefore, impacts on nocturnal animals are not anticipated. Impacts on the Wright's Field trail system from the presence of the active park are not expected to dramatically change the nature or intensity of trail usage at Wright's Field because of both the distance from the park to Wright's Field and the different usage preferences. Users who come to the active park for ball sports or skateboarding are not anticipated to also be hiking the distances required to access Wright's Field regularly. In addition, Wright's Field is accessed from its own entrance on the far western edge of its boundary.

Although some increase in trail usage can be expected from the easier parking within the proposed park, users can currently park along South Grade Road to access trails within the County's parcel and do so regularly. Usage of the trails in Wright's Field is anticipated to be driven by changing conditions in the larger community, including population growth and the availability of other open space areas, even public health hazards such as the coronavirus pandemic, which increased park usage throughout San Diego County. As a result, operation of Alpine Park is not anticipated to result in significant impacts on special-status plants or animals in the adjacent Wright's Field Preserve.

Special-Status Plant Species

Trail maintenance not expected to have direct permanent or temporary impacts on any special-status species or their habitats. Maintenance of the park site would be completed within the perimeter fence that would be constructed around the park; therefore, there would be minimal effects from park maintenance on special-status plants because none would occur within the active park site once construction is complete.

The presence of the active park has the potential to draw additional people onto the trails and open space/preserve areas. This potential increase in the number of people using the trails could result in direct impacts on special-status plants if such plants are trampled or crushed from unauthorized off-trail activities. This is especially true for low-growing annuals such as the two delicate clarkia individuals observed approximately 6 feet from the main east–west trails through the north-central portion of the open space/preserve as well as the Palmer's grapplinghook near the east–west

trail/vehicle access path through the south-central portion of the open space/preserve. Within 10 feet of this trail/vehicle access path, fewer than 100 individual Palmer's grapplinghook individuals were noted in 2019. These potential impacts would be less than significant because of the widespread nature of both species (San Diego Natural History Museum 2021). Furthermore, it is unlikely that additional trail use would affect the Engelmann oaks and Southern California black walnut because of their size. Similarly, increased traffic on trails is not likely to jeopardize the long-term existence of the San Diego County viguiera because of the location of these individuals far north of the open space/preserve, an area that is not heavily traveled, as well as the widespread nature of this taxa (San Diego Natural History Museum 2021). The County has proposed additional signage and a live-in volunteer to monitor the open space/preserve and trails, which would further minimize impacts on these special-status species from unauthorized trail activities.

Other potential long-term impacts resulting from operation of the active park and formalization of the existing trail system include an increase in invasive plant propagules being introduced into the open space/preserve. This, combined with the existing bare ground that exists along these trails, could create an environment that could support invasive species, creating more competition with the special-status species. Invasive plant management along the edges of the trails will be a management focus for the County during the long-term resource management associated with the open space/preserve. As a result, these activities would not present a significant impact on the regional long-term survival of special-status plants present on the site.

Impacts to Engelmann oaks could potentially occur during fire fuel reduction activities, as described above, but would occur in coordination with a certified arborist. No other special-status plants or host plants for QCB or HCB occur within these new fire fuel management zones.

Special-Status Wildlife Species

As mentioned above, operation of the active park includes maintenance of the park and existing trail system as well as the ongoing usage of the park and trails by the public. Maintenance of the trails and the park site would result in occasional noise and additional human presence along the trail and at the edge of the park adjacent to the open space/preserve. This noise could disrupt behavioral patterns of special-status wildlife adjacent to these activities, with varying degrees of intensity, based on the distance of the animal from the noise source and its ability to withstand noise and other anthropogenic disturbances. Noise impacts from maintenance activities would not result in direct mortality of individual special-status wildlife species and would not result in a regional decline of these species. As such, these impacts would be less than significant. Furthermore, proper maintenance of the park, such as trash collection and disposal, would reduce impacts on special-status wildlife species in the open space/preserve by ensuring that litter would not blow into the open space/preserve and entice wildlife to ingest trash. This would also help control animal pest infestations that could disrupt special-status wildlife use of the proposed Alpine Preserve.

The following sections describe the potential impacts on special-status wildlife species from additional human usage of the trails and open space/preserve areas. Much of the discussion that follows reflects the latest research on the subject of "recreational ecology," which is an interdisciplinary field that studies the ecological impacts of recreational activities and the management of these impacts (CDFW 2020).

Invertebrates

Post-construction, the existence of Alpine Park would increase the amount of anthropogenic influence in the areas along the existing trails. The existing trails currently support a few scattered dot-seed plantain individuals that may be trampled with increased use of the trails. These impacts are also included in total impacts on QCB host plants, described under *Construction*, above. Other indirect impacts may be similar to those described for the federally endangered Karner blue butterfly (*Lycaeides melissa samuelis*) (CDFW 2020). In that study, the Karner blue butterfly flushed in the presence of hikers, similar to how they might respond to natural predators. Recreational activities also restricted the choice of and access to host plants due to the presence of hikers, rendering the quality of the habitat within 33 feet of the trail unsuitable.

Within the 96.6-acre project site, approximately 3,450 host plants are located within 33 feet of existing trails that would be formalized as part of the project. QCB may be restricted from accessing these host plants, reducing the potential reproductive success of individuals. These indirect impacts from increased human presence along trails may cumulatively result in reduced use by QCB of habitat immediately surrounding the trails. QCB has persisted at the project site over time and is presumed to currently utilize areas adjacent to trails, especially in areas where host plants are located. The increase in human activity from formalization of the trails and creation of the Alpine Park is not expected to result in regional long-term decline of this species or additional direct take of individuals. The large stand of dot-seed plantain in the northern portion of the project site (see Figure 4.4-3) is directly adjacent to and surrounded to the east by closed-canopy scrub habitat that was determined during protocol-level surveys to not be suitable for QCB, in accordance with the definition of "excluded areas" in the 2014 USFWS survey guidelines. In the southern portion of the project area, dot-seed plantain was mapped within approximately 20 to 30 feet of the existing dirt road that leads to the Wright's Field property. This road is being maintained for access to Wright's Field; it is not anticipated that this road will see a major increase in either pedestrian or vehicular traffic from the proposed project. The other alternative for accessing Wright's Field would be from the south, directly off South Grade Road. This access road is much more overgrown and supports a significantly larger population of dot-seed plantain. This is where ICF directly observed QCB in 2020. As a result, the proposed access road to Wright's Field through the central portion of the County's parcel reflects the least impactful option for permanent access to the Wright's Field Preserve with respect to QCB. In addition, County DPR would restrict access to approximately 3,300 feet of existing trails throughout the open space/preserve, allowing those areas to naturally revegetate and stabilize. Dot-seed plantain has been documented on the project site colonizing old roads and trails; it appears to have a competitive advantage over annual grasses in these compacted soils. Annual grasses can outcompete dot-seed plantain in other areas; therefore, it is probable that the closed trails may support host plants in the future. As a result, it is not anticipated that operational effects of the project would result in additional significant impacts on QCB, beyond those described for construction, above.

Reptiles and Amphibians

Post-construction, the existence of Alpine Park would increase the amount of anthropogenic influence in the areas immediately surrounding the park footprint. There is a possibility for increased foot traffic, mountain bike traffic, and horse traffic within the trail system that is proposed to be formalized as part of the project. These trails exist in habitat that could support special-status reptiles and amphibian species, such as the Belding's orange-throated whiptail, coast horned lizard, coastal western whiptail, and red-diamond rattlesnake, which were observed within the BSA, and other special-status reptile species that could occur within the BSA. With an

increase in these activities, there is an increased risk of these species being crushed, especially from mountain bike activities. Bike-caused fatalities may occur because amphibians and reptiles may be attracted to trails for thermoregulation and thereby become vulnerable to collisions with bikes (CDFW 2020). An increased presence of humans also means an increased presence of domestic dogs, which may predate on these species. Dogs' scent can linger as well, long after a dog has left an area, which can repel special-status wildlife species (CDFW 2020). This is true for both leashed and unleashed dogs.

