

Biological Technical Report for the Devil's Punchbowl Nature Center Replacement Planning Project

Los Angeles County, California

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LIST OF ACRONYMS AND ABBREVIATIONS

Term	Description
°F	Degrees Fahrenheit
ARD	Aquatic Resources Delineation
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CNPSEI	CNPS Electronic Inventory
CWA	Clean Water Act
ESA	Endangered Species Act
GPS	Global Positioning System
HCP	Habitat Conservation Plan
ITP	Incidental Take Permit
MBTA	Migratory Bird Treaty Act
mph	Miles per Hour
NCCP	Natural Community Conservation Plan
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
OHWM	Ordinary High-Water Mark
OWCMP	Oak Woodlands Conservation Management Plan
Procedures	<i>State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State</i>
Project	Devil's Punchbowl Nature Center Proposed Project
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSAR	Society for the Study of Amphibians and Reptiles
SSC	Species of Special Concern
USACE	U.S. Army Corps of Engineers
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
WJTCA	Western Joshua Tree Conservation Act
WOTUS	Waters of the U.S.

1.0 INTRODUCTION

ECORP Consulting, Inc. conducted biological reconnaissance surveys at the Devil's Punchbowl Nature Center Proposed Project site (Project) plus some of the trails and areas surrounding the Project site (hereafter referred to as the Project Area). The Project Area includes the existing parking lots and structures onsite, a grading area where new facilities would be developed, areas of new accessible paths of travel, new and re-constructed hiking trails, signs, and re-planting areas. The footprint of the Project Area extends beyond areas where direct impacts would occur. The Project entails rebuilding the nature center and associated site improvements at the Devil's Punchbowl Natural Area south of the Valyermo community in the County of Los Angeles. Many parts of the Devil's Punchbowl Natural Area, including the historic-age structure that housed the nature center, were destroyed as a result of the Bobcat Fire in September/October 2020. In order to reopen the park to the public, repairs to the trailhead including signage, fencing, trail surface repairs, and a new nature center building of about 3,425 square feet are proposed at the site.

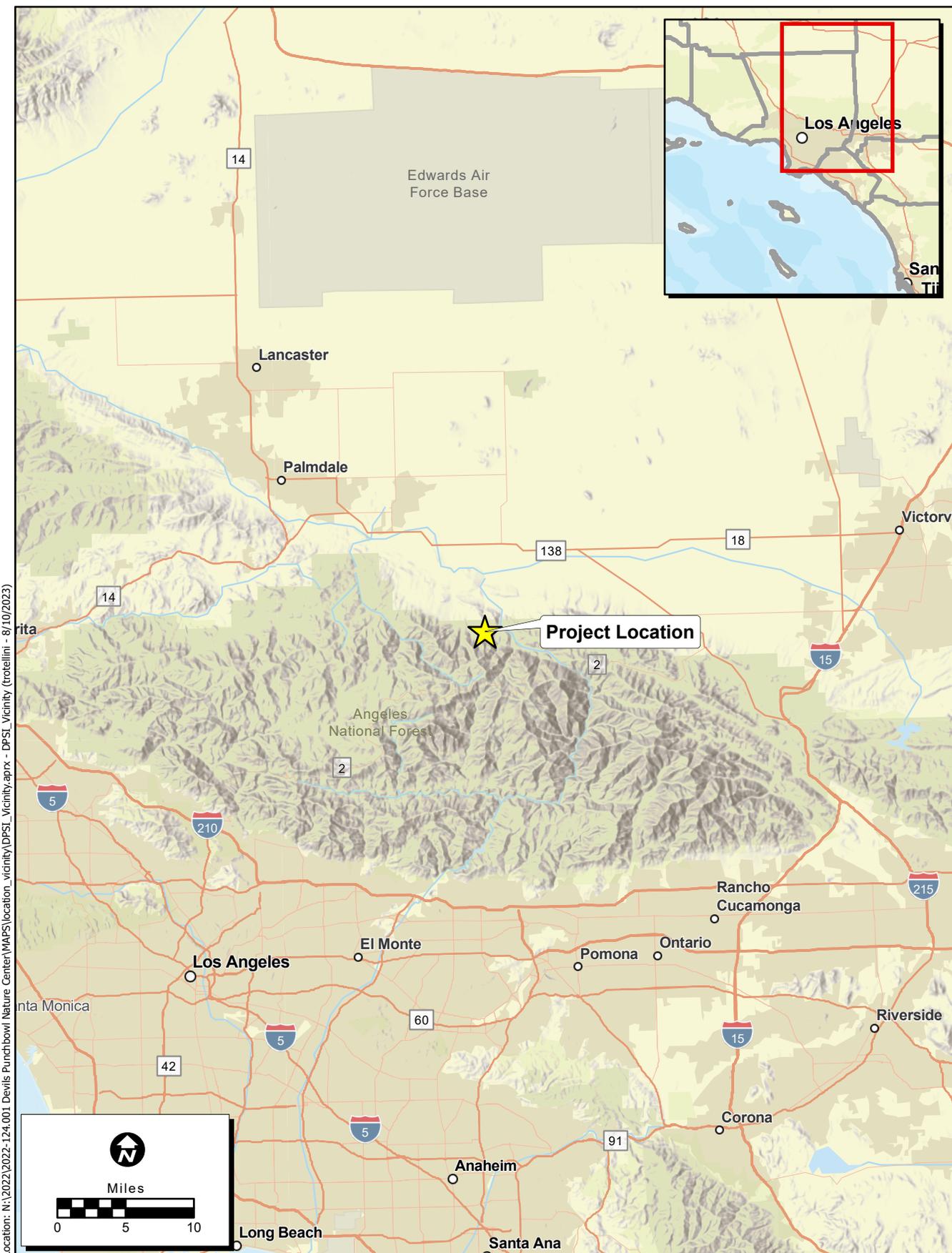
The surveys of the Project Area were conducted to identify biological resources that could be affected by the Proposed Project pursuant to the terms of the California Environmental Quality Act (CEQA), and for the purposes of identifying any biological constraints that would affect the site plan for the Project. The Project will be subject to county, state, and federal regulations regarding compliance with the federal Endangered Species Act (ESA), California ESA, Migratory Bird Treaty Act (MBTA), and California Fish and Game Code.

1.1 Project Description and Location

The Project Area is located within the Devil's Punchbowl Natural Area south of the Valyermo community in the County of Los Angeles, California (Figure 1). The Project Area, as depicted on the U.S. Geological Survey (USGS) 7.5-minute Valyermo topographic quadrangle, lies within Section 19 of Township 4 North, and Range 9 West (Figure 2). The elevation of the Project Area is approximately 4,650 feet above mean sea level.

In 2020 heavy winds pushed the Bobcat Fire over the San Gabriel Mountains into the community of Juniper Hills. The Devil's Punchbowl Nature Center was lost in the fire as it descended towards the desert floor north of the National Forest. This Project entails planning for the replacement of the Nature Center with a new building while also making improvements to the surrounding support site elements including trail heads, Americans with Disabilities Act access to buildings and trails, picnic areas and shade structures.

The proposed concept builds on the theme of site transformation, rebirth, and a new way to experience the landscape of Devil's Punchbowl. The architecture is inset into the landscape within the footprint of previously disturbed areas of the site and also includes a covered exterior courtyard. By grouping and sinking the buildings into the earth, the roof of the facility now becomes a usable lookout platform to experience the Punchbowl from a higher viewpoint. An accessible circular path to the south brings visitors from the parking lot to the rim and invites visitors to explore the desert landscape restored along the edges of the path and adjacent to the new building. The architecture gently emerges from its surroundings as one travels down the path and makes their way to the rim of the Devil's Punchbowl. The

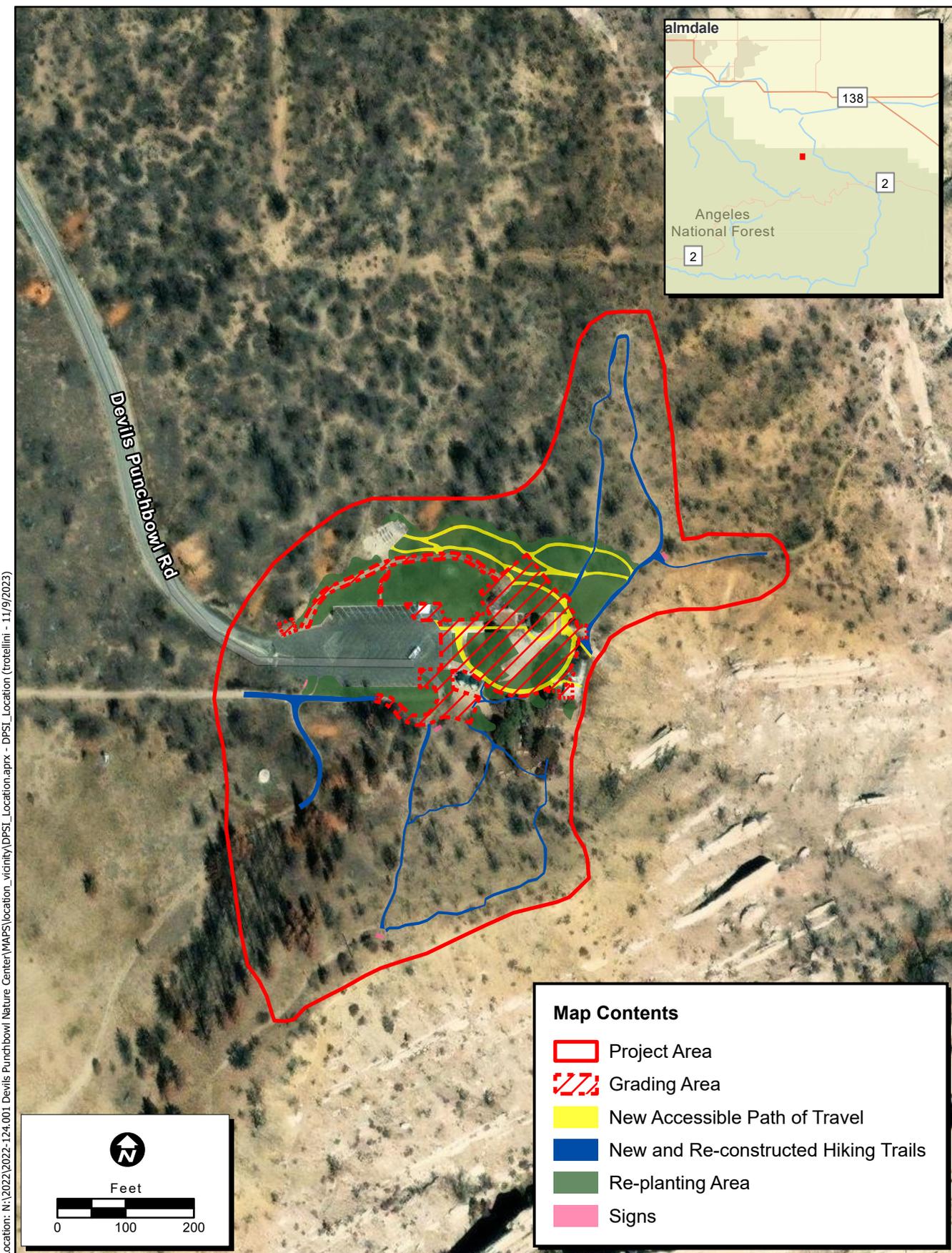


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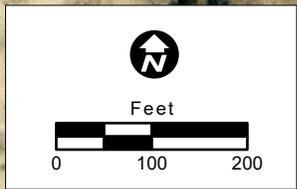
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Figure 1. Project Vicinity





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Map Contents

-  Project Area
-  Grading Area
-  New Accessible Path of Travel
-  New and Re-constructed Hiking Trails
-  Re-planting Area
-  Signs

Map Date: 11/9/2023

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Figure 2. Project Location

newly planted native plantings will blend into the existing surrounding landscape and over time will imbed the architecture seamlessly into the site.

Elements of the site and proposed building will include:

- 3,245 square feet of building that includes Nature Center, Administrative offices, and a gift shop;
- Picnic areas;
- Americans with Disabilities Act access to buildings and trails;
- Improvements to the trailheads (e.g., signage, fencing);
- Green roof;
- Reinforced masonry structure;
- Fire-rated board form concrete panels in sand color proposed for exterior;
- Protection of all existing remaining healthy trees on site;
- Natural ventilation;
- Natural lighting and skylights;
- Storm water collection and reuse;
- Solar panels in parking lot;
- All proposed planting to be native;
- Seed collection and starts for local native revegetation such as local manzanita seeds for future use;
- Shade structures for immediate shade protection;
- Planting native trees to provide shade in the future;
- Local materials such as rocks on façade; and
- Solar canopies over parking lot.

No additional parking will be included as part of this Project.

For the purposes of this biological resources analysis, the Project Area includes the existing parking lots and structures onsite, a grading area where new facilities would be developed, areas of new accessible paths of travel, new and re-construction hiking trails, signs, and re-planting areas. The footprint of the Project Area extends beyond areas where direct impacts would occur.

2.0 REGULATORY FRAMEWORK

This biological reconnaissance survey was conducted to identify potential issues and ensure compliance with state and federal regulations regarding listed, protected, and sensitive species. The regulations are detailed below.

2.1 Federal Regulations

2.1.1 The Federal Endangered Species Act

The federal ESA protects plants and animals that are listed as endangered or threatened by the U.S. Fish and Wildlife Service (USFWS) and the National Marine Fisheries Service. Section 9 of the ESA prohibits the taking of endangered wildlife, where taking is defined as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, collect, or attempt to engage in such conduct” (50 Code of Federal Regulations [CFR] 17.3). For plants, this statute governs removing, possessing, maliciously damaging, or destroying any endangered plant on federal land and removing, cutting, digging up, damaging, or destroying any endangered plant on non-federal land in knowing violation of state law (16 U.S. Code 1538). Under Section 7 of the ESA, federal agencies are required to consult with the USFWS if their actions, including permit approvals or funding, could adversely affect a listed (or proposed) species (including plants) or its critical habitat. Through consultation and the issuance of a biological opinion, the USFWS may issue an incidental take statement allowing take of the species that is incidental to an otherwise authorized activity provided the activity will not jeopardize the continued existence of the species. Section 10 of the ESA provides for issuance of Incidental Take Permits (ITP) where no other federal actions are necessary provided a Habitat Conservation Plan (HCP) is developed.

2.1.2 Migratory Bird Treaty Act

The MBTA implements international treaties between the U.S. and other nations devised to protect migratory birds, any of their parts, eggs, and nests from activities including hunting, pursuing, capturing, killing, selling, and shipping, unless expressly authorized in the regulations or by permit. As authorized by the MBTA, the USFWS issues permits to qualified applicants for the following types of activities: falconry, raptor propagation, scientific collecting, special purposes (rehabilitation, education, migratory game bird propagation, and salvage), take of depredating birds, taxidermy, and waterfowl sale and disposal. The regulations governing migratory bird permits can be found in 50 CFR Part 13 General Permit Procedures and 50 CFR Part 21 Migratory Bird Permits. The State of California has incorporated the protection of birds of prey in Sections 3800, 3513, and 3503.5 of the California Fish and Game Code.

2.1.3 Federal Clean Water Act

Under Section 404 of the federal Clean Water Act (CWA), potential Waters of the U.S., including wetlands, may be regulated by the U.S. Army Corps of Engineers (USACE). The limit of USACE jurisdiction for non-tidal watercourses (without adjacent wetlands) is defined in 33 Code of Federal Regulations 328.4(c)(1) as the “Ordinary High-Water Mark” (OHWM).

The OHWM is defined as the *line on the shore established by the fluctuations of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas*. The upstream limits of other waters are defined as the point where the OHWM is no longer perceptible.

Jurisdictional Waters of the U.S. are delineated in accordance with the "Revised Definition of 'Waters of the United States'" rule, published in the *Federal Register* in 2022 which became final on January 18, 2023. This rule, set forth by the United States Environmental Protection Agency and USACE, was consistent with the pre-2015 regulatory definition as all waters that are currently used, or were used in the past, or may be susceptible to use in interstate commerce, including all waters subject to the ebb and flow of the tide. This definition also includes all interstate waters, including interstate wetlands, interstate lakes, rivers, streams (including all intermittent and ephemeral streams), mudflats, sand flats, sloughs, and prairie potholes, wet meadows, playa lakes, or natural ponds where the use, degradation, or destruction of which could affect interstate or foreign commerce. Under this rule, Waters of the U.S. (WOTUS) do not include prior converted cropland.

The definition of WOTUS in accordance with this rule (40 CFR 230.3[s]), is summarized below.

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters: (i) Which are or could be used by interstate or foreign travelers for recreational or other purposes; or (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or (iii) Which are used or could be used for industrial purpose by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the U.S. under the definition;
5. Tributaries of waters identified in paragraphs (s)(1)-(4) of this section;
6. The territorial sea; and
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not WOTUS.

On May 25, 2023, the Supreme Court of the United States adopted a narrower definition of WOTUS in the case *Sackett v. Environmental Protection Agency*. Under the majority opinion, WOTUS refers to

“geographical features that are described in ordinary parlance as ‘streams, oceans, rivers, and lakes’ and to adjacent wetlands that are ‘indistinguishable’ from those bodies of water due to a continuous surface connection.” On August 29, 2023, the agencies issued a final rule to amend the final “Revised Definition of ‘Waters of the United States’” rule to conform the definition of “waters of the United States” to the U.S. Supreme Court’s May 25, 2023, decision in the case of *Sackett v. Environmental Protection Agency*.

Parts of the January 2023 Rule are invalid under the Supreme Court’s interpretation of the CWA in the *Sackett* decision. Therefore, the agencies have amended key aspects of the regulatory text to conform to the Court’s decision. Key changes under the amendment include:

- Definition of “adjacent” is now “having a continuous surface connection;”
- Only tributaries that are relatively permanent, standing or continuously flowing bodies of water (or tributaries with a continuous surface connection to those) are considered jurisdictional;
- Interstate wetlands are no longer jurisdictional just by virtue of being interstate; and
- Significant nexus test is eliminated.

Where areas jurisdictional to the USACE are present, and will be impacted by a project, the project proponent must usually apply for permitting with the agency, which generally consists of submittal of a Pre-Construction Notification under Section 404 of the CWA.

2.2 State and Local Regulations

2.2.1 California Endangered Species Act

The California ESA generally parallels the main provisions of the ESA but, unlike its federal counterpart, the California ESA applies the take prohibitions to species proposed for listing (called “candidates” by the state). Section 2080 of the California Fish and Game Code prohibits the taking, possession, purchase, sale, and import or export of endangered, threatened, or candidate species, unless otherwise authorized by permit or in the regulations. Take is defined in Section 86 of the California Fish and Game Code as “hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” The California ESA allows for take incidental to otherwise lawful development projects. State lead agencies are required to consult with the California Department of Fish and Wildlife (CDFW) to ensure that any action they undertake is not likely to jeopardize the continued existence of any endangered or threatened species or result in destruction or adverse modification of essential habitat.

2.2.2 Fully Protected Species

The State of California first began to designate species as *fully protected* prior to the creation of the federal and California ESAs. Lists of fully protected species were initially developed to provide protection to those animals that were rare or faced possible extinction, and included fish, amphibians, reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESA. Previously, the regulations that implement the Fully Protected Species

Statute (California Fish and Game Code § 4700) provide that fully protected species may not be taken or possessed at any time. However, as of July 10, 2023, Senate Bill 147 (SB147) was signed into law, authorizing CDFW to issue take permits under the California ESA for fully protected species for qualifying projects through 2033. As stated in section 2081.15 of SB147, qualifying projects include:

- A maintenance, repair, or improvement project to the State Water Project, including existing infrastructure, undertaken by the Department of Water Resources;
- A maintenance, repair, or improvement project to critical regional or local water agency infrastructure;
- A transportation project, including any associated habitat connectivity and wildlife crossing project, undertaken by a state, regional, or local agency, that does not increase highway or street capacity for automobile or truck travel;
- A wind project and any appurtenant infrastructure improvement, and any associated electric transmission project carrying electric power from a facility that is located in the state to a point of junction with any California based balancing authority; and
- A solar photovoltaic project and any appurtenant infrastructure improvement, and any associated electric transmission project carrying electric power from a facility that is located in the state to a point of junction with any California-based balancing authority.

2.2.3 Western Joshua Tree Conservation Act

The Western Joshua Tree Conservation Act (WJTCA) (Senate Bill 122) was passed by California state legislation on June 27, 2023, and went into effect on July 10, 2023. The WJTCA was developed to conserve western Joshua trees (*Yucca brevifolia*) while streamlining the permitting process for projects involved with renewable energy and housing development. The WJTCA works alongside the California ESA while the western Joshua tree remains a Candidate for listing. While the western Joshua tree is under review for official listing, projects involving the take of western Joshua tree may obtain authorization as provided by the California ESA (i.e., Incidental Take Permit) or elect to pay fees for impacted trees as outlined in the WJTCA, according to impacted tree height. Projects involving the take of western Joshua tree must demonstrate compliance with conditions outlined in the WJTCA. At a minimum, this includes submittal to the CDFW, for approval, a census of all western Joshua trees on a project site.

2.2.4 California Fish and Game Code

2.2.4.1 Native Plant Protection Act

The Native Plant Protection Act (NPPA) of 1977 (California Fish and Game Code §§ 1900-1913) was created with the intent to “preserve, protect and enhance rare and endangered plants in this State.” The NPPA is administered by CDFW. The California Fish and Game Commission has the authority to designate native plants as “endangered” or “rare” and to protect endangered and rare plants from take. The California ESA of 1984 (California Fish and Game Code § 2050-2116) provided further protection for rare and endangered plant species, but the NPPA remains part of the California Fish and Game Code.

2.2.4.2 Streambed Alteration Agreement

Pursuant to Section 1602 of the California Fish and Game Code, a Streambed Alteration Agreement (SAA) application must be submitted for “any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake” (CDFW 2021). In Title 14 of the California Code of Regulations, Section 1.72, the CDFW defines a *stream* (including creeks and rivers) as “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation.”

In Chapter 9, Section 2785 of the Fish and Game Code, *riparian habitat* is defined as “lands which contain habitat which grows close to, and which depends upon, soil moisture from a nearby freshwater source.”

The CDFW’s jurisdiction includes drainages with a definable bed, bank, or channel and areas associated with a drainage channel that support intermittent, perennial, or subsurface flows; supports fish or other aquatic life; or supports riparian or hydrophytic vegetation. It also includes areas that have a hydrologic source.

The CDFW will determine if the proposed actions will result in diversion, obstruction, or change of the natural flow, bed, channel, or bank of any river, stream, or lake that supports fish or wildlife. If warranted, the CDFW will issue an SAA that includes measures to protect affected fish and wildlife resources; this SAA is the final proposal agreed upon by the CDFW and the applicant.

2.2.4.3 Migratory Birds

The CDFW enforces the protection of nongame native birds in §§ 3503, 3503.5, and 3800 of the California Fish and Game Code. Section 3513 of the California Fish and Game Code prohibits the possession or take of birds listed under the MBTA. These sections mandate the protection of California nongame native birds’ nests and also make it unlawful to take these birds. All raptor species are protected from “take” pursuant to California Fish and Game Code § 3503.5 and are also protected at the federal level by the MBTA of 1918.

2.2.5 Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act requires “any person discharging waste, or proposing to discharge waste, within any region that could affect the waters of the State to file a report of discharge” with the Regional Water Quality Control Board (RWQCB) through *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (Procedures, California Code of Regulations [CCR], title 23, § 3855) (State Water Resources Control Board 2021). *Waters of the State* is defined as any surface water or groundwater, including saline waters, within the boundaries of the State (California Water Code § 13050[e]). Pollution is defined as an alteration of the quality of the waters of the state by waste to a degree that unreasonably affects its beneficial uses (California Water Code § 13050) and includes filling in waters of the State. Note that CCR, title 23, § 3855 applies only to individual water quality certifications, but the new Procedures extend the application of § 3855 to individual waste discharge requirements for discharges of dredged or fill material to Waters of the State and waivers thereof.

A permit for impacts to Waters of the State of California would likely be required under the CWA and/or Porter-Cologne Water Quality Control Act. To determine whether a project should be regulated pursuant to the Porter-Cologne Water Quality Control Act, the RWQCB considers whether project activities could impact the quality of Waters of the State.

On September 27, 2023, the U.S. Environmental Protection Agency (USEPA) published its final 2023 Clean Water Act Section 401 Quarter Quality Certification Improvement Rule (88 Fed. Reg. 66558.) The final 2023 Rule revises and replaces the 2020 Rule's regulatory requirements for water quality certification that were adopted by the prior federal administration. The updates realign the scope of the Section 401 certification process with established practices, while also restoring the roles of states, territories, and authorized Tribes as certifying agencies.

2.2.6 Los Angeles County Oak Tree Ordinance

Any tree of the oak tree genus (*Quercus*) which is eight inches or more in diameter at breast height (dbh), or in the case of oaks with multiple trunks, a combined diameter of 12 inches or more of the two largest trunks; on any lot or parcel of land within the unincorporated area of Los Angeles County; or any tree that has been provided as a replacement tree, pursuant to Section 22.56.2180, on any lot or parcel of land within the unincorporated area of Los Angeles County is protected under this ordinance. Dbh is defined as diameter of the tree when measured 4.5 feet above mean natural grade. Pursuant to the Los Angeles County Oak Tree Ordinance, a person shall not cut, destroy, remove, relocate, inflict damage, or encroach into the protected zone of any oak tree, without first obtaining a permit. The protected zone is defined as 5 feet from the drip-line or 15 feet from the trunk, whichever is greater.

2.2.7 Los Angeles County Oak Woodlands Conservation Management Plan (OWCMP)

The Oak Tree Ordinance (Section 22.56.2050 of the Los Angeles County Code) is intended to protect individual trees while the OWCMP (Los Angeles County Oak Woodlands Habitat Conservation Strategic Alliance 2011) is intended to protect oak woodlands. A project may be subject to both the ordinance and plan requirements. This plan defines oak woodlands as an oak stand, including its understory, which consists of two or more oak trees of at least 5 inches dbh, with greater than 10 percent canopy cover or that may have historically supported greater than 10 percent canopy cover as early as January 1, 2005. The main goal of the OWCMP is to preserve and restore oak woodlands so they are conserved in perpetuity with no net loss of existing woodlands.

2.2.8 Los Angeles County Significant Ecological Areas (SEA)

SEAs are officially designated areas within Los Angeles County (County) identified for their biological value. These areas warrant special management because they contain biotic resources that are considered to be rare or unique; are critical to the maintenance of wildlife; represent relatively undisturbed areas of County habitat types; or serve as linkages (Los Angeles County 2015).

The SEA Program is the name given to the regulations, policies, and maps by the County used to guide development within SEAs. As stated in the Chapter 9 of the County's General Plan:

"The objective of the SEA Program is to conserve genetic and physical diversity by designating biological resource areas that are capable of sustaining themselves into the future. However, SEAs are not wilderness preserves. Much of the land in SEAs is privately-held, used for public recreation, or abuts developed areas. The SEA Program must therefore balance the overall objective of resource preservation against other critical public needs. The General Plan goals and policies are intended to ensure that privately-held lands within the SEAs retain the right of reasonable use, while avoiding activities and developments that are incompatible with the long-term survival of the SEAs."

The County relies on the SEA Program to balance preservation of the County's natural biodiversity with the development rights of property owners located within the SEAs. There are three main components of the SEA Program; 1) SEA Boundary Map, 2) General Plan Policies, and 3) SEA Ordinance.

The General Plan establishes the location of the SEAs, the description of SEA (i.e., habitat types, unique resources), and program policies. The SEA Ordinance, a component of the County Zoning Code (Title 22) is the implementation tool of the SEA Program which establishes the permitting standards and process for development within SEAs.

2.2.9 California Environmental Quality Act Significance Criteria

Section 15064.7 of the CEQA Guidelines encourages local agencies to develop and publish the thresholds the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study checklist contained in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. According to Appendix G of the CEQA Guidelines and County of Los Angeles thresholds, a project would have significant effect on the biological environment if it would:

- 1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife (CDFW) or U.S. Fish and Wildlife Service (USFWS);
- 2) Have a substantial adverse effect on any sensitive natural communities (e.g., riparian habitat, coastal sage scrub, oak woodlands, non-jurisdictional wetlands) identified in local or regional plans, policies, regulations or by CDFW or USFWS;
- 3) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marshes, vernal pools, coastal wetlands, etc.) through direct removal, filling, hydrological interruption, or other means;
- 4) 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;

- 5) Convert oak woodlands (as defined by the state, oak woodlands are oak stands with greater than 10% canopy cover with oaks at least 5 inch in diameter measured at 4.5 feet above mean natural grade) or other unique native woodlands (juniper, Joshua, southern California black walnut, etc.);
- 6) Conflict with any local policies or ordinances protecting biological resources, including Wildflower Reserve Areas (L.A. County Code, Title 12, Ch. 12.36), the Los Angeles County Oak Tree Ordinance (L.A. County Code, Title 22, Ch. 22.174), the Significant Ecological Areas (SEAs) (L.A. County Code, Title 22, Ch. 102), Specific Plans (L.A. County Code, Title 22, Ch. 22.46), Community Standards Districts (L.A. County Code, Title 22, Ch. 22.300 et seq.), and/or Coastal Resource Areas (L.A. County General Plan, Figure 9.3); or
- 7) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved state, regional, or local habitat conservation plan.

An evaluation of whether an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, state, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

3.0 METHODS

3.1 Literature Review

Prior to conducting the biological reconnaissance surveys, ECORP biologists performed a literature review using the CDFW's California Natural Diversity Database (CNDDDB; CDFW 2023a) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI; CNPS 2023) to determine the special-status plant and wildlife species that have been documented near the Project Area. ECORP searched CNDDDB and CNPSEI records within the Project Area boundaries as depicted on USGS 7.5-minute Valyermo topographic quadrangle, plus the surrounding eight topographic quadrangles including Juniper Hills, Littlerock, Lovejoy Buttes, El Mirage, Mescal Creek, Mount San Antonio, Crystal Lake, and Waterman Mountain. A literature review was conducted initially prior to the reconnaissance survey in 2022 and an updated literature review was conducted in 2023. The CNDDDB and CNPSEI contain records of reported occurrences of federally or state-listed endangered, threatened, proposed endangered or threatened species, CDFW Species of Special Concern (SSC), and/or other special-status species or habitat that may occur within or near the Project. Additional information was gathered from the following sources and includes, but is not limited to:

- State and Federally Listed Endangered and Threatened Animals of California (CDFW 2023b);
- Special Animals List (CDFW 2023c);

- The Jepson Manual: Vascular Plants of California (Baldwin et al. 2012);
- *A Manual of California Vegetation*, 2nd Edition (Sawyer et al. 2009); and
- various online websites (e.g., Calflora 2023).

Using this information and observations in the field, a list of special-status plant and animal species that have the potential to occur on or near the Project Area was generated and are provided as Appendices D and E, respectively. For the purposes of this assessment, special-status species are defined as plants or animals that:

- have been designated as either rare, threatened, or endangered by CDFW, CNPS, or the USFWS, and/or are protected under either the federal ESA or California ESA;
- are candidate species being considered or proposed for listing under these same acts;
- are fully protected by the California Fish and Game Code, §§ 3511, 4700, 5050, or 5515; and/or
- are of expressed concern to resource and regulatory agencies or local jurisdictions.

Special-status species reported for the region in the literature review or for which suitable habitat occurs on the site were assessed for their potential to occur within the Project Area based on the following guidelines:

- **Present:** The species was observed on site during a site visit or focused survey.
- **High:** Habitat (including soils and elevation factors) for the species occurs within the Project Area and a known occurrence has recently been recorded (within the last 20 years) within 5 miles of the area.
- **Moderate:** Habitat (including soils and elevation factors) for the species occurs within the Project Area and a documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or a recently documented observation occurs within 5 miles of the area and marginal or limited amounts of habitat occurs in the Project Area.
- **Low:** Limited or marginal habitat for the species occurs within the Project Area and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or suitable habitat strongly associated with the species occurs on site, but no records or only historic records were found within the database search.
- **Presumed Absent:** Species was not observed during a site visit or focused surveys conducted in accordance with protocol guidelines at an appropriate time for identification; habitat (including soils and elevation factors) does not exist on site; or the known geographic range of the species does not include the Project Area.