As mentioned above, the County has proposed additional signage and a live-in volunteer and park rangers to monitor the Alpine Preserve and Alpine Park as part of project implementation. Moreover, the public is currently accessing the County property for hiking and mountain biking, in some instances along trails that would be closed as part of the project. The presence of an active park adjacent to these trails is not anticipated to significantly increase mortality or reduce the viability of special-status reptiles or amphibians over the long-term because of the differences in user preferences between the two forms of recreation. There most likely would be an increase in the number of horses on the property compared to baseline condition due to the construction of an equestrian staging area. Horses move much slower than most reptile species, and as such, most reptiles would be adroit enough to avoid being crushed by hooves. However, these impacts would be significant absent mitigation because they could directly and permanently affect Group I wildlife species and/or California Species of Special Concern (**Impact-BIO-13**).

Western Spadefoot

During development of the proposed trails, the County worked closely with the Back Country Land Trust (BCLT) to determine which trails to close and which to keep open to the public. One of the factors in these decisions was the presence of known population of western spadefoot within seasonally inundated basins along roads/trails in the eastern portion of Wright's Field Preserve. An existing trail, currently located along a steep section of the "knoll" or central hill on the County's parcel, leads visitors directly into the area where western spadefoot is known to breed on Wright's Field. BCLT has noted erosion issues in the past along this segment of trail and recommended the County close it to minimize further erosion issues. To accommodate this request, the County is proposing to close that trail as part of the project. One trail segment that would remain open leads visitors into Wright's Field Preserve just north of the area where western spadefoots are known to breed. This trail is less steep, and erosion is not a concern in this segment.

Spadefoots forage only during brief periods; therefore, it is unlikely that trail users and/or their pets would pose a risk to western spadefoots from being crushed, predated, or killed. For most of the year, western spadefoots are underground in protected burrows; when foraging, they typically do so at night. Moreover, it is not anticipated that the presence of the active park or formalization of existing trails would dramatically increase the number of users on the trails such that the small number of western spadefoots that may be foraging during the day at peak breeding times would face a significantly higher risk from direct crushing or predation. These risks are currently present and will continue to be present but pose a very minimal risk to western spadefoots. As a result, operational impacts on western spadefoot would be less than significant.

Birds

Similar to QCB, discussed above, special-status avian species may be affected by increases in the number of hikers using the trail system because they may be flushed from their resting or nesting locations more often with increased foot traffic. Increased rates of flushing in avian species has the

potential to negatively impact thermoregulation abilities, nesting success, and ability to forage for food successfully. Thresholds vary for how many users can be in an area before birds are negatively affected, but it is generally accepted that more visitors will cause more wildlife effects (CDFW 2020). Dog-specific disturbance (e.g., lingering dog scent, predation) has been studied for birds, with no evidence that birds become habituated to dog presence, even with leashed dogs and even where dog walking was frequent (CDFW 2020).

There is also the possibility that increased car traffic within the park footprint may result in additional collisions with avian species flying over the park. These impacts may cumulatively result in reduced numbers of special-status avian species as well as a decrease in use of habitat immediately surrounding the project footprint. These impacts would be significant absent mitigation because they could directly and permanently affect Group I wildlife species and/or California Species of Special Concern (**Impact-BIO-13**).

Impacts on nesting birds also may occur during fire fuel management activities proposed for the project. Activities such as vegetation removal or tree limbing could cause direct mortality to special-status and common avian species protected under the MBTA. These impacts would be significant, in accordance with **Impact-BIO-7**, described above. As recommended in the FEOA, nesting bird surveys must be conducted prior to these activities if they are conducted during the nesting season.

Mammals

Special-Status Bats

Operation of the project is not expected to have significant temporary or permanent impacts on special-status bat species. Because bats are nocturnal and the park hours would be from sunrise to sunset, with no night lighting allowed, anthropogenic activity is not expected to have an impact on bat behavior.

Other Special-Status Mammals

The northwestern San Diego pocket mouse, San Diego black-tailed jackrabbit, and Bryant's (San Diego Desert) woodrat were determined to have moderate potential to occur within the BSA. These species could experience impacts similar to those described for reptiles, above, during operation of the project. These include collisions with mountain bikes, predation by dogs, and avoidance of habitat areas due to lingering dog scent. Human may can reduce habitat suitability and the carrying capacity of habitat areas for mammals. These impacts may cumulatively result in reduced numbers of special-status mammal species as well as a decrease in use of habitat immediately surrounding the project footprint.

As mentioned above, the County has proposed additional signage and a live-in volunteer and park rangers to monitor the Alpine Preserve and Alpine Park as part of project implementation. Moreover, the public is currently accessing the County property for hiking and mountain biking, in some instances along trails that would be closed as part of the project. The presence of an active park adjacent to these trails is not anticipated to significantly increase mortality or reduce the viability of special-status mammals over the long-term because of the differences in user preferences between the two forms of recreation. There likely would be an increase in the number of horses on the property compared to baseline condition due to the construction of an equestrian staging area. However, horses move much slower than most mammal species, and as such, most mammals, including the three discussed in this section, would be skilled at avoiding hooves. However, these impacts would be significant absent mitigation because they could directly and

permanently affect Group I wildlife species and/or California Species of Special Concern (**Impact-BIO-13**).

Impact Determination

Implementation of the project would have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by CDFW and USFWS. Potentially significant impact(s) include the following:

Impact-BIO-1: Significant Impacts on Decumbent Goldenbush. Of the 226 decumbent goldenbush individuals observed within the survey area, 110 would be affected by the project, which is nearly half of the on-site population. These impacts would be significant on the existing population of decumbent goldenbush, absent mitigation.

Impact-BIO-2: Potentially Significant Impacts on Engelmann Oaks. No direct impacts on any Engelmann oaks would occur because of implementation of the project. Indirect impacts may include potential grading within the root protection zone. Approximately 0.94 acre is within the root protection zone where grading/site preparation (e.g., compaction) and construction of park infrastructure would occur (Figure 4.4-6). Impacts would occur within the root protection zone, but not within the canopy/dripline, of approximately 25 Engelmann oak trees, including one individual that appears to be dying. These oaks are at risk of injury or mortality if construction activities damaged the root zones or aboveground portions of the trees. Canopy thinning may be conducted under the supervision of a certified arborist, as part of fire fuel management in these areas. Engelmann oaks have endured challenges in recent years that threaten the long-term survival of the species; these challenges include development, pest infestations, and climate change impacts. As a result, impacts within the root protection zone and impacts associated with fire fuel management activities could potentially be significant, absent mitigation.

Impact-BIO-3: Significant Impacts on QCB Occupied Habitat During Construction. Occupied QCB habitat would be affected by construction and maintenance of the project. Impacts on occupied QCB habitat would be significant.