Note that location information on some special-status species may be of questionable accuracy or unavailable. Therefore, for survey purposes, the environmental factors associated with a species'

occurrence requirements may be considered sufficient reason to give a species a positive potential for occurrence. In addition, just because a record of a species does not exist in the databases does not mean it does not occur. In many cases, records may not be present in the databases because an area has not been surveyed for that species.

A review of the National Wetlands Inventory (NWI; USFWS 2022) and the corresponding USGS topographic maps was also conducted to determine if there were any blue line streams or drainages present in the Project Area that potentially fall under the jurisdiction of either federal or state agencies.

The Bobcat Fire Recovery Plan (ECORP 2021) prepared by ECORP for the Devil's Punchbowl Natural Area and Nature Center was also reviewed.

3.2 Field Survey

3.2.1 Biological Reconnaissance Survey

The biological reconnaissance surveys were conducted by walking the entire Project Area to determine the vegetation communities and wildlife habitats present on the site. The biologists documented the plant and animal species present in the Project Area and the location and condition of the site were assessed for the potential to provide habitat for special-status plant and wildlife species. Data were recorded on a Global Positioning System (GPS) unit, field notebooks, and/or maps. Photographs were taken during the survey to provide visual representation of the conditions within the Project Area. The Project Area was also examined to assess its potential to facilitate wildlife movement or function as a movement corridor for wildlife moving throughout the region. In addition, the biologists documented the vegetation communities present in the Project Area. Two biological reconnaissance surveys were conducted, one on May 12, 2022 and one on September 29, 2023 to update existing conditions and account for changes to the Project Area.

Plant and wildlife species, including any special-status species that were observed during the survey, were recorded. Plant nomenclature follows that of *The Jepson Manual: Vascular Plants of California* (Baldwin et al. 2012). Wildlife nomenclature follows Society for the Study of Amphibians and Reptiles (SSAR, 2017), *Check-list of North American Birds* (Chesser et al. 2023), and the *Revised Checklist of North American Mammals North of Mexico* (Bradley et al. 2014).

In instances where a special-status species was observed, the date, species, location and habitat, and GPS coordinates were recorded. The locations of special-status species observations were recorded using a handheld GPS in North American Datum 1983, Universal Transverse Mercator coordinates, Zone 11S.

Prior to the biological reconnaissance surveys conducted for this report, immediately following the Bobcat Fire in 2020, the Project Area was mapped by ECORP botanists to determine what communities were present prior to the fire in preparation of the Bobcat Fire Recovery Plan (ECORP 2021). This mapping effort also included the documentation of any rare plants observed onsite, the results of which are included in this report.

3.2.2 Focused Special-status Plant Surveys

A special-status plant survey was conducted by qualified biologists with extensive experience conducting botanical surveys and knowledge regarding plant taxonomy, plant species in the region, and special-status plant species. The special-status plant survey was conducted within the entire Project Area and 50-foot buffer concurrent with the biological reconnaissance survey conducted in May of 2022. Target species included all species identified during the literature review for the Project.

The survey was conducted using guidelines from the following resources: 1) Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants (USFWS 1998), 2) Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018), and 3) CNPS Botanical Survey Guidelines (CNPS 2001).). To the extent possible, the survey was conducted on foot using appropriately spaced transects to allow for 100 percent visual coverage of the Project Area. Areas that were not safely accessible on foot were scanned using binoculars. The survey was conducted to coincide with the blooming periods of the majority of target species and during a period when target species are readily identifiable. All plants species detected during the survey were identified using the Jepson Manual: Vascular Plants of California (Baldwin et al. 2012). Any special-status plant species observed during the surveys were mapped using a handheld Global Navigation Satellite System device.

3.2.3 Preliminary Aquatic Resources Delineation

A desktop review was conducted to identify potential streams and hydric soils on the property. This entailed examination of the Natural Resources Conservation Service Web Soil Survey (NRCS, 2022), NWI mapping, aerial photography, and the USGS topographic mapping of the Project Area to aid in identifying potential biological constraints to the Project due to jurisdictional streams or features. A preliminary Aquatic Resources Delineation (ARD) of the site was conducted in the field. The property was walked to look for signs of OHWM as defined by the *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (USACE 2008). The boundaries of potential aquatic resources, if present, were estimated by the presence of bed and bank topography. A formal ARD was not completed as part of this biological survey and assessment.

4.0 RESULTS

Summarized below are the results of the literature review and field surveys, including site characteristics, vegetation communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors).

4.1 Literature Review

The literature review and database searches resulted in records for 50 special-status plant species and 26 special-status wildlife species that could occur on and/or near the Project Area.

4.1.1 Special-Status Plants and Wildlife

The literature review and database searches identified 50 special-status plant species and 26 special-status wildlife species that could occur near the Project Area. A list was generated from the results of the literature review and the Project Area was evaluated for suitable habitat that could support any of the special-status plant or wildlife species on the list.

4.1.2 U.S. Fish and Wildlife Service Designated Critical Habitat

The Project Area is not located within any USFWS-designated Critical Habitat. Four designated Critical Habitat regions are present within 10 miles of the Project Area: three for the mountain yellow-legged frog (*Rana muscosa*), and one for the arroyo toad (*Anaxyrus californicus*).

4.1.3 Preliminary Aquatic Resources Delineation Literature Review

According to the review of the NRCS Web Soil Survey (NRCS 2022) the soil type in the Project Area is primarily Haploxerolls, warm-Vista family association, 2- to 30-percent slope with rock outcrops, neither of which are considered hydric. No aquatic features were depicted within the Project Area in the NWI review. The closest documented aquatic resource is Holmes Creek located approximately 0.1 mile west of the Project Area.

4.2 Biological Reconnaissance Survey

The biological reconnaissance surveys were conducted on May 12, 2022 by ECORP biologists Lauren Simpson and Carley Adams and on September 29, 2023 by ECORP biologists Lauren Simpson and Christine Tischer, all of whom have extensive experience conducting reconnaissance- and protocol-level surveys for wildlife and plant species. The special-status plant survey was conducted concurrently with the May 12, 2022 survey. Summarized below are the results of the biological reconnaissance surveys and plant survey, including site characteristics, plant communities, wildlife, special-status species, and special-status habitats (including any potential wildlife corridors). Weather conditions during the surveys are summarized in Table 1.

Date	Surveyors	Time		Temperature (°F)		Cloud Cover (%)		Wind Speed (mph)	
		Start	End	Min	Max	Min	Max	Min	Max
5/12/2022	Carley Adams, Lauren Simpson	0800	1030	54.4	64	0	0	1-4	3-5
9/29/2023	Christine Tischer, Lauren Simpson	1015	1300	71.5	77.1	0	0	1-3	2-5

Note: °F = Degrees Fahrenheit; mph = Miles per Hour

4.2.1 Property Characteristics

Immediately following the Bobcat Fire the Project Area was mapped by ECORP botanists to determine what communities were present prior to the fire. Based on this mapping effort it was determined that the Project Area primarily consisted of single-leaf pinyon – juniper woodland vegetation communities. During the biological reconnaissance survey conducted in May 2022 the Project Area consisted of burned and resprouting vegetation, and the plant species dominating those areas were typical of chaparral communities. Between the 2022 and 2023 surveys the Project Area characteristics were largely consistent; however, during the updated survey in September 2023, further vegetation recovery and growth within the chaparral communities were observed. There are remnants of previously existing structures present in the Project Area including the nature center. There are also other facilities onsite including a parking lot and restroom facilities. The Project Area is part of the Devil’s Punchbowl Nature Area within the San Gabriel Mountains Wilderness Area. Representative site photographs are presented in Appendix A.

4.2.2 Vegetation Communities

Native vegetation communities present in the Project Area include recovering chaparral communities and yerba santa scrub (*Eriodictyon* ssp. Shrubland Alliance) with additional areas falling under the land cover types landscaped, developed, or disturbed. These communities and land cover types within the Project Area are depicted on Figure 3.

4.2.2.1 Chaparral

Areas mapped as chaparral did not fit into any of the alliances listed in *A Manual of California Vegetation, Second Edition* (Sawyer et al. 2009). Due to the high level of disturbance caused by the Bobcat Fire, which burned from September 2020 to December 2020, these areas are still recovering and are currently dominated by species typically observed in chaparral communities. Many of these areas were previously mapped as single-leaf pinyon – juniper woodland (Global [G] Rank 5, State [S] Rank 4); however, single-leaf pinyon (*Pinus monophylla*) and California juniper (*Juniperus californica*) do not readily resprout following fire and the plant species currently dominating these areas are typical of chaparral communities. Common plant species observed within the areas mapped as chaparral included flannel bush (*Fremontodendron californicum*), chaparral bush mallow (*Malacothamnus fasciculatus*), Tucker’s oak (*Quercus john-tuckeri*), fragrant sumac (*Rhus aromatica*), and thickleaf yerba santa (*Eriodictyon crassifolium*). A high level of herbaceous cover was also present including Douglas’ milk-vetch (*Astragalus douglasii*), field primrose (*Camissonia campestris*), sanddune wallflower (*Erysimum capitatum*), Fremont’s phacelia (*Phacelia fremontii*), and splendid woodland gilia (*Saltugilia splendens*). In addition, several individuals of single-leaf pinyon pine and bigberry manzanita (*Arctostaphylos glauca*) had been planted in these areas in an effort to restore them to their pre-fire condition. Approximately 6.6 acres of chaparral were mapped within the Project Area; however only 0.5 acre occurs within proposed impact areas of the Project design (e.g., grading areas, new trails).

4.2.2.2 Yerba Santa Scrub (*Eriodictyon* spp. Shrubland Alliance)

Due to the high level of disturbance caused by the Bobcat Fire, these areas are still recovering. Some of these areas were previously dominated by Coulter's pine (*Pinus coulteri*); however, this species does not readily resprout following fire. Common plant species observed within the areas mapped as yerba santa scrub (G4, S4) included thicket yerba santa, common phacelia (*Phacelia distans*), Fremont's phacelia, fragrant sumac, and desert stipa (*Stipa speciosa*). Approximately 1.0 acre of yerba santa scrub was mapped within the Project Area; however less than 0.1 acre occurs within proposed impact areas of the Project design (grading areas, new trails, etc.).

4.2.2.3 Landscaped

Landscaped is not a vegetation classification, but rather a land cover type. Landscaped areas were present within the Project Area near and adjacent to the existing structures onsite. Landscaped areas were made up of various native species including bigberry manzanita, mountain mahogany (*Cercocarpus betuloides*), single-leaf pinyon, black oak (*Quercus kelloggii*), and western Joshua tree. Approximately 0.4 acre of landscaped areas were mapped within the Project Area, of which 0.2 acre falls into proposed impact areas of the Project design (grading areas, new trails, etc.).

4.2.2.4 Disturbed

Disturbed is not a vegetation classification, but rather a land cover type. Areas mapped as disturbed were found to have been heavily influenced by human activities and were mostly devoid of native vegetation but lacked any development. Soils in these areas typically showed some level of compaction and vegetation was mostly limited to nonnative herbaceous species including foxtail brome (*Bromus madritensis*), cheatgrass (*Bromus tectorum*), and false barley (*Hordeum murinum*). Approximately 0.2 acre of disturbed areas were mapped within the Project Area, of which less than 0.1 acre falls into proposed impact areas of the Project design (grading areas, new trails, etc.).

4.2.2.5 Developed

Developed is not a vegetation classification, but rather a land cover type. Areas mapped as developed were found to have infrastructure present and were devoid of vegetation due to lack of growing substrate. Developed areas within the Project Area include the parking lot, Devil's Punchbowl Road, and the existing structures onsite. Approximately 1.3 acres of developed areas were mapped within the Project Area, of which approximately 0.4 acre falls into proposed impact areas of the Project design (grading areas, new trails, etc.).

4.2.3 Plants

Plant species observed in the Project Area were those typically observed in chaparral communities for the times of the year in which the surveys were conducted. Dominant species included flannel bush, thicket yerba santa, chaparral bush mallow, Tucker's oak, and fragrant sumac. Nonnative species observed in the Project Area included lamb's quarters (*Chenopodium album*), false barley, foxtail brome, and cheatgrass. A

full list of plant species observed on and immediately adjacent to the Project Area is included in Appendix B.

4.2.4 Wildlife

Wildlife species observed and detected in the Project Area were characteristic of chaparral and scrub habitat. Nine invertebrate species were identified during the 2023 survey including northern white skipper (*Heliopetes ericetorum*), variegated meadowhawk (*Sympetrum corruptum*), funereal duskywing (*Erynnis funeralis*), acmon blue (*Plebejus acmon*), and valley carpenter bee (*Xylocopa sonorina*). Thirty bird species were also detected on and in the vicinity of the Project Area across the two surveys including yellow warbler (*Setophaga petechia*), white-throated swift (*Aeronautes saxatalis*), California scrub-jay (*Apelocoma californica*), California quail (*Callipepla californica*), California towhee (*Melospiza crissalis*), Costa's hummingbird (*Calypte costae*), common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), and mourning dove (*Zenaidura macroura*). Four reptile species were observed onsite: Blainville's horned lizard (*Phrynosoma blainvillii*), San Diegan tiger whiptail (*Aspidoscelis tigris stejnegeri*), Great Basin fence lizard (*Sceloporus occidentalis longipes*), and western side-blotched lizard (*Uta stansburiana elegans*). One mammal species, California ground squirrel (*Otospermophilus beecheyi*), was also observed. A complete list of wildlife species observed on or immediately adjacent to the Project Area is included in Appendix C.

4.2.5 Potential for Special-Status Plant and Wildlife Species to Occur in the Project Area

The literature review and database searches identified 50 special-status plant species and 26 special-status wildlife species that have the potential to occur on or near the Project Area. However, due to the recent effects on the landscape from the Bobcat Fire, many of the species are presumed absent from the Project Area.

4.2.5.1 Special-Status Plants

There were 50 special-status plant species that appeared in the literature review and database searches for the Project Area (CDFW 2023a; CNPS 2023). A list was generated from the results of the literature review and the Project was evaluated for suitable habitat that could support any of the special-status plant species on the list. During the updated 2023 literature review, an additional two species were added to the list for consideration (previously 48 species). Descriptions of the CNPS designations are found in Table 2. Of the 50 special-status plants identified, three were present in the Project Area and three have a low potential to occur due to the presence of limited suitable habitat in the post-fire transitional habitat. The remaining 44 species identified in the literature review are presumed absent from the Project Area. Species were presumed to be absent if suitable habitat, including soils and elevation factors, were not present in the Project Area and/or if that species was not observed during the focused special-status plant survey, if conducted at the appropriate bloom period for that species.

Table 2. CNPS Status Designations	
List Designation	Meaning
1A	Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere
1B	Plants Rare, Threatened, or Endangered in California and Elsewhere
2A	Plants Presumed Extirpated in California, But Common Elsewhere
2B	Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere
3	Plants about which more information is needed; a review list
4	Plants of limited distribution; a watch list
List 1B, 2, and 4 extension meanings:	
.1	Seriously threatened in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
.2	Moderately threatened in California (20 to 80 percent occurrences threatened/moderate degree and immediacy of threat)
.3	Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)

Note: According to California Native Plant Society (CNPS, Skinner and Pavlik 1994), plants on lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10, of the California Fish and Game Code (California Department of Fish and Game 1984). This interpretation is inconsistent with other definitions.

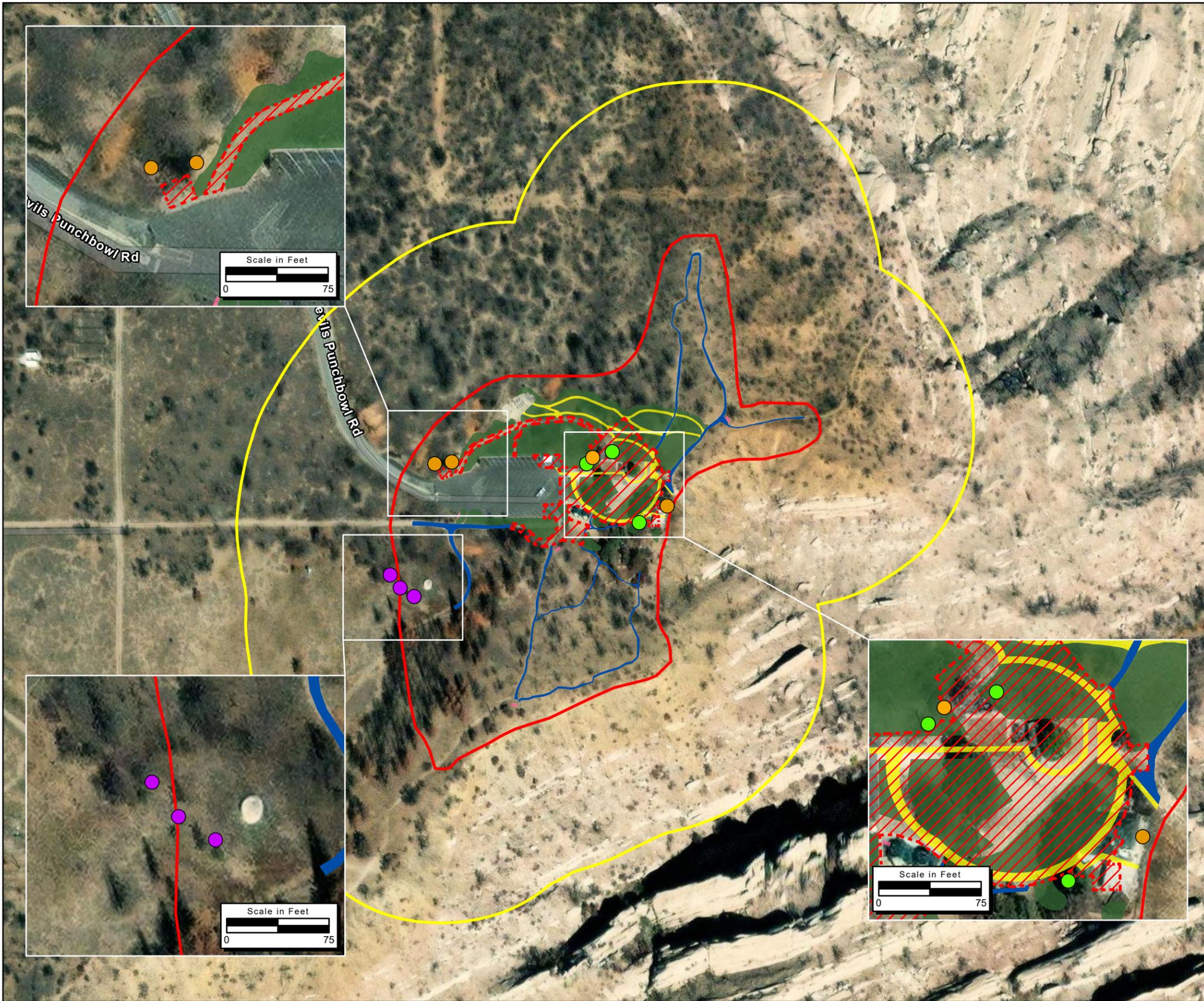
4.2.5.2 Plant Species that are Present

The following plant species were observed in the Project Area or adjacent to the Project Area during the reconnaissance surveys or the habitat mapping that occurred immediately following the Bobcat Fire.

Western Joshua Tree

Western Joshua trees were identified within the Project Area during the 2021 habitat mapping effort (ECORP 2021), the 2022 and 2023 reconnaissance surveys and 2022 rare plant survey. The locations of the western Joshua trees observed are depicted in Figure 4. Based on the existing conditions and vegetation communities in the Project Area, it is likely that these western Joshua trees are previously planted individuals and are not naturally occurring in the Project Area. Western Joshua trees are currently a candidate for state listing under the California ESA which affords the species the same protection as a listed species until an official decision regarding the listing of the species has been confirmed. The western Joshua tree is a member of the agave family that blooms from March to June. It is found in desert flats and slopes.

Location: N:\2022\2022-124.001 Devils Punchbowl Nature Center\WAPS\biological_resources\DPNS_RP_Results.aprx - DPNC_RP_Results_20231109 (trciellini - 11/21/2023)



Map Contents

- Project Area
- Grading Area
- New Accessible Path of Travel
- New and Re-constructed Hiking Trails
- Re-planting Area
- Signs
- 300-ft Buffer

Rare Plant Survey Results

- Beavertail cactus (*Opuntia basilaris* var. *brachyclada*)
- Southern California black walnut (*Juglans californica*)
- Western Joshua tree (*Yucca brevifolia*)

Sources: ESRI
Other Related Info if Needed

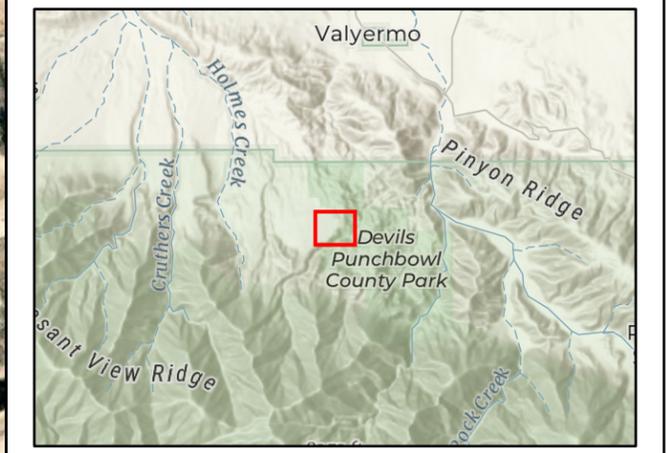


Figure 4. Rare Plant Survey Results
2022-124.001 Devils Punchbowl Nature Center

Southern California Black Walnut

Southern California black walnut (*Juglans californica*) was identified along the southwestern edge of the Project Area during the 2022 and 2023 reconnaissance surveys and 2022 rare plant survey. The locations of the southern California black walnut trees observed are depicted in Figure 4. Southern California black walnut is a CNPS 4.2 species, indicating that it is uncommon and moderately threatened in California (CNPS 2023). Southern California black walnut is a perennial deciduous tree that blooms from March to August. It is found in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats.

Short-Joint Beavertail

Short-joint beavertail (*Opuntia basilaris* var. *brachyclada*) was identified within the Project Area during the 2020 habitat mapping effort (ECORP 2021), the 2022 and 2023 reconnaissance surveys and 2022 rare plant survey. The locations of the short-joint beavertails observed are depicted in Figure 4. Short-joint beavertail is a CNPS 1B.2 species, indicating that it is rare and moderately threatened in California (CNPS 2023). Short-joint beavertail is a perennial stem species that blooms from April to June (occasionally into August). It is found in chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland habitats. Suitable habitat for this species is present within the chaparral habitat in the Project Area.

4.2.5.3 Plant Species with a Low Potential to Occur

The following species was determined to have a low potential to occur in the Project Area because limited or marginal habitat for that species occurs within the transitional chaparral scrub habitat in the Project Area, but no records or only historical records have been observed within 5 miles of the area. The limited size and existing disturbances of the recovering chaparral habitat in the Project Area likely preclude these species from occurring within the Project Area.

- San Gabriel Mountains monardella (*Monardella australis* ssp. *gabrielensis*), CNPS 1B.2
- Mojave monardella (*Monardella exilis*), CNPS 4.2
- Crowned muilla (*Muilla coronata*), CNPS 4.2.

4.2.5.4 Plant Species Presumed Absent

The following species are presumed absent from the Project Area due to the lack of suitable habitat, soil type, and/or elevation range at the site:

- Abram's oxytheca (*Acanthoscyphus parishii* var. *abramsii*), CNPS 1B.2;
- Parish's oxytheca (*Acanthoscyphus parishii* var. *parishii*), CNPS 4.2;
- Slender silver moss (*Anomobryum julaceum*), CNPS 4.2;
- San Gabriel's manzanita (*Arctostaphylos glandulosa* spp. *gabrielensis*), CNPS 1B.2;
- San Antonio milk-vetch (*Astragalus lentiginosus* var. *antoniuis*), CNPS 1B.3;

- Big Bear Valley woollypod (*Astragalus leucolobus*); CNPS 1B.2;
- Modoc Plateau milk-vetch (*Astragalus pulsiferae* var. *coronensis*), CNPS 4.2;
- Scalloped moonwort (*Botrychium crenulatum*), CNPS 2B.2;
- Slender mariposa-lily (*Calochortus clavatus* var. *gracilis*), CNPS 1B.2;
- Palmer's mariposa-lily (*Calochortus palmeri* var. *palmeri*), CNPS 1B.2;
- Plummer's mariposa-lily (*Calochortus plummerae*), CNPS 4.2;
- Alkali mariposa-lily (*Calochortus striatus*), CNPS 1B.2;
- Peirson's morning-glory (*Calystegia peirsonii*), CNPS 4.2;
- White pygmy-poppy (*Canbya candida*), CNPS 4.2;
- Western sedge (*Carex occidentalis*), CNPS 2B.3;
- Mt. Gleason paintbrush (*Castilleja gleasoni*), state listed Rare, CNPS 1B.2;
- Kern Canyon clarkia (*Clarkia xantiana* ssp. *parviflora*), CNPS 4.2;
- Peirson's spring beauty (*Claytonia peirsonii* ssp. *peirsonii*), CNPS 1B.2;
- Ewan's woodbeauty (*Drymocallis cuneifolia* var. *ewanii*), CNPS 1B.3;
- San Gabriel river dudleya (*Dudleya cymosa* ssp. *crebrifolia*), CNPS 1B.2;
- San Gabriel Mountains dudleya (*Dudleya densiflora*), CNPS 1B.1;
- Southern alpine buckwheat (*Eriogonum kennedyi* var. *alpigenum*), CNPS 1B.3;
- Johnston's buckwheat (*Eriogonum microthecum* var. *johnstonii*), CNPS 1B.3;
- Hot springs fimbristylis (*Fimbristylis thermalis*), CNPS 2B.2;
- Slender bedstraw (*Galium angustifolium* ssp. *gracillimum*), CNPS 4.2;
- Mesa horkelia (*Horkelia cuneata* var. *puberula*), CNPS 1B.1;
- Knotted rush (*Juncus nodosus*), CNPS 2B.3;
- Short-sepaled lewisia (*Lewisia brachycalyx*), CNPS 2B.2;
- Ocellated Humboldt lily (*Lilium humboldtii* ssp. *ocellatum*), CNPS 4.2;
- Lemon lily (*Lilium parryi*), CNPS 1B.2;
- San Gabriel linanthus (*Linanthus concinnus*), CNPS 1B.2;
- Peirson's lupine (*Lupinus peirsonii*), CNPS 1B.3;
- Torrey's box-thorn (*Lycium torreyi*), CNPS 4.2;

- Robbins' nemacladus (*Nemacladus secundiflorus* var. *robbinsii*), CNPS 1B.2;
- Woolly mountain parsley (*Oreonana vestita*), CNPS 1B.3;
- Rock Creek broomrape (*Orobanche valida* ssp. *valida*), CNPS 1B.2;
- Rock-loving oxytrope (*Oxytropis oreophila* var. *oreophila*), CNPS 2B.3;
- San Bernardino grass-of-Parnassus (*Parnassia cirrata* var. *cirrata*), CNPS 1B.3;
- Parish's popcorn flower (*Plagiobothrys parishii*), CNPS 1B.1;
- San Gabriel oak (*Quercus durata* var. *gabrielensis*), CNPS 4.2;
- Engelmann oak (*Quercus engelmannii*), CNPS 4.2;
- San Bernardino aster (*Symphyotrichum defoliatum*), CNPS 1B.2;
- Greata's aster (*Symphyotrichum greatae*), CNPS 1B.3; and
- Grey-leaved violet (*Viola pinetorum* ssp. *grisea*), CNPS 1B.2.

4.2.5.5 Special-Status Wildlife

Of the 26 special-status wildlife species identified in the literature review, one was observed during the 2023 reconnaissance survey, one was found to have a high potential to occur, one was found to have a moderate potential to occur, four were found to have a low potential to occur, and the remaining 19 species are presumed absent from the Project Area. In addition, two special-status wildlife species that were not identified in the literature review were observed during the 2022 reconnaissance survey: San Diegan tiger whiptail (*Aspidoscelis tigris stejnegeri*) and yellow warbler (*Setophaga petechia*), both CDFW SSC species. The remaining sensitive wildlife species with a potential to occur in the area were not observed during the reconnaissance surveys.

4.2.5.6 Wildlife Species that are Present

The following wildlife species were observed in the Project Area during the reconnaissance surveys.

Blainville's horned lizard

Two individual Blainville's horned lizards were observed within the Project Area during the September 2023 reconnaissance survey. Blainville's horned lizard is a CDFW SSC reptile. This lizard occurs in open scrub and riparian habitats and other open areas with ample ant prey base (Zeiner et al. 1990).

San Diegan Tiger Whiptail

One individual San Diegan tiger whiptail was observed within the Project Area during the May 2022 reconnaissance survey. San Diegan tiger whiptail is a CDFW SSC reptile. This lizard occurs in woodland, riparian, and arid open areas with sparse vegetation (Stebbins 2003).

Yellow warbler

One individual yellow warbler was observed foraging within and adjacent to the Project Area and singing during the May 2022 biological reconnaissance survey. Yellow warbler is a California SSC bird species. In southern California, yellow warbler breeds in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland (Small 1994).

4.2.5.7 Wildlife Species with a High Potential to Occur

The following wildlife species was determined to have a high potential to occur because suitable habitat is present in the Project Area and recent records of the species were identified within 5 miles of the Project Area.

Crotch Bumble Bee

Crotch bumble bee (*Bombus crotchii*) is a CDFW candidate species for listing as endangered. This species is associated with open grassland and scrub habitats and occurs primarily in California, including the Mediterranean region, Pacific Coast, Western Desert, Great Valley, and adjacent foothills through most of southwestern California (Williams et al. 2014). Crotch bumble bees primarily nest underground, and may occupy cavities in a variety of substrates including: thatched grasses, abandoned rodent burrows or bird nests, brush piles, rock piles, and fallen logs (Alford 1975; Free and Colin Gasking Butler 1959; Fussell and Corbet 1992; Lye et al. 2012; Sladen 1912; Williams et al. 2014) and have also been found nesting in humanmade structures such as walls, rubble or abandoned furniture (Fussell and Corbet 1992, Williams et al. 2014). Bumble bee nests are annual and conclude with deaths of the queen, workers, and drones at the end of the season with only the mated gyne (future queen) surviving the winter (overwintering) to emerge the following spring to start the next year's colony. Similar to other bumble bee species, Crotch bumble bee is a generalist forager and reportedly visits a variety of flowering plants including *Asclepias*, *Chaenactis*, *Lupinus*, *Medicago*, *Phacelia*, and *Salvia*. The recovering chaparral and scrub habitat in the Project Area provides suitable nectaring, foraging, and overwintering habitat for this species. Additionally, several recent CNDDDB records of this species have been documented within 5 miles of the Project Area.

4.2.5.8 Wildlife Species with a Moderate Potential to Occur

The following species have a moderate potential to occur in the Project Area because a recently documented observation occurs within 5 miles of the area and marginal or limited amounts of habitat occurs in the Project Area.

California Glossy Snake

California glossy snake (*Arizona elegans occidentalis*) is a CDFW SSC reptile species. This species typically occurs in rocky washes, chaparral, scrub, and grassland habitats often with loose or sandy soils. Limited suitable habitat is present in the Project Area in the recovering chaparral areas. One recent occurrence was documented in the CNDDDB within 5-miles of the Project Area. As a result, this species was determined to have a moderate potential to occur in the Project Area.

4.2.5.9 **Wildlife Species with a Low Potential to Occur**

The following species have a low potential to occur in the Project Area because limited or marginal habitat for the species occurs within the site and a recently documented observation occurs within the database search, but not within 5 miles of the area; a historic documented observation (more than 20 years old) was recorded within 5 miles of the Project Area; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search.