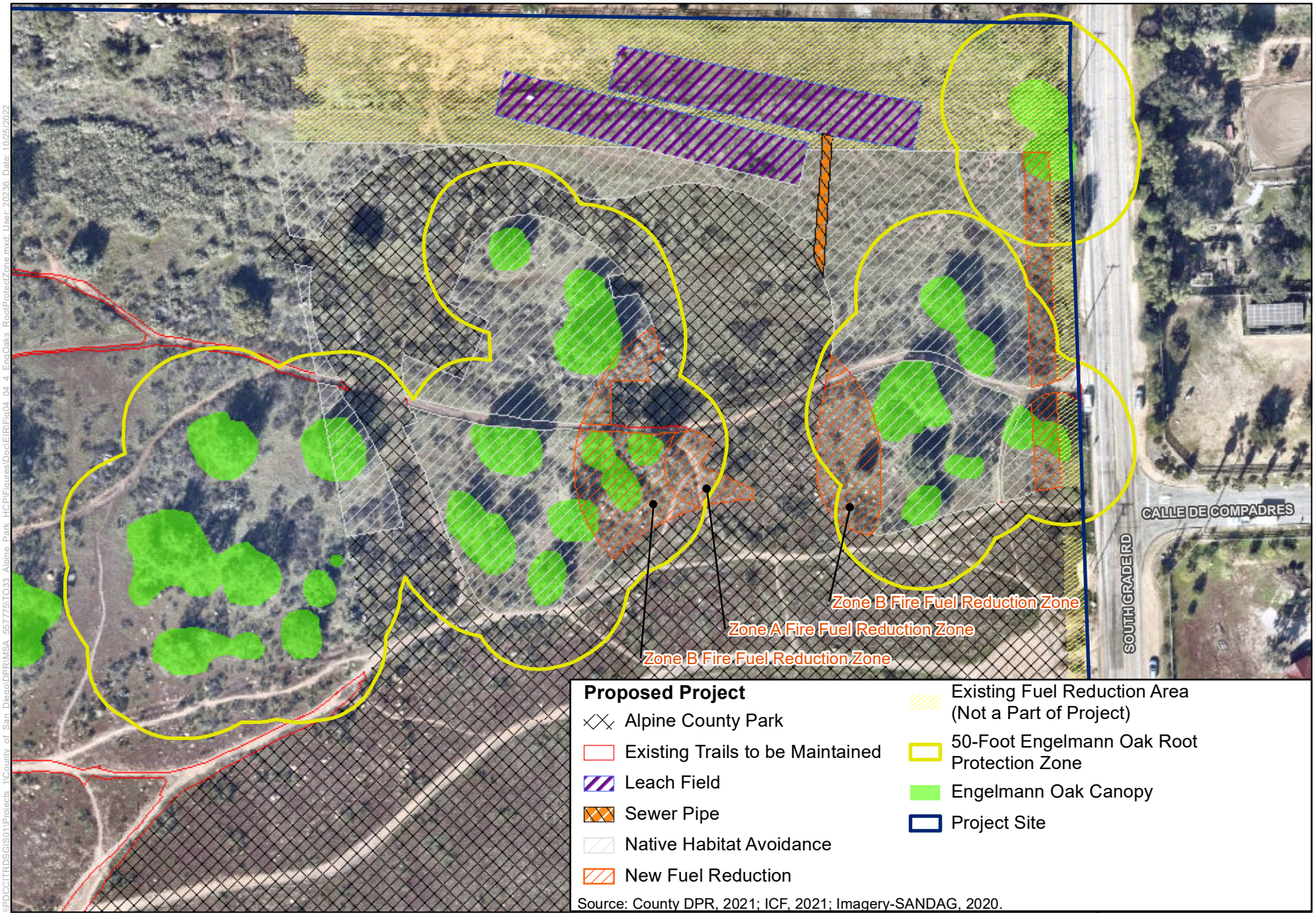

Figure 4.4-6
Engelmann Oak Root Protection Zone Impacts
Alpine County Park Project

Impact-BIO-4: Significant Impacts on Western Spadefoot. One seasonally inundated basin (AP-7) within which western spadefoot eggs were observed in 2019 would be filled in during construction of the active park. This impact could limit the ability of western spadefoot within the core breeding habitat on Wright's Field to expand territory during wet years. This could cause declines in the core population over time because it would restrict locations where breeding activities could occur and reduce breeding refugia sites. These impacts could potentially be significant, absent mitigation.

Impact-BIO-5: **Habitat Impacts on Special-Status Reptiles.** Impacts on eight special-status reptile species (California glossy snake, coast patch-nosed snake, coast horned lizard, coastal western whiptail, Coronado skink, orange-throated whiptail, red-diamond rattlesnake, and Southern California legless lizard) could potentially be significant, absent mitigation. Coast horned lizard and orange-throated whiptail are MSCP covered species that are considered adequately conserved with implementation of the South County MSCP. The larger preserve being assembled with implementation of the South County MCSP affords the remaining six species (not covered under the MSCP) additional regional conservation benefits because these species are generalists and can utilize a wide variety of habitats that are permanently protected under the MSCP. As a result, impacts on these species would be less than significant.

Impact-BIO-6: Habitat Impacts on Special-Status Avian Species. Impacts on 22.4 acres of foraging and/or breeding habitat for special-status avian species could potentially be significant, absent mitigation. Southern California rufous-crowned sparrow and ferruginous hawk are MSCP covered species that are considered adequately conserved with implementation of the South County MSCP. The larger preserve being assembled with implementation of the South County MCSP affords some of these generalist species (e.g., Cooper's hawk, red-shouldered hawk, white-tailed kite) additional conservation benefits at a regional level because these species are generalists and can utilize a wide variety of habitats that are permanently protected under the MSCP. As a result, impacts on avian special-status species and raptors would remain less than significant.

Impact-BIO-7: **Impacts on MBTA-Protected Avian Species During Breeding Season**. Impacts on the nesting success of any bird protected by the MBTA, such as removal of an active nest during construction or the loss of eggs or chicks from construction noise or human presence, would be significant.

Impact-BIO-8: Potential Impacts on Breeding Burrowing Owl. Although not documented as breeding on-site, burrowing owl could begin breeding within areas proposed for construction in the future. Potential impacts on breeding burrowing owl during construction would be significant.

Impact-BIO-9: Impacts on Raptor Foraging Habitat. Impacts on 22.4 acres of prime foraging habitat for raptors would be significant.

Impact-BIO-10: Habitat Impacts on Special-Status Bats. Impacts on up to 22.4 acres of habitat for special-status bats would be significant absent mitigation due to the small home ranges and specialized foraging habits for some of these species, lack of coverage for these species in the MSCP, and the California Species of Special Concern and/or Group I status for most of these species, indicating their relative rarity in the County.

Impact-BIO-11: Potential Impacts on Maternal Bat Roost Sites. Impacts on any bat species roost sites, such as rock crevices or oak trees, could result in direct mortality of adults and possibly juvenile bats. Even if direct impacts on these sites do not occur, roosting females may be negatively affected by increased noise and disturbance within proximity of their roost sites, which could result in increased

mortality of young or similar reduction in fecundity. Furthermore, roosting bats may be very difficult to detect; therefore, it would be hard to know if impacts on roost sites were occurring, absent detailed studies using mist nesting, tracking, and telemetry. Direct or indirect impacts on roost sites causing mortality or reproductive decline in special-status bats would be significant, absent mitigation.

Impact-BIO-12: Impact on Other Special-Status Mammals During Construction. Impacts on special-status mammal species would be significant, absent mitigation. The larger preserve being assembled with implementation of the South County MCSP affords these species some conservation benefits at a regional level because these species are generalists and can utilize a wide variety of habitats that are permanently protected under the MSCP. However, these species are not covered under the MSCP, and as such, impacts on these species would be significant, absent mitigation.

Impact-BIO-13: Impacts on Group I Wildlife Species/California Species of Special Concern During Operation. Operation of the proposed project may result in reduced numbers of special-status species due to an increase in mortality rates as well as a decrease in use of habitat immediately surrounding the project footprint. These impacts on Group I Wildlife Species/California Species of Special Concern could potentially be significant, absent mitigation.

Mitigation Measures

The County DPR proposes the following mitigation measures to reduce potentially significant impacts to below a level of significance.

For **Impact-BIO-1**: **Significant Impacts on Decumbent Goldenbush**

MM-BIO-1: Replace Decumbent Goldenbush. To mitigate for significant impacts on decumbent goldenbush, the County DPR shall replace at a 3:1 mitigation ratio any affected decumbent goldenbush individuals. Individual plants and/or seeds will be salvaged from the onsite population prior to the start of construction and installed within the open space/preserve. Plantings shall be monitored for a minimum of 3 years to ensure the 3:1 mitigation ratio has been met and that the planted individuals have properly established themselves. Seed/material from onsite populations may be contract grown to provide replacement plantings.

For **Impact-BIO-2**: **Potentially Significant Impacts on Engelmann Oaks**

MM-BIO-2: Implement Engelmann Oak Avoidance and Minimization Measures. The following measures will minimize and avoid potential impacts on Engelmann oaks resulting from the Project:

1. Engelmann oaks within 50 feet of any mass grading shall be fenced entirely around the tree dripline to ensure that no construction activities, including equipment staging, vegetation grubbing, driving, or grading, occur within the tree's dripline. These restrictions shall be communicated to the construction contractor prior to work in this area.
2. To mitigate for any potential significant impacts to Engelmann oak trees, the County will monitor the health of all Engelmann oaks within 200 feet of the proposed Alpine County Park development footprint for 5 years following construction. A certified arborist with experience monitoring oak health will conduct the monitoring. Mortality or serious declines in the health of the Engelmann oaks during these 5 years within this area will be mitigated at a 3:1 ratio, should significant impacts occur. Specifically, three Engelmann oaks will be planted for each oak tree that has died or is in serious decline. The mitigation would occur

within on-site Engelmann oak woodland areas that will be permanently protected. Planting shall occur within either the Native Habitat Protection Area or within the northwestern portion of the open space preserve. All oak plantings must be certified pathogen free, including for *Phytophthora* species.