- Loggerhead shrike (*Lanius ludovicianus*), CDFW SSC.
- Western mastiff bat (*Eumops perotis californicus*), CDFW SSC;
- Desert bighorn sheep (*Ovis canadensis nelsoni*), CDFW Fully Protected; and
- American badger (*Taxidea taxus*), CDFW SSC

4.2.5.10 **Wildlife Species Presumed Absent**

The following species are presumed absent from the Project Area due to the lack of suitable habitat in the Project Area:

- Quino checkerspot butterfly (*Euphydryas editha quino*), federally listed Endangered;
- Santa Ana sucker (*Catostomus santaanae*), federally listed Threatened;
- Arroyo chub (*Gila orcutti*), CDFW SSC;
- Santa ana speckled dace (*Rhinichthys osculus* ssp. 8), CDFW SSC;
- Arroyo toad (*Anaxyrus californicus*), federally listed Endangered, CDFW SSC;
- Foothill yellow-legged frog (*Rana boylei*), CDFW SSC;
- Southern mountain yellow-legged frog (*Rana muscosa*), federally and state-listed Endangered.
- Coast Range newt (*Taricha torosa*), CDFW SSC;
- Western pond turtle (*Emys marmorata*), CDFW SSC;
- Desert tortoise (*Gopherus agassizii*), federally and state-listed Threatened;
- Two-striped garter snake (*Thamnophis hammondi*), CDFW SSC;
- Burrowing owl (*Athene cunicularia*), CDFW SSC;
- Southwestern willow flycatcher (*Empidonax traillii extimus*), federally and state-listed Endangered;
- Le Conte's thrasher (*Toxostoma lecontei*), CDFW SSC (San Joaquin population only);
- Nelson's antelope squirrel (*Ammospermophilus nelsoni*), state-listed Threatened;

- Townsend's big-eared bat (*Corynorhinus townsendii*), CDFW SSC;
- South coast marsh vole (*Microtus californicus stephensi*), CDFW SSC;
- Southern grasshopper mouse (*Onychomys torridus ramona*), CDFW SSC; and
- Mojave ground squirrel (*Xerospermophilus mohavensis*), state-listed Threatened .

4.2.6 Preliminary Aquatic Resources Delineation

A preliminary ARD of the site was conducted in the field; no aquatic resources were identified during the biological reconnaissance survey. The desktop review of the NWI identified riverine features approximately 250-feet northeast and 350-feet south of the Project Area as being the closest aquatic resource areas.

Due to the nature of the site and the planned Project activities no Project-related impacts to aquatic resources are anticipated.

4.2.7 Raptors and Migratory Birds

Suitable nesting habitat for numerous species of migratory birds and raptors protected under the federal MBTA and California Fish and Game Code is present in the Project Area in some of the resprouting shrubs and trees, unburned trees, surrounding buildings and landscaping, and other anthropogenic structures. Therefore, nesting birds could use the Project Area during the nesting bird season (typically February 1 through August 31).

4.2.8 Wildlife Movement Corridors, Linkages, and Significant Ecological Areas

The concept of habitat corridors addresses the linkage between large blocks of habitat that allow the safe movement of mammals and other wildlife species from one habitat area to another. The definition of a corridor varies, but corridors may include such areas as greenbelts, refuge systems, underpasses, and biogeographic land bridges. In general, a corridor is described as a linear habitat, embedded in a dissimilar matrix, which connects two or more large blocks of habitat. Wildlife movement corridors are critical for the survivorship of ecological systems for several reasons. Corridors can connect water, food, and cover sources, spatially linking these three resources with wildlife in different areas. In addition, wildlife movement between habitat areas provides for the potential of genetic exchange between wildlife species populations, thereby maintaining genetic variability and adaptability to maximize the success of wildlife responses to changing environmental conditions. This is especially critical for small populations subject to loss of variability from genetic drift and effects of inbreeding. The nature of corridor usage and wildlife movement patterns vary greatly among species.

The Project Area was assessed for its ability to function as a wildlife corridor. The Project Area is located within the Devil's Punchbowl Natural Area, managed by the Los Angeles County Department of Parks and Recreation. The Project Area is part of the San Gabriel Wilderness Area that provides habitat for several wildlife species and functions as a wildlife corridor allowing free movement between connected open space areas, Angeles National Forest to the northwest, and the San Bernardino National Forest to the east.

The Project Area is not located within a Significant Ecological Area (SEA). The Project Area is located adjacent to, but not within, the Antelope Valley SEA.

5.0 IMPACT ANALYSIS

5.1 Special-Status Species

The Project Area is generally classified as in a state of recovery; the recovering land cover is predominately chaparral habitat.

Three special-status plant species (western Joshua tree, short-joint beavertail, and southern California black walnut) were observed on or adjacent to the Project Area during the biological reconnaissance surveys, rare plant survey, and previous habitat mapping efforts immediately following the Bobcat Fire. Although located within the Project Area, the current project design would avoid impacts to the individual short-joint beavertails, western Joshua trees, and southern California black walnuts during Project construction. However, if during final Project design, construction cannot avoid these individuals, then direct impacts in the form of ground disturbance, vegetation removal, habitat loss, and mortality and indirect impacts from dust may occur to these species. Impacts to western Joshua trees would be less than significant with the implementation of Mitigation Measure BIO-1. Impacts to short-joint beavertail would be less than significant with the implementation of Mitigation Measure BIO-2. The mitigation measures for the Proposed Project are discussed in Section 6. Only three southern California black walnut tree individuals were noted straddling the western Project boundary, and not immediately adjacent to improvement or development areas. No direct impacts to California black walnut trees are likely and would be considered less than significant with implementation of Mitigation Measure BIO-3.

Fifty (50) special-status plant species were identified in the literature review and database searches, including those described above. Based on the results of previously conducted rare plant surveys, the condition of the Project Area and the available habitat three species (San Gabriel Mountains monardella, Mojave monardella, and crowned muilla) were determined to have a low potential to occur in the Project Area. No special-status plant species have a high potential to occur in the Project Area. However, as the chaparral habitat continues to recover onsite, there is the potential for additional rare plant species to be present. The Project design would avoid impacts to native vegetation within the Project Area to the extent feasible. However, should these species occur within the Project Area, direct impacts in the form of ground disturbance, vegetation removal, habitat loss, and mortality and indirect impacts from dust may occur to these species. Impacts to special-status plant species would be less than significant with the implementation of Mitigation Measure BIO-3.

The only native vegetation communities in the Project Area are the recovering chaparral communities. The majority of the Project footprint is within existing disturbed, developed, or landscaped areas that were present in the Project Area prior to the Bobcat Fire. The slow vegetative recovery after the fire, presence of anthropogenic influences onsite, and dominant vegetation community assemblage likely preclude many of these species from occurring within the Project Area. The Proposed Project would involve the building of a new nature center and administrative offices as well as adjacent landscaping and shade structures to enhance the visitor's center – activities that would involve ground disturbance within the previously

disturbed Project footprint and adjacent to the recovering chaparral communities. As such, the Project would have the potential to have a substantial adverse effect, either directly or through habitat modifications and indirectly, on special-status species identified by CDFW. Impacts to each special-status wildlife species identified as present or having a potential to occur are described below.

One California SSC species, Blainville's horned lizard, was observed during the September 2023 biological reconnaissance survey. Additionally, two special-status wildlife species not identified in the literature review, San Diegan tiger whiptail and yellow warbler, were observed during the May 2022 biological reconnaissance survey. The literature review and database searches identified 26 special-status wildlife species that have previously been documented in the vicinity of the Project Area. One species (Crotch bumblebee) was determined to have a high potential to occur in the Project Area, one species (California glossy snake) was determined to have moderate potential to occur in the Project Area, and four species (loggerhead shrike, western mastiff bat, desert bighorn sheep, and American badger) were determined to have low potential to occur in the Project Area. The remaining 19 species were presumed absent from the Project Area.

Crotch bumble bee is a candidate for state listing and therefore afforded all the protections as though it were listed under the California ESA. It was determined that this species has a high potential to occur in the recovering chaparral and scrub habitats surrounding the previously developed areas. As such, direct impacts to Crotch bumble bee through ground disturbance and indirect impacts from habitat loss may occur. If present, direct impacts to this species could occur as a result of the Project in the form of mortality or injury due to ground-disturbing activities in areas that serve as nesting, overwintering, and foraging habitat. Indirect impacts may include loss of habitat and ground vibrations. Because this species is a generalist forager that chooses nesting and overwintering locations on an annual basis, temporary and permanent loss of habitat would not be expected to contribute substantially to the overall decline of this species in the area unless an active nest or overwintering gyne (future queen) were to be impacted. Impacts to Crotch bumble bee would be less than significant with the implementation of Mitigation Measures BIO-4, -5 -7, and -8.

San Diegan tiger whiptail and Blainville's horned lizards were observed in the Project Area in the recovering chaparral communities surrounding the previously developed areas. As such, direct impacts to San Diegan tiger whiptail and Blainville's horned lizard through ground disturbance and indirect impacts from habitat loss may occur. The Proposed Project has the potential to impact the vegetation surrounding the previously developed portions of the Project Area during the construction of and re-construction of new and existing hiking trails, replanting of areas, and installation of signs. If present, direct impacts to these species could occur as a result of the Proposed Project in the form of mortality or injury due to ground-disturbing activities. Indirect impacts may include loss of habitat, ground vibrations, increased human activity, and noise. Impacts to San Diegan tiger whiptail and Blainville's horned lizard would be less than significant with the implementation of Mitigation Measures BIO-5, -7, and -8.

Yellow warbler was observed during the biological reconnaissance survey. Yellow warbler would not be expected to nest within the Project Area itself due to lack of suitable nesting habitat but may use tree habitat adjacent to the Project Area for nesting. Indirect impacts to yellow warbler may occur from construction noise and vibrations should the species nest within 500 feet of the Project Area. Loggerhead

shrike was determined to have a low potential to occur as the recovering chaparral habitat provides marginally suitable nesting habitat. As such, direct impacts to nesting loggerhead shrikes through ground disturbance and indirect impacts from construction noise and vibrations may occur. Impacts to yellow warbler and loggerhead shrike would be less than significant with the implementation of Mitigation Measures BIO-5, -6, -7, and -8.

The Project Area is located within and adjacent to suitable habitat for desert bighorn sheep, American badger, and western mastiff bat, but habitat features within the Project Area itself are not sufficient to sustain populations of these species. As such, these species may be expected to pass through the Project Area but would not be expected to be directly affected by the Project. Indirect impacts may occur if the species are present through ground vibrations, increased human activity, and noise. These impacts would be less than significant with the implementation of Mitigation Measures BIO-5, -7, and -8.

The approximately 6.6 acres of recovering chaparral habitat provides marginally suitable habitat for California glossy snake. As such, direct impacts to this species through ground disturbance and indirect impacts from habitat loss may occur. The Proposed Project has potential to impact the vegetation surrounding the previously developed portions of the Project Area during the construction and reconstruction of new and existing hiking trails, replanting of areas, and installation of signs. If present, direct impacts to this species may occur as a result of the Proposed Project in the form of mortality or injury due to ground-disturbing activities. Indirect impacts may include loss of habitat, ground vibrations, increased human activity, and noise. Impacts to special-status wildlife species would be less than significant with the implementation of Mitigation Measures BIO-5, -7, and -8.

The Project Area also contained suitable nesting habitat for bird species protected under the MBTA. Development of the Project Area will be required to comply with the MBTA and avoid impacts to nesting birds. If construction of the Proposed Project occurs during the nesting bird season (typically February 1 through August 31), ground-disturbing construction activities could directly affect birds protected by the MBTA and their nests through the removal of habitat and indirectly through increased noise. Impacts to yellow warbler, loggerhead shrike, and other nesting birds would be less than significant with the implementation of Mitigation Measure BIO-6, -7, and -8.

5.2 Sensitive Natural Communities

The Project Area consists of recovering chaparral vegetation communities with landscaped, disturbed, and developed land cover present. The Project Area does not contain any riparian habitat, oak woodland, or sensitive natural communities that would need to be preserved and no Project-related impacts to these types of resources are anticipated with the development of the Project.

5.3 Oaks and Oak Woodlands

Existing trees and vegetation deemed to be significant to the aesthetics, character, and environmental quality of the Project have been integrated into the Conceptual Site Plan. Section 22.46.2100 of the Los Angeles County Municipal Code protects all oak trees with a diameter at breast height of eight inches or greater, or 12 inches or greater for multiple trunks (combination of two largest trunks). No oak woodlands are present in the Project Area. However, individual oak trees (Tucker's oak and black oak) that may be

protected by the Los Angeles County Municipal Code are present along the existing trail edges and in the landscaped areas. The Proposed Project would avoid impacts to native vegetation within the Project Area to the extent feasible. The Project does not involve tree removal and onsite grading would be limited to disturbed areas. Impacts to individual oak trees would be avoided during Project construction. However, should any alterations to the final design result in the encroachment of the tree protection zone of any individual oak trees, potential direct or indirect impacts to individual trees may occur. Impacts to oak trees in the Project Area would be less than significant with the implementation of Mitigation Measure BIO-9.

5.4 State and Federally Protected Wetlands and Waters of the United States

According to the results of the desktop review and preliminary ARD, no WOTUS or areas that would qualify under CDFW and State Water Resources Control Board jurisdiction are present within the Project Area. Therefore, no impacts to state or federally protected wetlands and WOTUS would occur during development of the Project Area.

5.5 Wildlife Corridors and Nursery Sites

The Project Area is located within the Devil's Punchbowl Natural Area, a Los Angeles County Department of Parks and Recreation managed facility that is part of the San Gabriel Mountains Wilderness area. The San Gabriel Mountains Wilderness area is connected to both the Los Angeles National Forest and the San Bernardino National Forest and functions as a wildlife corridor and native wildlife nursery site. However, due to the nature of the Project, no impacts to wildlife corridors or nursery sites are expected to occur during the development of the Project Area. The Project would only develop upon previously developed and disturbed areas and Project construction would only occur during daytime hours; as a result this Project is not anticipated to impact the Project Area's ability to function as a wildlife corridor.

5.6 Habitat Conservation Plans and Natural Community Conservation Plans

The Project Area is not located within an HCP or Natural Community Conservation Plan (NCCP). Therefore, development of the Project Area will not conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state HCP.

6.0 RECOMMENDATIONS

The following mitigation measures are recommended prior to Project implementation:

- BIO-1 Western Joshua Tree Incidental Take Permit:** Prior to the start of Project construction, individual western Joshua trees located within the Project Area shall be mapped using sub-meter GPS units. Impacts to individual western Joshua trees shall be avoided to the greatest extent feasible. If Project-related impacts are unavoidable to the western Joshua trees present within the Project Area, an Incidental Take Permit from CDFW under the Western Joshua Tree Conservation Act (WJTCA) will be required as long as western Joshua tree

remains a candidate or listed species under the California ESA. Projects involving the take of western Joshua tree must demonstrate compliance with conditions outlined in the WJTCA. At a minimum, this includes submittal to the CDFW, for approval, a census of all western Joshua trees on a Project site and payment of fees for impacted trees as outlined in the WJTCA, according to impacted tree height.

BIO-2 Short-Joint Beavertail Protection: Prior to the start of Project construction, individual short-joint beavertails located within the Project Area shall be mapped using sub-meter GPS units. Impacts to individual short-joint beavertails shall be avoided to the greatest extent feasible. If impacts to short-joint beavertail individuals cannot be avoided during Project design, the following shall be implemented. To avoid impacting the seed bank, the upper 3 inches of soil for areas of soil disturbance that overlap with mapped populations of short joint beavertail shall be scraped, and the soil returned to the same location once work is complete. If direct impacts are unavoidable, transplanting or translocation of short joint beavertail specimens can be accomplished and is recommended during spring and early summer. A successful transplant will include a 6-inch buffer clod with at least a 6-inch depth around the specimen, to ensure the salvage of the main shoot, and transplanting the individual within a nearby location that contains the same soil and habitat affinities as its original location. If transplanting is deemed too difficult based on settings and/or health of the specimen, propagation through a stem/pad cutting can also be accomplished by cutting the pad as an entire segment from the plant, drying the segment, and placing it upright with the cut portion below the ground, within the first two to three inches of soil. Initial irrigation of the transplanted specimen and/or segment is not required but shall be established every other week if nighttime temperatures are above 60°F. Monitoring of the transplant shall be conducted for at least two years until signs of establishment (i.e. new growth) are apparent.

BIO-3 Preconstruction Rare Plant Surveys: A preconstruction rare plant survey shall be conducted within suitable habitat in the Project Area during the year immediately prior to construction in order to ensure the protection of the root zone of walnut trees and detect any additional special-status species that may reestablish as the burn area recovers. Ideally, the surveys shall be done during the spring (late April/early May) and late summer (July/August) to capture the blooming periods of target plants with potential to occur. The survey shall be conducted by a botanist or qualified biologist in accordance with the USFWS Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed, and Candidate Plants; the CDFW Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities; and the CNPS Botanical Survey Guidelines.

If special-status (non-listed) plant species are observed during the rare plant survey, locations of individual plants or populations will be mapped using sub-meter GPS units and a no-disturbance buffer around locations of individuals or a population shall be established. A biological monitor shall be present during heavy equipment operations (including but not limited to grading activities). As-needed compliance inspections shall be conducted at least

monthly throughout construction to ensure no-disturbance buffers are intact and adhered to. In the unlikely event that a listed plant species is detected and cannot be avoided, then agency consultation would be required to develop a mitigation plan or additional avoidance and minimization measures. .

BIO-4 Focused Crotch Bumble Bee Surveys: If the Crotch bumble bee is no longer a candidate or listed species under the California ESA at the time ground-disturbing activities, then no additional protection measures are proposed for this species.

If the Crotch bumble bee is legally protected under the California ESA as a candidate or listed species at the time of Project construction, focused surveys shall be conducted in accordance with CDFW's Survey Considerations for California ESA Candidate Bumble Bee Species (CDFW 2023d) the season immediately prior to ground disturbing activities are scheduled to occur. A minimum of three Crotch bumble bee focused surveys shall be conducted at 2 to 4 week intervals (ideally monthly) during the colony active period (April through August) when Crotch bumble bees are most likely to be detected. Non-lethal, photo voucher surveys shall be completed by a biologist who holds a Memorandum of Understanding to capture and handle Crotch bumble bee (if nesting and chilling protocol is to be utilized) or by a CDFW approved biologist experienced in identifying native bumble bee species (if surveys are restricted to visual surveys that will provide high-resolution photo documentation for species verification). The surveyor shall walk through all areas of suitable habitat focusing on areas with floral resources. Surveys shall be completed at a minimum of one person-hour of searching per three acres of suitable habitat during suitable weather conditions (sustained winds less than 8 mph, mostly sunny to full sun, temperatures between 65° and 90°F) at an appropriate time of day for detection (at least an hour after sunrise and at least two hours before sunset, though ideally between 9:00 a.m. and 1:00 p.m.).

If Crotch bumble bees are detected, CDFW shall be notified by the designated biologist as further coordination may be required to avoid or mitigate certain impacts. At a minimum, two nesting surveys shall be conducted with focus on detecting active nesting colonies within one week and 24-hours immediately prior to ground disturbing activities that are scheduled to occur during the same flight season (February through October). If an active Crotch bumble bee nest is detected, an appropriate no disturbance buffer zone (including foraging resources and flight corridors essential for supporting the colony) shall be established around the nest to reduce the risk of disturbance or accidental take and the designated biologist shall coordinate with CDFW to determine if an Incidental Take Permit under Section 2081 of the California ESA will be required. Nest avoidance buffers may be removed at the completion of the flight season and/or once the qualified biologist deems the nesting colony is no longer active and CDFW has provided concurrence of that determination. If no nests are found but the species is present, a full-time qualified biological monitor shall be present during vegetation removal or ground disturbing activities that are scheduled to occur during the queen flight period (February through March), colony active period (March through September), and/or gyne flight period (September through October).

Because bumble bees move nest sites each year, three preconstruction nesting surveys shall be required during each subsequent year of construction, regardless of the previous year's findings, whenever vegetation removal and ground disturbing activities are scheduled to occur during the flight season (February through October).

BIO-5 **Preconstruction Sensitive Wildlife Survey:** A preconstruction survey for sensitive wildlife species will be conducted within two weeks (14 days) of initial grading, demolition, and/or grubbing activities. If special-status (non-listed) wildlife species are observed within the impact area, the qualified biologist will develop and implement appropriate protection measures for that species. These protection measures shall include, as appropriate: presence of a biological monitor during ground-disturbing activities, redirecting the species, constructing exclusionary devices, or capturing and relocating wildlife outside the work area (as Project and/or individual Scientific Collecting Permits allow). In addition, prior to initial ground and habitat disturbing activities and vegetation removal, a qualified biologist will prepare a Wildlife Relocation Plan. The Wildlife Relocation Plan shall describe all wildlife species that could occur within the Project Area and proper handling and relocation protocols. The Wildlife Relocation Plan shall include species-specific relocation areas, at least 200 feet outside of the Project Area and in suitable and safe relocation areas. No wildlife nests, eggs, or nestlings may be removed or relocated at any time. The biological monitor will have the authority to temporarily halt construction activities in order to allow special-status and general wildlife to safely move out of harm's way and may employ hazing methods to direct individuals to areas outside the construction limits. If a listed wildlife species is determined to be present or to nest or den within the Project Area, the Project will be temporarily halted until agency consultation can be completed. Observations of any special-status species made during the surveys shall be recorded onto a CNDDDB field data sheet and submitted to CDFW for inclusion into the CNDDDB.

BIO-6 **Preconstruction Nesting Bird Survey:** If construction or other Project activities are scheduled to occur during the bird breeding season (February 1 through August 31), a preconstruction nesting bird survey shall be conducted by a qualified biologist to ensure that active bird nests, including those of the yellow warbler and loggerhead shrike, will not be disturbed or destroyed. The survey shall be completed no more than three days prior to initial ground disturbance. The nesting bird survey shall include the Project Area and adjacent areas where Project activities have the potential to affect active nests, either directly or indirectly, due to construction activity, noise, or ground disturbance. If an active nest is identified, a qualified avian biologist shall establish an appropriate disturbance-limit buffer around the nest using flagging or staking. Construction activities shall not occur within any disturbance-limit buffer zones until the nest is deemed inactive by the qualified avian biologist. As-needed nest monitoring shall be conducted at least weekly throughout construction to ensure no-disturbance buffers are intact and adhered to and to update the status of the nest. The no-disturbance buffer shall be removed and work may continue in that area once the qualified avian biologist determines the nest is no longer active and has removed the flagging or staking.

- BIO-7 Worker Education:** Within 30 days prior to ground-disturbing activities, a sensitive species educational briefing shall be conducted by a qualified biologist for construction personnel. The biologist shall identify all sensitive habitat and resources that may be encountered onsite, and construction personnel will be instructed to avoid Environmentally Sensitive Areas and report any sightings of sensitive species to the monitoring biologist. No night work will be allowed.
- BIO-8 Biological Monitoring:** A biologist shall be present to monitor all vegetation trimming and removal activities both during and outside of the breeding season. A biological monitor shall perform biological clearance surveys at the start of each workday that vegetation clearing takes place to minimize impacts on sensitive wildlife and/or to avoid special-status plant species. The monitor will be responsible for ensuring that impacts to sensitive species will be avoided to the fullest extent possible. The biological monitor shall be present during the initiation of vegetation trimming or removal activities and their presence shall continue as necessary to maintain protective measures and to monitor for species in harm's way. If protection measures require capturing and relocating wildlife to areas outside the work area, the biological monitor shall possess the appropriate Scientific Collecting Permit to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with Project-related activities. Any captured species shall be relocated out of harm's way to adjacent appropriate habitat that is outside of Project impact areas. If any SSC are harmed during relocation or a dead or injured animal is found, work in the immediate area shall stop immediately, the qualified biologist shall be notified, and dead or injured wildlife documented immediately. A formal report shall be sent to CDFW within 3 calendar days of the incident or finding. The report shall include the date, time of the finding or incident (if known), and location of the carcass or injured animal and circumstances of its death or injury (if known). Work in the immediate area may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.
- BIO-9 Protection of Oak Trees:** The tree protection zone (diameter of the tree canopy plus five feet) of each oak tree within the Project Area shall be avoided to the greatest extent feasible. If oak trees cannot be avoided, an oak tree survey and report shall be prepared by an International Society of Arboriculture (ISA) Certified Arborist prior to construction. An oak tree permit will be obtained prior to cutting, destroying, removing, relocating, inflicting damage, or encroaching into the protected zone of any oak trees with a diameter at breast height (dbh) of eight inches or more. All protection and replacement measures shall be consistent with the Los Angeles County Oak Tree Ordinance.

6.1 Additional Recommendations

The following Best Management Practices are not mitigation measures pursuant to CEQA but are recommended to further reduce impacts to species that have potential to occur on the property:

- Confine all work activities to a predetermined work area.

- To prevent inadvertent entrapment of wildlife during the construction phase of the Project, all excavated, steep-walled holes or trenches more than 2 feet deep should be covered at the close of each working day by plywood or similar materials. If the trenches cannot be closed, one or more escape ramps constructed of earthen fill or wooden planks shall be installed. Before such holes or trenches are filled, they should be thoroughly inspected for trapped animals.
- Wildlife are often attracted to burrow- or den-like structures such as pipes and may enter stored pipes and become trapped or injured. To prevent wildlife use of these structures, all construction pipes, culverts, or similar structures with a diameter of 4 inches or greater should be capped while stored onsite.
- All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in securely closed containers and removed at least once a week from a construction or Project Area.
- Use of rodenticides and herbicides in the Project Area should be restricted. This is necessary to prevent primary or secondary poisoning of wildlife, and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the USEPA, California Department of Food and Agriculture, and other state and federal legislation. If rodent control must be conducted, zinc phosphide should be used because of a proven lower risk to predatory wildlife.

7.0 CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Field work conducted for this assessment was performed by me or under my direct supervision. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the Project applicant or the applicant's representative and that I have no financial interest in the Project.

SIGNED: 

Lauren Simpson, Senior Biologist
ECORP Consulting, Inc.

DATE: 11/28/2023

8.0 LITERATURE CITED

- Alford, D. V. 1975. *Bumblebees*. Davis-Poynter, London.
- Baldwin, B.G., G.H. Goldman, D.J. Keil, R. Patterson, T.J. Rosatti, and D.H. Wilken, Eds. 2012. *The Jepson Manual; Vascular Plants of California*, Second Edition. Berkeley, CA, University of California Press.
- Bradley, R.D., L.K. Ammerman, R.J. Baker, L.C. Bradley, J.A Cook, R.C. Dowler, C. Jones, D.J Schmidly, F.B. Stangl, Jr., R.A. Van Den Bussche, B. Wursig. 2014. *Revised Checklist of North American Mammals North of Mexico*. Museum of Texas Tech University.
- Calflora. 2023. Information on California plants for education, research and conservation. [Web application]. Berkeley, California: The Calflora Database [a non-profit organization]. Available: <http://www.calflora.org/>. Accessed: June 24, 2022 and November 7, 2023.
- California Department of Fish and Game. 1984. California Endangered Species Act. Fish and Game Code Section 2050-2085.
- California Department of Fish and Game (CDFW). 2023a. RareFind California Department of Fish and Game Natural Diversity Database (CNDDDB). California. Sacramento, CA, California Department of Fish and Wildlife, Biogeographic Data Branch. Accessed: June 24, 2022 and November 7, 2023.
- _____. 2023b. State and Federally Listed Endangered and Threatened Animals of California. Sacramento (CA): State of California, Natural Resources Agency, Department of Fish and Wildlife. Accessed: June 24, 2022 and October 2, 2023.
- _____. 2023c. Special Animals List. Sacramento (CA): State of California, Natural Resources Agency, Department of Fish and Game. Available: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=109406&inline>. Accessed: June 24, 2022 and October 2, 2023.
- _____. 2023d. Survey Considerations for California ESA Candidate Bumble Bee Species. Available at: <https://nrm.dfg.ca.gov/FileHandler.ashx?DocumentID=213150&inline>.
- _____. 2021. Lake and Streambed Alteration Program. <https://wildlife.ca.gov/Conservation/Environmental-Review/LSA>.
- _____. 2018. *Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Sensitive Natural Communities*. California Natural Resources Agency, Department of Fish and Wildlife.
- Chesser, R. T., S. M. Billerman, K. J. Burns, C. Cicero, J. L. Dunn, B. E. Hernández-Baños, R. A. Jiménez, A. W. Kratter, N. A. Mason, P. C. Rasmussen, J. V. Remsen, Jr., and K. Winker. 2023. Check-list of North American Birds (online). American Ornithological Society. <https://checklist.americanornithology.org/taxa/>.

- California Native Plant Society (CNPS) 2023. Rare Plant Program. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). California Native Plant Society, Sacramento, CA. Website <http://www.rareplants.cnps.org>.
- _____. 2001. *CNPS Botanical Survey Guidelines. Pages 38-40 in California Native Plant Society's Inventory of Rare and Endangered Vascular Plants of California* (D.P. Tibor, editor). Sixth edition. Special Publication No. 1, California Native Plant Society, Sacramento, 387 pp.
- ECORP Consulting, Inc. 2021. *Bobcat Fire Recovery Plan for the Devil's Punchbowl Natural Area and Nature Center*. Prepared for Los Angeles County Parks and Recreation Department. September 24.
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual. Technical Report Y-87-1*. U. S. Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.
- Free, J. B., and Colin Gasking Butler. 1959. *Bumblebees*. Collins.
- Fussell, M., and S.A. Corbet. 1992. Flower Usage by Bumble-Bees: A Basis for Forage Plant Management. Source: *Journal of Applied Ecology*. Volume 29.
- Los Angeles County. 2015. *June 2015 Town & Country Antelope Valley Area Plan*. Available at https://case.planning.lacounty.gov/assets/upl/project/tnc_draft-20150601.pdf.
- The Los Angeles County Oak Woodlands Habitat Conservation Strategic Alliance. 2011. *Los Angeles County Oak Woodlands Conservation Management Plan*. Lye, G.C., J.L. Osborne, K.J. Park, and D. Goulson. 2012. Using citizen science to monitor *Bombus* populations in the UK; nesting ecology for and relative abundance in the urban environment. *Journal of Insect Conservation* 16:697-707.
- Natural Resources Conservation Service (NRCS). 2022. "Web Soil Survey" from <http://websoilsurvey.nrcs.usda.gov>. Accessed: 7/7/2022.
- Sawyer, J.O., T. Keeler-Wolf, and J.M. Evens. 2009. *A Manual of California Vegetation, 2nd ed*. California Native Plant Society, Sacramento, CA. Sibley, D. A. (2003).
- Skinner, M.W., and B.M. Pavlik, eds. 1994. *California Native Plant Society's inventory of rare and endangered vascular plants of California*. Fifth edition. Spec. Publ. No. 1, California Native Plant Society, Sacramento, CA, 338 pp.
- Sladen, F.W. Lambert 1912. *The Humble-bee: its Life-history and how to Domesticate it*. Macmillan and Company, Ltd.
- Small, A. 1994. *California Birds: Their Status and Distribution*. Ibis Publ., Vista, CA
- Society for the Study of Amphibians and Reptiles (SSAR). 2017. *Scientific and Standard English Names of Amphibians and Reptiles of North American North of Mexico, With Comments Regarding Confidence in our Understanding. Eighth Edition*. Committee on Standard English and Scientific Names.

State Water Resources Control Board. 2021. State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State. Retrieved from:

https://www.waterboards.ca.gov/water_issues/programs/cwa401/wrapp.html.

Stebbins, Robert. 2003. *Western Reptiles and Amphibians*. 3rd ed. Boston, Massachusetts: Houghton Mifflin Company.

U.S. Army Corps of Engineers (USACE). 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region*. ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-06-16. Vicksburg, MS: U.S. Army Engineer Research and Development Center.

U.S. Fish and Wildlife Service (USFWS). 2022. "National Wetlands Inventory" from <https://www.fws.gov/wetlands/data/Mapper.html>. Accessed: July 11, 2022.

_____. 1998. Guidelines for conducting and reporting botanical inventories for federally listed, proposed, and candidate plants. Sacramento, California 2 pp.

_____. 1918. Migratory Bird Treaty Act. Section 16 of the U.S. Code (703-712), as amended 1989.

Williams, P. H., R. W. Thorp, L. L. Richardson, and S.R. Colla. 2014. *The Bumble bees of North America: An Identification guide*. Princeton University Press, Princeton.