3. Any areas within the Engelmann oak root protection zone (i.e., all areas within 50 feet of Engelmann oak canopy) shall be identified on a map that is provided to the construction contractor. Any grading or construction activities within the root protection zone shall be monitored to minimize impacts on oaks to the maximum extent possible. Training shall be provided for the construction contractor by a biological monitor prior to the start of construction activities in this area. This training will detail ways that the construction contractor can reduce impacts as much as possible on Engelmann oaks within the root protection zone. The following avoidance and minimization measures must be implemented: (1) minimizing repetitive travel routes within the root protection zone, (2) restricting any long-term storage of heavy materials within the root protection zone, and (3) restricting work within the root protection zone when the ground is wet to avoid compaction as much as possible after a rain event. Additional avoidance and minimization measures not envisioned here that can be feasibly implemented during construction must be identified and implemented.

For **Impact-BIO-3: Significant Impacts on QCB-Occupied Habitat During Construction**

MM-BIO-3: Ensure No Net Loss of Quino Host Plants and Provide Permanent Protection of Quino Habitat.. The County DPR shall seek a Section 10 Incidental Take Permit (ITP) for impacts on QCB-occupied habitat and comply with any additional mitigation required by the ITP. Regardless of the conservation measures required under the ITP, the County will mitigate for impacts on occupied QCB habitat by providing, at a minimum, on-site preservation of occupied habitat for QCB within the open space/preserve and ensure that no net loss of QCB host plants will occur because of the project. The County DPR shall ensure that there is no net loss of QCB host plants by performing on-site enhancement and restoration activities within QCB habitat, including planting dot-seed plantain, removing thatch to support healthy populations of dot-seed plantain, and maintaining and monitoring these enhancement areas for a minimum of 5 years. Construction activities shall not occur until the ITP is secured. Conservation measures shall be implemented pursuant to that ITP and will include measures to restore and enhance QCB habitat and provide permanent habitat protection and maintenance activities within the open space/preserve.

As part of its ongoing monitoring, the County will demonstrate that QCB persists on the project site at the end of the 5-year restoration and enhancement period. If QCB can no longer be found on either the County's preserve or within the adjacent Wright's Field in a normal flight-year at the end of the 5-year restoration period, the County will secure a specific off-site parcel that will contribute meaningfully to the species' long-term conservation.

For **Impact-BIO-4**: **Significant Impacts on Western Spadefoot**

MM-BIO: 4 Western Spadefoot. The County will mitigate for impacts on one western spadefoot breeding pool, approximately 157 square feet in size, by creating three permanent basins, encompassing a minimum of 471 square feet, to support western spadefoot breeding. These constructed basins will be created within clay soils on the permanently protected lands on the County's parcel, no closer than 100 feet from the western edge of Alpine Park. Basins will be constructed within approximately 262 meters of the core breeding population on Wright's Field

to maximize opportunities for western spadefoots on Wright's Field to naturally expand into these newly constructed basins. No basins will be constructed within the areas proposed for QCB habitat enhancement activities.

Hydrological analysis will be conducted prior to site selection to map the micro-watersheds in potential sites and ensure the constructed basins fill naturally with rainwater. Basins will be constructed to allow for maximum inundated depths of approximately 18 to 24 inches (20 to 60 centimeters), with the goal that they remain inundated long enough to increase the chances for breeding to be successful during dry years. Conversely, the newly constructed basins shall be designed in such a way that they support standing water for only several weeks following seasonal rains and aquatic predators (e.g., fish, bullfrogs, crayfish) cannot become established. Because ponding duration is so critical to the success of this effort, additional studies may be needed to estimate infiltration rates, soil profile, depth of clay soil layer, etc. The County will conduct these studies, as needed, to estimate the ponding duration within constructed basins. Terrestrial habitat surrounding the proposed relocation site shall be as similar in type, aspect, and density to the location of the existing pool(s), as feasible.

The County will develop a Western Spadefoot Habitat Mitigation and Monitoring Plan to describe requirements for the constructed basins, how basin sites are chosen, what activities will be conducted during the installation of the new basins, adaptive management, maintenance activities, access controls (e.g., fences), and what monitoring and reporting activities will occur and when. The data for the micro-habitat hydrological analysis will also be presented within this plan. The Western Spadefoot Habitat Mitigation and Monitoring Plan will be provided to the CDFW and USFWS for review and comment.

The new basins will be constructed concurrently with Alpine Park, and western spadefoots observed within the project footprint will be relocated to suitable basins outside the project footprint.

Monitoring of the newly constructed basins will be conducted during the wet season (approximately December through April) at approximately weekly intervals, beginning with the first significant rain event each year for 5 years following completion of basin construction. The County's biologist will map the spatial extent of the basins, document the inundation depths of the basins and breeding outcomes, and determine if adaptive management is needed to increase survival and recruitment within the constructed basins. Notes will be made if egg masses or larvae are observed. One nocturnal adult survey will also be conducted in each of the 5 years when a breeding event is occurring in order to document the foraging/mobility patterns of western spadefoots in the area of the new basins. The County will also monitor the core breeding population on the Wright's Field Preserve, using the same methods described above (i.e., basin mapping, weekly checks, nocturnal survey) to document the population dynamics of the entire population over time.

Monitoring/survey data will be provided to CDFW and USFWS by the monitoring biologist following each monitoring period; a written report summarizing the monitoring results will be provided to CDFW and USFWS at the end of the monitoring effort each year. Success criteria for the monitoring program shall include evidence of a ponding duration that is suitable for western spadefoot reproduction within at least one of the constructed basins during at least one of the 5 years of monitoring.

After exclusionary fencing has been installed around all initial proposed ground-disturbing construction, but prior to initiation of initial ground disturbance, the spadefoot biologist will conduct at least three nighttime surveys for spadefoots within the fenced area. Surveys will

continue until no more spadefoots are captured and relocated out of the fenced footprint and/or upon the recommendations of the spadefoot biologist. These surveys will be conducted during appropriate climatic conditions and during the appropriate hours (i.e., nighttime, during rain events in breeding season) to maximize the likelihood of encountering spadefoots. If climatic conditions are not highly suitable for spadefoot activity, spadefoot habitat in the project footprint will be watered to encourage aestivating toads to surface. All spadefoots found within the project area will be captured and translocated by the spadefoot biologist to the nearest suitable habitat outside of the work area. Upon completion of these surveys and prior to initiation of construction activities, the spadefoot biologist will report the capture and release locations of all spadefoots found and relocated during these surveys to CDFW and USFWS.

For **Impact-BIO-5**: **Habitat Impacts on Special-Status Reptiles**

APM-BIO-1: Establishment of the Open Space Preserve and **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** (see Threshold 2, below). Habitat-based mitigation will be provided consistent with **MM-BIO-9**, below, for significant impacts on special-status reptiles.

For **Impact-BIO-6: Habitat Impacts on Special-Status Avian Species**

APM-BIO-1: Establishment of the Open Space Preserve and **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** (see Threshold 2, below). Habitat-based mitigation will be provided consistent with **MM-BIO-9**, below, for significant impacts on special-status avian species.

For **Impact-BIO-7**: **Impacts on MBTA-Protected Avian Species During Breeding Season**

MM-BIO-5: Avoid and Minimize Impacts on Special-Status Avian Species and Other Birds Protected under the MBTA. To mitigate for potentially significant impacts on sensitive nesting birds and raptors, the County DPR shall avoid ground-disturbing activities during the bird breeding season to keep the project in compliance with state and federal regulations regarding nesting birds (i.e., the federal MBTA and California FGC). The bird breeding season is defined as January 15 to September 15, which includes the tree-nesting raptor breeding season of January 15 to July 15, the ground-nesting raptor breeding season of February 1 to July 15, and the general avian breeding season of February 1 to September 15.

If removal cannot be avoided during the bird and/or raptor nesting season, a nesting bird survey shall be conducted no more than 72 hours prior to ground-disturbing activities by a qualified avian biologist within 500 feet of proposed ground- or vegetation-disturbing activities. Biologists will also survey for raptor nests up to 1,500 feet from proposed ground- or vegetation-disturbing activities. This is necessary to definitively ascertain whether raptors or other migratory birds are actively nesting on the project site or in a vicinity that could be indirectly affected by work activities (i.e., through noise or visual disturbances). Special attention will be paid to determining the presence of nesting grassland-endemic bird species, such as grasshopper sparrow, that may be nesting within the dense grasses present within the proposed development footprint.

If any active nests are detected, the area shall be flagged and mapped on construction plans, along with a buffer, as recommended by the qualified biologist. The buffer area(s) established by the qualified biologist shall be avoided until the nesting cycle is complete or it is determined that the nest is no longer active. The qualified biologist shall be a person familiar with bird breeding

behavior and capable of identifying the bird species of San Diego County by sight and sound. The biologist shall determine if alterations to behavior have occurred as a result of human interaction. Buffers may be adjusted, based on observations by the biological monitor of the response of nesting birds to human activity.

For **Impact-BIO-8: Potential Burrowing Owl Breeding Impacts**

MM-BIO-6: Burrowing Owl Preconstruction Surveys. Prior to initiation of project clearing, grading, grubbing, or other construction activities, pre-construction surveys for the presence of burrowing owl, to verify species absence, will be conducted, including surveying suitable habitat within the project footprint and a 300-foot buffer by a qualified biologist; no grading shall occur within 300 feet of an active burrowing owl burrow. The pre-construction surveys shall follow the take avoidance survey methods outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). The first survey shall be conducted within 30 days of initial site disturbance, and the second survey shall occur within 24 hours of initial site disturbance.

Following the initial pre-grading survey, the project site will be monitored for new burrows each week until grading is complete. Subsequent pre-construction surveys will be required if lapses in the project occur that exceed 72 hours. If present in the project construction footprint or within 300 feet of the project site, coordination with CDFW and USFWS shall occur to establish measures to avoid potential impacts on burrowing owl. Such measures will be decided in coordination with the CDFW and USFWS and follow the "Strategy for Mitigating Impacts to Burrowing Owls in the Unincorporated County" (Attachment A of the County's Report Format and Content Requirements – Biological Resources).

Following the first pre-construction survey within 30 days of initial site disturbance, the qualified biologist will submit a Pre-Grading Survey Report to the County, CDFW, and USFWS within 14 days of the survey and include maps of the project site. If any burrowing owls are observed, the burrowing owl locations on aerial photos and in the format described in the mapping guidelines of the County's Report Format and Content Requirements – Biological Resources will be included. A qualified biologist will attend the pre-construction meeting to inform construction personnel about the burrowing owl requirements.

For **Impact-BIO-9**: **Impacts on Raptor Foraging Habitat**

APM-BIO-1: Establishment of the Open Space Preserve and **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** (see Threshold 2, below). Habitat-based mitigation will be provided consistent with **MM-BIO-9**, below, for significant impacts on raptor foraging habitat.

For **Impact-BIO-10**: **Habitat Impacts on Special-Status Bats**

APM-BIO-1: Establishment of the Open Space Preserve and **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** (see Threshold 2, below). Habitat-based mitigation will be provided consistent with **MM-BIO-9**, below, for significant impacts on pallid bat foraging habitat.

MM-BIO-7: Support Pallid Bat. The County DPR shall work with a bat expert to design and install bat boxes that attract pallid bat prior to vegetation removal activities commencing on the site. These bat boxes should be designed to accommodate both solitary individuals and maternal roost sites. Bat box design should reflect the best practices at the time of installation and be

specific to larger-sized bats like pallid bat with respect to roost chamber sizes, etc. Design and placement of bat boxes should also consider how to best maintain proper roost temperature. When possible, the bat boxes should be placed along the edges of the wooded areas on the site. Final design, numbers, and placement of bat boxes will be determined by the bat expert in consultation with County DPR using the best practices known at the time.

Monitoring of the bat boxes shall be conducted quarterly for the first 2 years and twice yearly during years 3 through 5 after installation. Any problems that are noted (e.g., mortality, predation) shall be addressed in consultation with the bat expert. Occupancy status, including species, numbers, etc., shall be documented to the extent possible without disturbing the occupants. If, after the first 2 years, a bat box remains unoccupied by any bat species, the County DPR and bat expert will discuss if the bat box needs to be repositioned on the site or redesigned. An annual report shall be prepared by the bat expert or designee to document the findings of the monitoring visits. The County will provide copies of this annual report to the CDFW and also include updates on the bat box monitoring on the site in the County's annual report for the MSCP.

For **Impact-BIO-11: Potential Impacts on Maternal Bat Roost Sites**

MM-BIO-8: Bat Roost Avoidance. Because of the difficulty in detecting all potentially occurring roosting bats (e.g., the western red bat within the Engelmann oaks, pallid bats within rock crevices), no construction activities that could disturb maternal roost site will occur during the pupping season (typically April 1 through August 31). This measure specifically precludes high-frequency surveying as well as intensive noise-generating activities (e.g., jack-hammering) within 200 feet of any Engelmann oaks or rock outcrops during the pupping season.

If construction activities must occur within this 200-foot avoidance buffer during the pupping season, the County will conduct definitive bat roost surveys to determine the presence or absence of maternal day-roost and/or night-roost locations within the 200-foot avoidance buffer that overlaps the construction footprint. The bat biologist(s) who conduct these surveys shall have the appropriate education, training, and experience. The bat roost survey methodology will be described in a Bat Roost Management, Monitoring, and Mitigation Plan, which will be prepared at least 30 days prior to the start of construction and provided to CDFW.

Bat roost survey methods may include mist netting and tracking individual bats using telemetry and/or additional acoustic surveys that are timed to determine if individual Engelmann oaks or rock outcrops within the 200 foot avoidance buffer are supporting bat roost sites. If any maternal roost sites within the 200 foot avoidance buffer are identified, an appropriate avoidance buffer shall be established around that roost site in accordance with the requirements established in the Bat Roost Management, Monitoring, and Mitigation Plan. Avoidance buffer distances will account for the ability of that individual bat species to tolerate specific types of low- and high-frequency construction noise and other human disturbance associated with the project. No construction activities that could disrupt the roost site will be permitted within the established avoidance buffer.

Bat biologists will monitor construction activities occurring adjacent to the avoidance areas for the bat roost sites in accordance with the Bat Roost Management, Monitoring, and Mitigation Plan. Monitoring frequency and duration also will conform to the Bat Roost Management, Monitoring, and Mitigation Plan and be used to determine that the established bat roost avoidance buffers are large enough to prevent maternal roost site impacts, including, but not limited to, roost site abandonment. Avoidance buffers will be expanded if any stress or disturbance to the maternal roost site is observed during monitoring. In years 1, 3, and 5

following construction completion, the County will conduct bat surveys, including maternal bat roost surveys, within the areas originally surveyed prior to construction.

If the maternal bat roost sites previously observed prior to and during construction are still observed during these monitoring surveys, no additional mitigation will be required. If any maternal roost sites observed prior to or during construction are no longer present (i.e., are not observed in any of the three post-construction surveys), the County will mitigate for the loss of the maternal roost site at a 2:1 ratio using methods agreed upon in the Bat Roost Management, Monitoring, and Mitigation Plan. This may include planting additional Engelmann oaks within the proposed preserve if the affected maternal roost site utilized Engelmann oak trees or by building artificial bat roosts specifically for the affected bat species.

For **Impact-BIO-12**: **Habitat Impacts on Special-Status Mammals**

APM-BIO-1: Establishment of the Open Space Preserve and **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** (see Threshold 2, below). Habitat-based mitigation will be provided consistent with **MM-BIO-9**, below, for significant impacts on special-status mammals.

For **Impact-BIO-13: Impacts on Group I Wildlife Species/California Species of Special Concern During Operation.**

APM-BIO-1: Establishment of the Open Space Preserve and **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** (see Threshold 2, below). Habitat-based mitigation will be provided consistent with **MM-BIO-9**, below, for significant impacts on special-status wildlife species resulting from implementation of the proposed project.

Level of Significance After Mitigation

Impact-BIO-1 through **Impact-BIO-10** would be reduced to less than significant after implementation of **MM-BIO-1** through **MM-BIO-7** as well as the habitat-based mitigation described under **MM-BIO-9** below.

The planned Alpine Preserve, to be created with implementation of the project, contains all key habitat components required by QCB, including significant host plant populations, nectaring resources, and hilltops and ridgelines. The Alpine Preserve is also contiguous with existing conserved lands located within the Wright's Field Preserve. When combined, 98 percent of the known individual host plants associated with the Alpine Occurrence Complex would be conserved between the two preserves. Similarly, the permanent protection of habitat for special-status plant and wildlife species within the Alpine Preserve would add an additional 67.5 acres to the approximately 380 acres of open space (including Wright's Field and privately held open space land, some of which is permanently protected through conservation easements) in the immediate vicinity. Furthermore, pre-construction nesting bird surveys would be conducted in accordance with **MM-BIO-5** to avoid direct mortality of eggs, chicks, or adults during the breeding season. As a result, **MM-BIO-1** through **MM-BIO-9** would reduce the project's impacts on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by CDFW or USFWS to a less-than-significant level.