Zeiner D.C., W.F. Laudenslayer Jr., K.E. Mayer, and M. White, editors. 1990. *California's Wildlife. Volume I, Amphibians and Reptiles*. Sacramento (CA): State of California, the Resources Agency, Department of Fish and Wildlife.

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APPENDIX A

Representative Site Photographs



Photo 1. Chaparral Habitat with Fenced Remnants of Previously Existing Structures (2022).



Photo 2. Recovering Chaparral Habitat in Area Burned by the Bobcat Fire (2022).



Photo 3. Recovering Chaparral Habitat with Existing Structure Visible in the Background (2022).



Photo 4. Disturbed/Developed Existing Infrastructure in the Project Area (2022).



Photo 5. Recovering Chaparral Habitat in Area Burned by the Bobcat Fire (2023).



Photo 6. Landscaped and Disturbed/Developed Area – Fence Denoting Previously Developed Area in the Project Area (2023).



Photo 7. Planted Western Joshua Tree Located Outside of Fenced/Previously Developed Area (2023).



Photo 8. Recovering Chaparral Habitat Along Trail in Area Burned by the Bobcat Fire (2023).

APPENDIX B

Plant Species Observed

Scientific Name	Common Name
VASCULAR PLANTS	
ANGIOSPERMS (DICOTYLEDONS)	
ANACARDIACEAE	CASHEW FAMILY
<i>Rhus aromatica</i>	fragrant sumac
ALLIACEAE	ONION FAMILY
<i>Allium fimbriatum</i>	fringed onion
AMARANTHACEAE	AMARANTH FAMILY
<i>Chenopodium album*</i>	lamb's quarters
APIACEAE	CARROT FAMILY
<i>Lomatium dissectum</i>	desert parsley
ASTERACEAE	SUNFLOWER FAMILY
<i>Ambrosia acanthicarpa</i>	annual bursage
<i>Anisocoma acaulis</i>	scalebud
<i>Artemisia tridentata</i>	sagebrush
<i>Ericameria nauseosa</i>	rubber rabbitbrush
<i>Erigeron foliosus</i> var. <i>foliosus</i>	leafy fleabane
<i>Lasthenia californica</i>	California goldfields
<i>Lessingia glandulifera</i>	valley vinegar weed
<i>Senecio flaccidus</i>	threadleaf ragwort
<i>Stephanomeria pauciflora</i>	wirelettuce
BORAGINACEAE	BORAGE FAMILY
<i>Cryptantha intermedia</i>	common cryptantha
<i>Cryptantha</i> sp.	cryptantha
<i>Eriodictyon crassifolium</i>	thickleaf yerba santa
<i>Eriodictyon trichocalyx</i> var. <i>trichocalyx</i>	hairy yerba santa
BRASSICACEAE	MUSTARD FAMILY
<i>Descurainia pinnata</i>	western tansy mustard
<i>Erysimum capitatum</i>	sanddune wallflower
CACTACEAE	CACTUS FAMILY
<i>Cylindropuntia echinocarpa</i>	silver cholla
<i>Opuntia basilaris</i> var. <i>brachyclada**</i>	short-joint beavertail
ERICACEAE	HEATH FAMILY
<i>Arctostaphylos glauca</i>	bigberry manzanita
FABACEAE	PEA FAMILY
<i>Acmispon strigosus</i>	hairy lotus
<i>Astragalus douglasii</i>	Douglas's milk-vetch
FAGACEAE	BEECH, CHESTNUT AND OAK FAMILY
<i>Quercus john-tuckeri</i>	Tucker's oak
<i>Quercus kelloggii</i>	black oak

Appendix B – Plant Species Observed

Scientific Name	Common Name
GERANIACEAE	GERANIUM FAMILY
<i>Erodium cicutarium*</i>	coastal heron's bill
GROSSULARIACEAE	GOOSEBERRY FAMILY
<i>Ribes</i> sp.	gooseberry
HYDROPHYLLACEAE	WATERLEAF FAMILY
<i>Phacelia cicutaria</i>	caterpillar phacelia
<i>Phacelia distans</i>	common phacelia
<i>Phacelia fremontii</i>	Fremont's phacelia
JUGLANDACEAE	WALNUT FAMILY
<i>Juglans californica**</i>	California black walnut
LAMINACEAE	MINT FAMILY
<i>Monardella breweri</i>	Brewer's monardella
<i>Salvia columbariae</i>	chia sage
LOASACEAE	LOASA FAMILY
<i>Mentzelia albicaulis</i>	small flowered blazing star
MALVACEAE	MALLOW FAMILY
<i>Fremontodendron californicum</i>	flannel bush
<i>Malacothamnus fasciculatus</i>	chaparral bush mallow
<i>Malacothamnus</i> sp.	mallow species
MONTIACEAE	MINER'S LETTUCE FAMILY
<i>Calyptidium umbellatum</i>	pussy paws
NYCTAGINACEAE	FOUR 'O' CLOCK FAMILY
<i>Abronia turbinata</i>	transmontane sand-verbena
PHRYMACEAE	LOPSEED FAMILY
<i>Mimulus fremontii</i>	Fremont's monkeyflower
PINACEAE	PINE FAMILY
<i>Pinus coulteri</i>	Coulter pine
<i>Pinus monophylla</i>	single-leaf pinyon pine
PLANTAGINACEAE	PLANTAIN FAMILY
<i>Penstemon centranthifolius</i>	scarlet bugler
<i>Penstemon</i> sp.	beardtongue
POLEMONIACEAE	PHLOX FAMILY
<i>Eriastrum densifolium</i>	giant eriastrum
<i>Gilia brecciarum</i>	Nevada gilia
<i>Leptosiphon breviculus</i>	Mojave linanthus
<i>Loesaliastrum matthewsii</i>	desert calico
<i>Saltugilia splendens</i>	splendid woodland-gilia
POLYGONACEAE	BUCKWHEAT FAMILY
<i>Eriogonum baileyi</i> var. <i>baileyi</i>	Bailey's buckwheat
<i>Eriogonum fasciculatum</i>	California buckwheat

Appendix B – Plant Species Observed

Scientific Name	Common Name
<i>Eriogonum reniforme</i>	kidney-leaf wild buckwheat
ONAGRACEAE	EVENING PRIMROSE FAMILY
<i>Camissonia bistorta</i>	California sun cup
<i>Camissonia campestris</i>	field primrose
<i>Camissonia micrantha</i>	small flowered evening primrose
ROSACEAE	ROSE FAMILY
<i>Cercocarpus betuloides</i>	mountain mahogany
SOLANACEAE	NIGHTSHADE FAMILY
<i>Nicotiana attenuata</i>	coyote tobacco
THEMIDACEAE	BRODIAEA
<i>Dipterostemon capitatus</i>	blue dicks
ANGIOSPERMS (MONOCOTYLEDONS)	
AGAVACEAE	CENTURY PLANT FAMILY
<i>Hesperoyucca whipplei</i>	chaparral yucca
<i>Yucca brevifolia</i> ⁺	western Joshua tree
POACEAE	GRASS FAMILY
<i>Bromus madritensis</i> [*]	foxtail brome
<i>Bromus tectorum</i>	cheatgrass
<i>Hordeum murinum</i> [*]	false barley
<i>Stipa hymenoides</i>	Indian ricegrass
<i>Stipa speciosa</i>	desert stipa

*nonnative species

**special-status plant species (CNPS)

⁺Candidate for state-listing threatened.

APPENDIX C

Wildlife Species Observed

Appendix C – Wildlife Species Observed

Scientific Name	Common Name
INSECTS	
Apidae	Bees
<i>Xylocopa sonora</i>	valley carpenter bee
Hesperiidae	Skippers
<i>Erynnis funeralis</i>	funereal duskywing
<i>Heliopetes ericetorum</i>	northern white skipper
Libellulidae	Skimmers
<i>Sympetrum corruptum</i>	variegated meadowhawk
Lycaenidae	Blues, Hairstreaks, & Gossamer Wings
<i>Plebejus acmon</i>	acmon blue
Nymphalidae	Brush-footed Butterflies
<i>Junonia coenia</i>	common buckeye
<i>Vanessa cardui</i>	painted lady
Pieridae	Orange-Tips, White, & Sulphur Butterflies
<i>Colias eurytheme</i>	orange sulphur
<i>Pontia protodice</i>	checkered white
REPTILES	
Phrynosomatidae	Zebra tailed, Earless, Spiny, Side-blotched
<i>Phrynosoma blainvillii</i> **	Blainville's horned lizard
<i>Sceloporus occidentalis longipes</i>	Great basin fence lizard
<i>Uta stansburiana elegans</i>	western side-blotched lizard
Teiidae	Whiptails and Racerunners
<i>Aspidoscelis tigris stejnegeri</i> **	San Diegan tiger whiptail
BIRDS	
Apodidae	Swifts
<i>Aeronautes saxatalis</i>	white-throated swift
Cardinalidae	Cardinals, Grosbeaks and Buntings
<i>Passerina amoena</i>	lazuli bunting
<i>Pheucticus melanocephalus</i>	black-headed grosbeak
<i>Piranga ludoviciana</i>	western tanager
Columbidae	Pigeons and Doves
<i>Zenaida macroura</i>	mourning dove
Corvidae	Jays and Crows
<i>Aphelocoma californica</i>	California scrub jay
<i>Corvus corax</i>	common raven
Falconidae	Falcons
<i>Falco sparverius</i>	American kestrel
Fringillidae	New World Seedeaters
<i>Haemorhous mexicanus</i>	house finch

Appendix C – Wildlife Species Observed

Scientific Name	Common Name
<i>Spinus lawrencei</i>	Lawrence's goldfinch
<i>Spinus psaltria</i>	lesser goldfinch
Hirundinidae	Swallows, Martins and Saw-wings
<i>Tachycineta thalassina</i>	violet-green swallow
Mimidae	Thrashers, Mockingbirds and Tremblers
<i>Mimus polyglottos</i>	northern mockingbird
Odontophoridae	New World Quail
<i>Callipepla californica</i>	California quail
Parulidae	New World Warblers
<i>Setophaga occidentalis</i>	hermit warbler
<i>Setophaga petechia</i> **	yellow warbler
Passerellidae	New World Sparrows
<i>Chondestes grammacus</i>	lark sparrow
<i>Melospiza crissalis</i>	California towhee
<i>Pipilo chlorurus</i>	green-tailed towhee
<i>Pipilo maculatus</i>	spotted towhee
<i>Zonotrichia leucophrys</i>	white-crowned sparrow
Picidae	Woodpeckers
<i>Colaptes auratus</i>	northern flicker
Sittidae	Nuthatches
<i>Sitta carolinensis</i>	white-breasted nuthatch
Trochilidae	Hummingbirds
<i>Calypte anna</i>	Anna's hummingbird
<i>Calypte costae</i>	Costa's hummingbird
Troglodytidae	Wrens
<i>Salpinctes obsoletus</i>	rock wren
Tyrannidae	Tyrant flycatchers
<i>Contopus sordidulus</i>	western wood pewee
<i>Empidonax difficilis</i>	pacific-slope flycatcher
<i>Myiarchus cinerascens</i>	ash-throated flycatcher
<i>Tyrannus vociferans</i>	Cassin's kingbird
MAMMALS	
Sciuridae	Squirrels
<i>Otospermophilus beecheyi</i>	California ground squirrel

**CDFW California Species of Special Concern

Potential for Occurrence of Sensitive Plant Species

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
	Fed: Ca: CRPR:	None None 1B.2			
<i>Acanthoscyphus parishii</i> var. <i>abramsii</i> Abrams' oxytheca	Fed: Ca: CRPR:	None None 1B.2	Jun-Aug 1143-2057	Occurs in chaparral.	Presumed Absent. Limited suitable habitat present on the Project Area. No records of this species within five miles of the Project Area. This species was not observed within the Project Area during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
<i>Acanthoscyphus parishii</i> var. <i>parishii</i> Parish's oxytheca	Fed: Ca: CRPR:	None None 4.2	Jun-Sept 1220-2600	Occurs in chaparral, and lower montane coniferous forest.	Presumed Absent. Limited suitable habitat present on the Project Area. No records of this species within 5-miles of the Project Area. This species was not observed within the Project Area during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
<i>Anomobryum julaceum</i> slender silver moss	Fed: Ca: CRPR:	None None 4.2	100-1000	Occurs in broadleaved upland forest, lower montane coniferous forest, and north coast coniferous forest.	Presumed Absent. Limited suitable habitat is present on the Project Area. However, this species was not observed within the Project Area during the biological reconnaissance survey. In addition, the Project Area is outside the known elevation range for the species.
<i>Arctostaphylos glandulosa</i> ssp. <i>Gabrielensis</i> San Gabriel's manzanita	Fed: Ca: CRPR:	None None 1B.2	Mar 595-1500	Occurs in chaparral habitat	Presumed Absent. Limited suitable habitat is present on the Project Area and there is one historic records within five miles. However, this species was not observed within the Project Area during the biological reconnaissance survey. While the survey was not conducted during the appropriate bloom period for this species, there were no plant species observed within the Project Area that had the vegetative characteristics of this species
<i>Astragalus lentiginosus</i> var. <i>antonius</i> San Antonio milk-vech	Fed: Ca: CRPR:	None None 1B.3	Apr-Jul 1500-2600	Occurs in lower montane coniferous forest, and upper montane coniferous forest.	Presumed Absent. Limited suitable habitat is present on the Project Area. However, this species was not observed within the Project Area during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species. In addition, the Project Area is outside the known elevation range for the species.