Open Space/Preserve

Impact Discussion

County DPR would implement conservation measures in the project's Habitat Conservation Plan to preserve occupied habitat for QCB and ensure no net loss of QCB host plants from the project. The Habitat Conservation Plan proposes protection of habitat and permanent on-site restoration and enhancement of QCB habitat within the open space/preserve. Long-term management of the open space/preserve would also occur as part of the County's commitment to species conservation as a signatory to the MSCP and as outlined in an RMP that will be prepared for the project.

There is the possibility that impacts on special-status wildlife and special-status plants may occur during long-term management and habitat restoration/enhancement activities. Palmer's grapplinghook, for instance, occurs in habitats similar to those of dot-seed plantain. Individual Palmer's grapplinghook occurrences have been mapped and included in the habitat enhancement plans, with specific measures to avoid these areas and any future occurrences of special-status plants that are noted during restoration/enhancement activities. There is also potential for inadvertent take of a small number of QCB to occur in the open space preserve when implementing habitat management activities through accidental trampling of QCB larvae. These impacts would be avoided by ensuring that habitat restoration/enhancement activities occur only outside of the flight season for QCB and that work directly within patches of dot-seed plantain is prohibited.

Impact Determination

The purpose of the long-term management and habitat restoration activities is to improve habitat for special-status species. These benefits would outweigh potential impacts on special-status species resulting from management/restoration actions. As a result, impacts on special-status species from these actions would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 2: The project would have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by CDFW or USFWS.

County Park and Trails

Impact Discussion

The clearing of native vegetation during grading and site preparation would be required for construction of the project. Development of the project would result in direct permanent impacts on up to 23.1 acres of land, of which 22.4 acres are considered sensitive natural communities and classified as Tier I through Tier III (Table 4.4-4) (Figure 4.4-1). Table 4.4-4 summarizes the maximum project impacts on habitat types/vegetation communities from development of the project.

Table 4.4-4. Maximum Project Impacts on Vegetation Communities and Land Cover

Impact Type		Permanent Impacts[d]			Temporary Impacts		Impact Neutral	Total
Vegetation Community/Land Cover[a]	Tier[c]	Active Park	Leach Field	New Fire Fuel Modification Areas	Native Habitat Avoidance Area	Sewer Pipe	Maintenance of Existing Trails	
Disturbed Habitat (11300)	IV	0.5	0.1	< 0.1	< 0.1	—	1.0	1.6
Diegan Coastal Sage Scrub (32500), Including Disturbed and Baccharis Dominated (32530)	II	< 0.1	—	—	< 0.1	—	—	< 0.1
Disturbed Flat-topped Buckwheat (32800)	II	1.6	0.3	0.3	1.0	< 0.1	—	3.2
Flat-topped Buckwheat (32800)	II	1.7	—	0.1	0.7	< 0.1	—	2.4
Flat-topped Buckwheat – Existing Fire Fuel Modification Zone (32800)	II	< 0.1	—	—	—	—	—	< 0.1
Coastal Sage-Chaparral Transition (37G00)	II	—	—	—	—	—	—	—
Southern Mixed Chaparral (37120)	III	—	—	—	—	—	—	—
Valley Needlegrass Grassland (42100)	I	14.5	—	—	<0.1	—	—	14.5
Valley Needlegrass Grassland – Existing Fire Fuel Modification Zone (42100)	I	0.3	—	—	—	—	—	0.3
Disturbed Valley Needlegrass Grassland (42100)	I	—	—	—	—	—	—	—
Non-Native Grassland (42220)	III	3.6	—	—	—	—	—	3.6
Open Engelmann Oak Woodland (71181)	I	—	—	0.1	0.4	—	—	0.5
Non-Native Woodland (79000)	IV	< 0.1	—	< 0.1	< 0.1	—	—	< 0.1
Eucalyptus Woodland (79100)	IV	—	—	—	—	—	—	—
	Total[b]	**22.2**	**0.4**	**0.5**	**2.1**	**<0.1**	**1.0**	**26.1**

a. Vegetation categories and numerical codes are from Holland (1986) and Oberbauer et al. (2008).
b. Individual rows may not sum to total because of rounding.
c. Tier categories are defined in the County's Biological Mitigation Ordinance.
d. An additional 471 square feet of impacts on sensitive natural communities would occur from implementation of the western spadefoot mitigation measure (**MM-BIO-4**), requiring the construction of three basins for spadefoot. It is not known exactly where these basins would be constructed, but impacts would be mitigated in accordance with **MM-BIO-9** and the ratios stipulated in the Biological Mitigation Ordinance.

Construction

Permanent direct impacts on sensitive natural communities would occur, mostly within Valley needlegrass grassland, disturbed flat-topped buckwheat stands, Engelmann oak woodland, and non-native grasslands (**Impact-BIO-14**). Permanent direct impacts on Engelmann oak woodlands were reduced to a minimum during the County DPR's redesign of the concept plan for the proposed park in 2020. The County DPR would avoid all direct impacts (i.e., removal) of individual Engelmann oak trees during construction, and no construction activities (e.g., staging or grading) would occur within any dripline/canopy of Engelmann oaks. See Threshold 1, above, for a complete discussion of potential significant impacts associated with grading and fire clearing in the root protection zones of approximately 25 Engelmann oaks within Engelmann oak woodlands—specifically, within or under the canopy of seven Engelmann oaks. These impacts would be significant per **Impact-BIO-2**, above.

Construction of the project is not anticipated to cause indirect impacts on Valley needlegrass grassland, disturbed flat-topped buckwheat stands, Engelmann oak woodland, or non-native grasslands at levels that would be likely to harm sensitive habitats because of standard BMPs, such as dust control (see Section 4.4-2, *Existing Conditions*). Compliance with the General Construction Permit would require preparation of a Stormwater Pollution Prevention Plan for the project site, which would outline the BMPs that would be implemented during construction activities to prevent soil erosion and runoff from the construction site to nearby sensitive natural communities.

Operation

Although anthropogenic presence is likely to increase through construction of Alpine Park, measures have been sought to reduce impacts on the sensitive natural communities in the adjacent open space/preserve. The current informal trail system would be converted to a more formalized system, discouraging unauthorized uses within open space/preserve. A permanent live-in volunteer would also be situated within Alpine Park, which would further reduce indirect impacts on sensitive habitats through an increased monitoring presence in the area.

Fire fuel reductions zones associated with the proposed project are described in the introductory paragraph of Section 4.4.4. See Threshold 1, above, for a complete discussion of potentially significant impacts associated with fuel management activities that would occur within Engelmann oak woodlands, which would occur in coordination with a certified arborist. These impacts could potentially be significant per **Impact-BIO-2**, above.

Impact Determination

Impact-BIO-14: Direct Impacts on Sensitive Natural Communities. Direct impacts on up to 22.4 acres of Tier I, II, and III sensitive natural communities (i.e., Valley needlegrass grassland, flat-topped buckwheat stands, non-native grasslands) would be significant.

The project would directly and permanently affect Engelmann oak woodland, Valley needlegrass, non-native grassland, and flat-topped buckwheat within a Biological Resource Core Area (BRCA). Engelmann oak woodland and Valley needlegrass are listed as Tier I vegetation communities, flat-topped buckwheat is listed as a Tier II vegetation community, and non-native grassland is listed as a Tier III vegetation community in Attachment K of the Biological Mitigation Ordinance (BMO). Impacts on Tier I through Tier III vegetation communities would be significant, absent mitigation.

Mitigation Measures

The County DPR proposes the following applicant-proposed measure (APM) and mitigation measure to reduce **Impact-BIO-14** to below a level of significance.

APM-BIO-1: Establishment of the Open Space Preserve: As required under the County's MSCP Subarea Plan, Alpine Preserve will be managed in perpetuity in accordance with an RMP. This plan will outline management activities to be carried out by the County. The activities that are likely to be included in the RMP would enhance and preserve the affected sensitive natural communities. These activities include long-term monitoring of on-site preservation areas, non-native and invasive species vegetation management, and habitat restoration in the preserve, as applicable. Through these strategic measures to mitigate for impacts, the preserved sensitive natural communities will be managed to maintain high-quality and functioning habitat and the County DPR will demonstrate its long-term commitment to species conservation within the open space/preserve.

MM-BIO-9: Provide Compensatory Habitat-Based Mitigation. To mitigate for potentially significant impacts on Tier I, Tier II, and Tier III habitats, the County will provide compensatory mitigation consistent with its BMO to reduce significant impacts on sensitive vegetation communities. Mitigation will be provided within open space preserve and/or within offsite location(s), as summarized below.

Table 4.4-5. Mitigation Requirements

Tier[a]	Total Impacts	Mitigation Ratio	Mitigation Requirement	On-site Mitigation[b]	Off-site Mitigation
Tier I	14.86	2:1	29.73	17.48 acres of preservation plus 4.84 acres of restoration (see **MM-BIO-10**)	7.41 acres of restoration in Wright's Field Preserve (see **MM-BIO-10**)
Tier II	3.97	1.5:1	5.95	5.95	None
Tier III	3.57	1:1	3.57	None	3.57[b]

a. Tiers correspond to those described in the County's BMO.

b. Habitat-based mitigation for permanent direct impacts on non-native grassland will be satisfied through purchase of credits and/or land acquisition of a similar high-quality non-native grassland in an off-site location.

MM-BIO-10: Native Grassland Mitigation. Impacts on 14.79 acres of Valley needlegrass grassland will be mitigated at a 2:1 ratio through preservation of 10.60 acres of Valley needlegrass grassland and 6.88 acres of open Engelmann oak woodland on-site, in addition to 4.84 acres of restoration of non-native Valley needlegrass grassland within the County's parcel and 7.41 acres of restoration on Wright's Field Preserve. All restoration will be in accordance with a Habitat Restoration and Enhancement Plan (HREP) approved by the Wildlife Agencies (USFWS and CDFW). Success criteria established in that HREP will include achieving at least a 5 percent absolute cover of purple needlegrass within restoration areas while retaining cover and species composition similar to that of the native forbs currently present within non-native grassland areas on-site. If restoration does not meet the restoration goals, the County will implement adaptive management measures, to be approved by the Wildlife Agencies.

Level of Significance After Mitigation

APM-BIO-1, MM-BIO-9, and **MM-BIO-10** would provide compensatory mitigation, including through preservation and restoration for **Impact-BIO-14,** thereby reducing potentially significant direct and permanent impacts on sensitive vegetation communities to less than significant.

Open Space/Preserve

Impact Discussion

The County's management of the Alpine Preserve has the potential to affect sensitive natural communities. County DPR will implement conservation measures in the project's Habitat Conservation Plan to ensure no net loss of QCB host plants from the project site. These activities will result in the potential for disturbance to sensitive natural communities within the QCB enhancement areas, such as trampling and raking vegetation to reduce the total load of non-native grass seeds. Restoration of non-native grass areas to native grasslands also could result in similar impacts. Long-term management of the open space/preserve will occur as part of the County's commitment to species conservation as a signatory to the MSCP and as outlined in a RMP that will be prepared for the project. These impacts are intended to improve sensitive natural communities over the long-term, and as such, the overall improvement to these habitats would far outweigh any short-term temporary impacts that might occur during restoration work. As such, impacts associated with the County's management of its open space in the Alpine Preserve would be less than significant.

Impact Determination

Impacts on sensitive natural communities from the proposed long-term management and habitat restoration/enhancement activities within the open space/preserve would be less than significant.

Impact-BIO-14: Direct Impacts on Sensitive Natural Communities. Direct impacts on up to 22.3 acres of Tier I, II, and III sensitive natural communities (i.e., Valley needlegrass grassland, flat-topped buckwheat stands, and nonnative grasslands) would be significant.

The project would directly and permanently affect Engelmann oak woodland, Valley needlegrass, nonnative grassland, and flat-topped buckwheat within a Biological Resource Core Area (BRCA). Engelmann oak woodland and Valley needlegrass are listed as Tier I vegetation communities, flat-topped buckwheat is listed as a Tier II vegetation community, and nonnative grassland is listed as a Tier III vegetation community in Attachment K of the Biological Mitigation Ordinance (BMO). Impacts on Tier I through Tier III vegetation communities would be significant, absent mitigation.

Mitigation Measures

The County DPR proposes **APM-BIO-1** and **MM-BIO-9** (above) to reduce **Impact-BIO-14** to below a level of significance.

Level of Significance After Mitigation

APM-BIO-1, MM-BIO-9, and **MM-BIO-10** would provide compensatory mitigation, including through preservation and restoration for **Impact-BIO-14,** thereby reducing potentially significant direct and permanent impacts on sensitive vegetation communities to less than significant.

Threshold 3: The project would not have a substantial adverse effect on state or federally protected wetlands (including, but not limited to marshes, vernal pools, coastal areas, etc.) through direct removal, filling, hydrological interruption, or other means.

Impact Discussion

No wetland features or aquatic resources were found within the BSA during any field surveys. As a result, there would be no impact on any state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal areas) from the project.

Impact Determination

The project would not have a substantial adverse effect on state or federally protected wetlands. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 4: The project would not substantially interfere with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Impact Discussion

The BSA and the adjacent Wright's Field are surrounded by low-density exurban residential development. As such, the BSA and Wright's Field currently function as an "island" of habitat with limited connectivity to open space and other preserve areas. The project would be constructed at the eastern edge of this island of open space/preserve, leaving a smaller but similarly situated island of habitat west of the active park.

Residential development within the past 15 to 20 years in the vicinity of the project site has substantively changed how wildlife can move north and east of the County's parcel. Specifically, three large houses north of the County parcel along Engelmann Oak Lane were built during this time period, restricting the movement of terrestrial mesofauna to the north. Two additional homes east of the intersection of South Grade and Boulder Oak Lane were also built in this timeframe. These homes constrain wildlife movement from the far northeastern corner of the County parcel to points farther east. Large-lot residential development, many with fences around their perimeter, currently restricts wildlife movement from due east of the County parcel to points farther east. Wildlife movement, therefore, north and east of the County parcel is already constrained to backyards where there are gaps in fences or where animals can move under or over fences. Development of the equestrian center at the northern end of the proposed active park would further restrict east–west

movement at this northeastern edge of the County parcel; however, an area of open space (where the leach field for the septic system is proposed), approximately 100 feet in width, would remain in this area for east–west movement of terrestrial fauna.

On the southern end of the proposed park, development could potentially constrain wildlife movement from south to north for approximately 500 feet where the active park is proposed directly north of the Findel Ranch portion of Wright's Field. This 500-foot stretch represents only approximately 30 percent of the total linear distance where wildlife ostensibly cross from protected lands (i.e., the Findel Ranch section of Wright's Field) south of South Grade Road into the Wright's Field/County parcel to the north, or vice-versa. Approximately 1,060 feet remain where wildlife could cross from the Findel Ranch portion of Wright's Field into the proposed Alpine Preserve, ensuring that wildlife movement would continue to the extent it currently does in that portion. Most small mammals/meso-carnivore that are expected to use these habitat blocks can utilize widths of less than 1,000 feet as movement corridors. As a result, a reduction of approximately 30 percent of the width of this corridor from the proposed project would not substantially change wildlife movement patterns from baseline conditions.

Development of the Project would not significantly alter the way that wildlife utilize this contiguous block of open space. The conversion of 22.4 acres of native habitat to a developed park facility would not significantly constrain wildlife movement because the park would be adjacent to existing development on three sides and situated at the far eastern edge of the approximately 450-acre contiguous block of habitat in the immediate vicinity (i.e., the adjacent Wright's Field Preserve and privately held, directly contiguous open space lands in the immediate vicinity of the proposed Project, some of which are protected through a conservation easement). The Alpine Park Preserve would be created on the western edge of the park, contiguous to Wright's Field Preserve, and maintained as an MSCP preserve in perpetuity. Trails would be utilized by medium and large mammals for ease of movement through the preserve, similar to baseline conditions. No features would be constructed that would impinge any movement areas, including ridgelines or canyons.

There is the potential for more vehicle collisions along South Grade Road compared to baseline conditions because the proposed park would draw additional vehicles to this portion of South Grade Road. However, there is currently a risk associated with this crossing, and the relative impact of the park on traffic in this area is not anticipated to result in a significant impact on existing wildlife movement in this area.

Impact Determination

The project would not result in substantial interference with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Impacts would be less than significant.

Mitigation Measures

No mitigation is required.

Level of Significance After Mitigation

Impacts would be less than significant.

Threshold 5: The project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance, or conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

Impact Discussion

The project would be consistent with the MSCP, the County General Plan, and the ACP. It would not conflict with any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan. This is described within the *Multiple Species Conservation Program Conformance Statement* document, which is included as Attachment E of this EIR.

The proposed volunteer parking pad would be within the northern end of Alpine Park. The location results in the need for a Zone A and Zone B fire fuel modification zone, as described above. The County Consolidated Fire Code, Section 4907.2, Fuel Modification (f), states:

> When the subject property contains an area designated to protect biological or other sensitive habitat or resource, no building or other structure requiring a fuel modification zone shall be located so as to extend the fuel modification zone into a protected area.

The County redesigned the site plan in the fall of 2022 to move the volunteer parking pad from its previous location, approximately 12 feet from the edge of the proposed preserve, and avoid having the fire fuel modification zone (Zone A and Zone B) extend into the preserve. Its new location is more centrally located, directly adjacent to the equestrian staging area; it extends into the Native Habitat Avoidance Area within the equestrian center loop road. The Native Habitat Avoidance Area would be preserved after construction is complete. As such, the placement of this volunteer parking pad is not entirely consistent with these provisions in the County Consolidated Fire Code and as such, the impacts would be significant (**Impact-BIO-15**).

Impact Determination

Impact-BIO-15: Conflicts with County Consolidated Fire Code. The project would potentially conflict with the County's Consolidated Fire Code—specifically, the provision to prevent impacts within a biological open space/preserve contained in Section 4907.2, Fuel Modification (f). Impacts would be potentially significant, absent mitigation..

Mitigation Measures

The County DPR proposes the following APM and mitigation measure to reduce **Impact-BIO-15** to below a level of significance.

> **APM-BIO-1: Establishment of the Open Space Preserve** and **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation** (see Threshold 2). Habitat-based mitigation will be provided consistent with **MM-BIO-9**, above, for significant impacts on special-status reptiles.

Level of Significance After Mitigation

Impacts would be less than significant after mitigation.

4.4.5 Summary of Significant Impacts

Table 4.4-6. Summary of Significant Biological Resources Impacts and Mitigation Measures

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-BIO-1: Significant Impacts on Decumbent Goldenbush	**MM-BIO-1: Replace Decumbent Goldenbush**	Less than Significant	Mitigation ensures that no net loss of decumbent goldenbush individuals will occur.
Impact-BIO-2: Potentially Significant Impacts on Engelmann Oaks	**MM-BIO-2**: **Implement Engelmann Oak Avoidance and Minimization Measures**	Less than Significant	Any potential impacts on Engelmann oak resulting from grading or compaction in the root protection zone or fire clearing will be mitigated through on-site planting, resulting in no net loss of Engelmann oaks on-site.
Impact-BIO-3: Significant Impacts on QCB-Occupied Habitat During Construction	**MM-BIO-3: QCB Mitigation**	Less than Significant	Impacts on QCB-occupied habitat will be mitigated through permanent on-site preservation of occupied QCB habitat. Impacts on QCB host plants will be mitigated through a 1:1 replacement through on-site restoration and enhancement. Long-term monitoring of Quino populations on the site will occur; County to confirm persistence of Quino after 5 years or contribute to Quino recovery in a significant way in off-site locations.
Impact-BIO-4: Significant Impacts on Western Spadefoot	**MM-BIO-4 Western Spadefoot Mitigation**	Less than Significant	Impacts on one breeding pool will be mitigated by constructing three new breeding pools closer to the core breeding population on Wright's Field. Impacts during construction will be avoided by installing exclusionary fencing and translocating individuals to outside of the construction footprint.

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-BIO-5: Habitat Impacts on Special-Status Reptiles	**APM-BIO-1 Establishment of the Open Space Preserve** **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation**	Less than Significant	Permanent protection of habitat for these species will occur within the Alpine Preserve and in off-site locations (non-native grasslands), reducing impacts to less than significant.
Impact-BIO-6: Habitat Impacts on Special-Status Avian Species	**APM-BIO-1 Establishment of the Open Space Preserve** **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation**	Less than Significant	Permanent protection of habitat for these species will occur within the Alpine Preserve and in off-site locations (non-native grasslands), reducing impacts to less than significant.
Impact-BIO-7: Impacts on MBTA-Protected Avian Species During Breeding Season	**MM-BIO-5: Avoid and Minimize Impacts on Special-Status Avian Species and Other Birds Protected under the MBTA**	Less than Significant	Avoidance of nests during construction will ensure no direct mortality of eggs or chicks will occur.
Impact-BIO-8: Potential Impacts on Breeding Burrowing Owl	**MM-BIO-6: Burrowing Owl Preconstruction Surveys.**	Less than Significant	Pre-construction take avoidance surveys will be conducted to avoid take of any breeding burrowing owls on-site. If found, consultation with the wildlife agencies will occur to ensure burrowing owl are not negatively affected by the project.
Impact-BIO-9: Impacts on Raptor Foraging Habitat	**APM-BIO-1 Establishment of the Open Space Preserve** **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation**	Less than Significant	Permanent protection of habitat for these species will occur within the Alpine Preserve and in off-site locations (non-native grasslands), reducing impacts to less than significant.

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-BIO-10: Habitat Impacts on Special-Status Bats	**MM-BIO-7: Protect Pallid Bat**	Less than Significant	Pallid bat boxes will help attract pallid bats to a permanently protected location in the county (i.e., the open space/preserve) where there is a higher chance for long-term reproductive success than in private parcels where long-term persistence of this species is less certain. Potential stress to pallid bat from the loss of foraging habitat on the project site will be offset by access to bat boxes, providing safe, secure roost sites.
	APM-BIO-1: Establishment of the Open Space Preserve **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation**		Permanent protection of habitat for these species will occur within the Alpine Preserve and in off-site locations (non-native grasslands), reducing impacts to less than significant.
Impact-BIO-11: Potential Impacts on Maternal Roost Sites	**MM-BIO-8: Bat Roost Avoidance**	Less than Significant	Avoiding construction activities that could negatively affect the reproductive outcomes of roosting bats will reduce potential significant impacts on these species.
Impact-BIO-12: Habitat Impacts on Special-Status Mammals	**APM-BIO-1 Establishment of the Open Space Preserve** **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation**	Less than Significant	Permanent protection of habitat for this taxa group will occur within the Alpine Preserve and in off-site locations (non-native grasslands), reducing impacts to less than significant.
Impact-BIO-13: Operational Impacts on Special-Status Wildlife Species	**APM-BIO-1 Establishment of the Open Space Preserve** **MM-BIO-9: Provide Compensatory Habitat-Based Mitigation**	Less than Significant	Permanent protection of habitat for these groups will occur within the Alpine Preserve and in off-site locations (non-native grasslands), reducing impacts to less than significant.

Summary of Potentially Significant Impact(s)	Summary of Mitigation Measure(s)	Level of Significance After Mitigation	Rationale for Finding After Mitigation
Impact-BIO-14: Direct Impacts on Sensitive Natural Communities	**APM-BIO-1: Establishment of the Open Space Preserve** **MM-BIO-9**: **Provide Compensatory Habitat-Based Mitigation** **MM-BIO-10: Native Grassland Mitigation**	Less than Significant	**APM-BIO-1, MM-BIO-9,** and **MM-BIO-10** provide compensatory mitigation, including preservation and restoration, for **Impact-BIO-14,** thereby reducing potentially significant direct and permanent impacts on sensitive vegetation communities to less than significant.
Impact-BIO-15: Conflicts with County Consolidated Fire Code	**APM-BIO-1: Establishment of the Open Space Preserve** **MM-BIO-9**: **Provide Compensatory Habitat-Based Mitigation** **MM-BIO-10: Native Grassland Mitigation**	Less than Significant	The purpose of the provision in the County Consolidated Fire Code that requires fire fuel management zones not to extend into preserve areas is to reduce impacts on sensitive natural communities and the species that depend on them. **APM-BIO-1, MM-BIO-9,** and **MM-BIO-10** provide compensatory mitigation, including preservation and restoration**,** thereby reducing potentially significant direct and permanent impacts on sensitive vegetation communities to less than significant.