<i>Scientific Name</i> Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
	Fed: Ca: CRPR:	None None 1B.2			
<i>Astragalus leucolobus</i> Big Bear Valley woollypod	Fed: Ca: CRPR:	None None 1B.2	May-Jul 1100-2885	Occurs in rocky habitat in lower montane coniferous forest, pebble (pavement) plain, pinyon and juniper woodland, and upper montane coniferous forest.	Presumed Absent. Limited suitable habitat is present on the Project Area. However, this species was not observed within the Project Area during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
<i>Astragalus pulsiferae</i> var. <i>coronensis</i> Modoc Plateau milk-vetch	Fed: Ca: CRPR:	None None 4.2	(Apr) May-Jul 1345-1890	Occurs in Great Basin scrub, lower montane coniferous forest, and pinyon and juniper woodland.	Presumed Absent. Limited suitable habitat is present on the Project Area. However, this species was not observed within the Project Area during the biological reconnaissance survey which was conducted during the appropriate bloom period for this species.
<i>Botrychium crenulatum</i> scalloped moonwort	Fed: Ca: CRPR:	None None 2B.2	Jun-Sep 1268-3280	Occurs in bogs and fens, lower montane coniferous forest, marshes and swamps, meadows and seeps, and upper montane coniferous forest.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.
<i>Calochortus clavatus</i> var. <i>gracilis</i> slender mariposa- lily	Fed: Ca: CRPR:	None None 1B.2	Mar-Jun (Nov) 320-1000	Occurs in chaparral, coastal scrub, and valley and foothill grassland.	Presumed Absent. Suitable habitat is present on the Project Area. However, this species was not observed within the Project Area during the biological reconnaissance survey which was conducted during the appropriate bloom period for this species. In addition, the Project Area is outside the known elevation range for the species.
<i>Calochortus palmeri</i> var. <i>palmeri</i> Palmer's mariposa- lily	Fed: Ca: CRPR:	None None 1B.2	Apr-Jul 710- 2390	Occurs in mesic habitats in chaparral, lower montane coniferous forest, meadows and seeps	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.
<i>Calochortus plummerae</i> Plummer's mariposa-lily	Fed: Ca: CRPR:	None None 4.2	May-Jul 100- 1700	Occurs in granitic and rocky habitats in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland.	Presumed Absent. Limited suitable habitat is present on the Project Area. However, this species was not observed within the Project Area during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
	Fed: Ca: CRPR:	None None 1B.2			
<i>Calochortus striatus</i> alkali mariposa-lily	Fed: Ca: CRPR:	None None 1B.2	Apr-Jun 70-1595	Occurs in alkaline and mesic habitats in chaparral, chenopod scrub, meadows and seeps, and Mojavean desert scrub.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.
<i>Calystegia peirsonii</i> Peirson's morning-glory	Fed: Ca: CRPR:	None None 4.2	Apr-Jun 30-1500	Occurs in chaparral, chenopod scrub, cismontane woodland, coastal scrub, lower montane coniferous forest, and valley and foothill grassland.	Presumed Absent. Limited suitable habitat is present on the Project Area. However, this species was not observed within the Project Area during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
<i>Canbya candida</i> white pygmy-poppy	Fed: Ca: CRPR:	None None 4.2	Mar-Jun 600-1460	Occurs in granitic, gravelly and sandy habitats in Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland.	Presumed Absent. Limited suitable habitat is present on the Project Area. However, this species was not observed within the Project Area during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
<i>Carex occidentalis</i> western sedge	Fed: Ca: CRPR:	None None 2B.3	Jun-Aug 1645-3135	Occurs in lower montane coniferous forest, meadows and seeps.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.
<i>Castilleja gleasoni</i> Mt. Gleason paintbrush	Fed: Ca: CRPR:	None RARE 1B.2	May-Jun (Sept) 1160-2170	Occurs in granitic habitats in chaparral, lower montane coniferous forest, and pinyon and juniper woodland.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.
<i>Clarkia xantiana</i> ssp. <i>Parviflora</i> Kern Canyon clarkia	Fed: Ca: CRPR:	None None 4.2	May-Jun 700-3620	Occurs in chaparral, cismontane woodland, Great Basin scrub, and valley and foothill grassland.	Presumed Absent. Suitable habitat is present within the Project Area and there is one historic record within five miles. However, this species was not observed within the Project Area during the biological reconnaissance survey or focused plant surveys, which were conducted during the appropriate bloom period for this species.
<i>Claytonia peirsonii</i> ssp. <i>Peirsonii</i> Peirson's spring beauty	Fed: Ca: CRPR:	None None 1B.2	(Mar) May-Jun 1510-2745	Occurs in granitic, metamorphic, scree, and talus habitats in subalpine coniferous forest, and upper montane coniferous forest.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
	Fed: Ca: CRPR:	None None 1B.3			
<i>Drymocallis cuneifolia</i> var. <i>ewanii</i> Ewan's woodbeauty	Fed: Ca: CRPR:	None None 1B.3	Jun-Jul 1900-2400	Occurs in lower montane coniferous forest, meadows and seeps.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey. In addition, the Project Area is outside the known elevation range for the species.
<i>Dudleya cymosa</i> ssp. <i>Crebrifolia</i> San Gabriel River dudleya	Fed: Ca: CRPR:	None None 1B.2	Apr-Jul 275-457	Occurs in chaparral habitat.	Presumed Absent. The Project Area is outside the known elevation range for the species. In addition, this species was not observed within the Project Area during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
<i>Dudleya densiflora</i> San Gabriel Mountains dudleya	Fed: Ca: CRPR:	None None 1B.1	Mar-Jul 244-610	Occurs in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland	Presumed Absent. The Project Area is outside the known elevation range for the species. In addition, this species was not observed within the Project Area during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
<i>Eriogonum kennedyi</i> var. <i>alpigenum</i> southern alpine buckwheat	Fed: Ca: CRPR:	None None 1B.3	Jul-Sep 2600-3500	Occurs in granitic and gravelly habitats in alpine boulder and rock field, and subalpine coniferous forest.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey. In addition, the Project Area is outside the known elevation range for the species.
<i>Eriogonum microthecum</i> var. <i>johnstonii</i> Johnston's buckwheat	Fed: Ca: CRPR:	None None 1B.3	Jul-Sep 1829-2926	Occurs in rocky habitats in subalpine coniferous forest, and upper montane coniferous forest.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey. In addition, the Project Area is outside the known elevation range for the species.
<i>Fimbristylis thermalis</i> hot springs fimbristylis	Fed: Ca: CRPR:	None None 2B.2	Jul-Sep 110-1340	Occurs in meadows and seeps.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey. In addition, the Project Area is outside the known elevation range for the species.

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
	Fed: Ca: CRPR:	None None 4.2			
<i>Galium angustifolium</i> ssp. <i>Gracillimum</i> slender bedstraw	Fed: Ca: CRPR:	None None 4.2	May-Jun 700-3620	Occurs in chaparral, cismontane woodland, Great Basin scrub, and valley and foothill grassland.	Presumed Absent. Limited suitable habitat present on the Project Area, no records within five miles. This species was not observed within the Project Area during the biological reconnaissance survey or focused plant surveys, which were conducted during the appropriate bloom period for this species.
<i>Horkelia cuneata</i> var. <i>puberula</i> mesa horkelia	Fed: Ca: CRPR:	None None 1B.1	Feb-July (Sep) 70-810	Occurs in chaparral (maritime), cismontane woodland, and coastal sage scrub habitats. Often found in areas with sandy or gravelly soils.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey. In addition, the Project Area is outside the known elevation range for the species.
<i>Juglans californica</i> Southern California black walnut	Fed: Ca: CRPR:	None None 4.2	Mar-Aug 50-900	Occurs in chaparral, cismontane woodland, coastal scrub, and riparian woodland habitats. Often found in alluvial areas.	Present. This tree species was observed just outside the buffer for the Project Area during the biological reconnaissance survey; however, no individuals were observed within the Project Area.
<i>Juncus nodosus</i> knotted rush	Fed: Ca: CRPR:	None None 2B.3	Jul-Sep 30- 1980	Occurs in marshes and swamps, meadows and seeps.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.
<i>Lewisia brachycalyx</i> short-sepaled lewisia	Fed: Ca: CRPR:	None None 2B.2	(Feb) Apr-Jun (Jul) 1370-2300	Occurs in mesic habitats in lower montane coniferous forest, meadows and seeps.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey. In addition, the Project Area is outside of the known elevation range for this species.
<i>Lilium humboldtii</i> ssp. <i>Ocellatum</i> ocellated Humboldt lily	Fed: Ca: CRPR:	None None 4.2	Mar-Jul (Aug) 30-1800	Occurs in openings in chaparral, cismontane woodland, coastal scrub, lower montane coniferous forest, and riparian woodland.	Presumed Absent. Limited suitable habitat present on the Project Area. However, there are no recent records within five miles and this species was not observed within the Project Area during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
	Fed: Ca: CRPR:	None None 1B.2			
<i>Lilium parryi</i> lemon lily	Fed: Ca: CRPR:	None None 1B.2	Jul-Aug 1220-2745	Occurs in mesic habitats in lower montane coniferous forest, meadows and seeps, riparian forest, and upper montane coniferous forest.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.
<i>Linanthus concinnus</i> San Gabriel linanthus	Fed: Ca: CRPR:	None None 1B.2	April –July 1520-2800	Occurs in rocky openings in chaparral, lower montane coniferous forest, and upper montane coniferous forests.	Presumed Absent. Limited suitable habitat present on site. No records within five miles of the Project Area. This species was not observed within the Project Area during the biological reconnaissance survey or focused plant surveys, which were conducted during the appropriate bloom period for this species. In addition, the Project Area is outside of the known elevation range for this species.
<i>Lupinus peirsonii</i> Peirson's lupine	Fed: Ca: CRPR:	None None 1B.3	Apr-Jun 1000-2500	Occurs in gravelly and rocky habitats in Joshua tree woodland, lower montane coniferous forest, pinyon and juniper woodland, and upper montane coniferous forest.	Presumed Absent. Marginally suitable habitat present on the Project Area. Recent records within five miles. However, this species was not observed within the Project Area during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
<i>Lycium torreyi</i> Torrey's box-thorn	Fed: Ca: CRPR:	None None 4.2	(Jan-Feb) Mar-Jun (Sept-Nov) 50-1220	Occurs in Mojavean desert scrub, Sonoran desert scrub.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.
<i>Monardella australis</i> ssp. <i>Gabrielensis</i> San Gabriel Mountains monardella	Fed: Ca: CRPR:	None None 1B.2	July-Sept 1600-2200	Occurs in outcrops and openings with granitic soils in broadleafed upland forest, chaparral (montane), and lower montane coniferous forest habitats	Low. Limited suitable habitat for this species is present on the Project Area; however, only historical records returned within five miles of the Project Area. In addition, the Project Area is just outside of the known elevation range for this species.

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
	Fed: Ca: CRPR:	None None 4.2			
<i>Monardella exilis</i> Mojave monardella	Fed: Ca: CRPR:	None None 4.2	April-Sept 600-2050	Occurs in sandy soils in chenopod scrub, desert dunes, Great Basin scrub, Joshua tree "woodland", lower montane coniferous forest, Mojavean desert scrub, and pinyon and juniper woodland habitats	Low. Limited suitable habitat for this species is present on the Project Area; however, there were no records returned within five miles of the Project Area.
<i>Muilla coronata</i> crowned muilla	Fed: Ca: CRPR:	None None 4.2	Mar-Apr (May) 670-1960	Occurs in chenopod scrub, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland.	Low. Limited suitable habitat for this species is present on the Project Area; however, there were no records returned within five miles of the Project Area.
<i>Nemacladus secundiflorus var. robbinsii</i> Robbins' nemacladus	Fed: Ca: CRPR:	None None 1B.2	Apr-Jun 350- 1700	Occurs in openings in chaparral, and valley and foothill grassland.	Presumed Absent. Suitable habitat present on the Project Area. One historic record within five miles. However, this species was not observed within the Project Area during the biological reconnaissance survey or focused plant surveys, which were conducted during the appropriate bloom period for this species.
<i>Opuntia basilaris var. brachyclada</i> short-joint beavertail	Fed: Ca: CRPR:	None None 1B.2	Apr-Jun (Aug) 425-1800	Occurs in chaparral, Joshua tree woodland, Mojavean desert scrub, and pinyon and juniper woodland	Present. Observed on the Project Area during the biological reconnaissance survey.
<i>Oreonana vestita</i> woolly mountain-parsley	Fed: Ca: CRPR:	None None 1B.3	Mar-Sep 1615-3500	Occurs in lower montane coniferous forest, Subalpine coniferous forest, Upper montane coniferous forest	Presumed Absent. Marginally suitable habitat present on the Project Area. However, this species was not observed within the Project Area during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species. In addition, the Project Area is outside the known elevation range for the species.

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
	Fed: Ca: CRPR:	None None 1B.2			
<i>Orobanche valida</i> spp. <i>Valida</i> Rock Creek broomrape	Fed: Ca: CRPR:	None None 1B.2	May-Sep 1030-2000	Occurs in granitic habitats in chaparral, pinyon, and juniper woodland.	Presumed Absent. Only marginally suitable habitat for this species occurs within the Project Area. Two recent records of this species were returned within five miles of the Project Area during the literature review. However, this species was not observed within the Project Area during the biological reconnaissance survey or focused plant surveys, which were conducted during the appropriate bloom period for this species.
<i>Oxytropis oreophila</i> var. <i>oreophila</i> rock-loving oxytrope	Fed: Ca: CRPR:	None None 2B.3	Jun-Sept 3400-3800	Occurs in alpine boulder and rock fields, and subalpine coniferous forest.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey. In addition, the Project Area is outside the known elevation range for the species.
<i>Parnassia cirrata</i> var. <i>cirrata</i> San Bernardino grass-of-Parnassus	Fed: Ca: CRPR:	None None 1B.3	Aug-Sept 1250-2440	Occurs in mesic habitat in lower montane coniferous forest, meadows and seeps, and upper montane coniferous forest.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.
<i>Plagiobothrys parishii</i> Parish's popcorn flower	Fed: Ca: CRPR:	None None 1B.1	Mar-Jun (Nov) 750- 1400	Occurs in alkaline and mesic habitats in Great Basin scrub, and Joshua tree woodland.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.
<i>Quercus durata</i> var. <i>gabrielensis</i> San Gabriel oak	Fed: Ca: CRPR:	None None 4.2	Apr-May 450- 1000	Occurs in chaparral and cismontane woodland.	Presumed Absent. This species was not observed within the Project Area during the biological reconnaissance survey.
<i>Quercus engelmannii</i> Engelmann oak	Fed: Ca: CRPR:	None None 4.2	Mar-Jun 50- 1300	Occurs in chaparral, cismontane woodland, riparian woodland, and valley and foothill grassland.	Presumed Absent. This species was not observed within the Project Area during the biological reconnaissance survey.
<i>Symphotrichum defoliatum</i> San Bernardino aster	Fed: Ca: CRPR:	None None 1B.2	July-Dec <2040	Occurs in freshwater wetlands, coastal sage scrub, and southern oak woodland, often in recently disturbed areas.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.

Scientific Name Common Name	Status		Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
	Fed: Ca: CRPR:	None None 1B.3			
<i>Symphotrichum greatae</i> Greata's aster	Fed: Ca: CRPR:	None None 1B.3	Jun-Oct 300-2010	Occurs in mesic habitats in broadleafed upland forest, chaparral, cismontane woodland, lower montane coniferous forest, and riparian woodland.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.
<i>Viola pinetorum ssp. Grisea</i> grey-leaved violet	Fed: Ca: CRPR:	None None 1B.2	Apr-Jul 1500-3400	Occurs in meadows and seeps, subalpine coniferous forest, and upper montane coniferous forest.	Presumed Absent. Suitable habitat for this species was not observed within the Project Area during the biological reconnaissance survey.
<i>Yucca brevifolia</i> western Joshua tree	Fed: Ca: CRPR:	None CAN None	Mar-Jun 400-2300	Occurs in desert flats and slopes.	Present. Observed on the Project Area during the biological reconnaissance survey.

Federal Designations:

(Federal Endangered Species Act, USFWS)

END: federally listed, endangered

THR: federally listed, threatened

State Designations:

(California Endangered Species Act, CDFW)

END: state-listed, endangered

THR: state-listed, threatened

CAN: state-candidate for listing

California Native Plant Society (CNPS) Status Designations

1A Plants Presumed Extirpated in California and Either Rare or Extinct Elsewhere

1B Plants Rare, Threatened, or Endangered in California and Elsewhere

2A Plants Presumed Extirpated in California, But Common Elsewhere

2B Plants Rare, Threatened, or Endangered in California, But More Common Elsewhere

3 Plants about which we need more information; a review list

4 Plants of limited distribution; a watch list

List 1B, 2, and 4 extension meanings:

.1 Seriously threatened in California (over 80% of occurrences threatened / high degree and immediacy of threat)

.2 Moderately threatened in California (20-80% occurrences threatened / moderate degree and immediacy of threat)

.3 Not very threatened in California (less than 20% of occurrences threatened / low degree and immediacy of threat or no current threats known)

Note: According to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the California Fish and Game Code (CDFG 1984). This interpretation is inconsistent with other definitions.

Source: California Natural Diversity Data Base (CNDDDB) California Native Plant Society Electronic Inventory (CNPSEI) Valyermo, Juniper Hills, Littlerock, Lovejoy Buttes, El Mirage, Mescal Creek, Mount San Jacinto, Crystal Lake, and Waterman Mountain. 7.5-minute topographic quadrangles.

Potential for Occurrence of Sensitive Wildlife Species

Scientific Name Common Name	Status	Habitat	Potential for Occurrence
INVERTEBRATES			
<i>Bombus crotchii</i> Crotch bumble bee	Fed: none CA: CAN	Occurs in open grassland and scrub habitats.	High. Suitable habitat is present on the Project Area in the recovering chaparral areas. Five recent observations have been documented in the CNDDDB within 5-miles of the Project Area.
<i>Euphydryas editha quino</i> Quino checkerspot butterfly	Fed: END CA: none	Found in chaparral and coastal sage scrublands.	Presumed Absent. Outside of the known range of this species.
FISH			
<i>Catostomus santaanae</i> Santa Ana sucker	Fed: THR CA: none	Permanent flowing creeks and streams with gravel, rubble, or boulder substrates.	Presumed Absent. No suitable stream habitat is present on the Project Area.
<i>Gila orcutti</i> arroyo chub	Fed: none CA: SSC	Typically occurs in slow water stream sections with mud or sand bottoms.	Presumed Absent. No suitable stream habitat is present on the Project Area.
<i>Rhinichthys osculus ssp. 8</i> Santa Ana speckled dace	Fed: none CA: SSC	Permanent flowing creeks and streams with shallow gravel and cobble riffles.	Presumed Absent. No suitable stream habitat is present on the Project Area.
AMPHIBIANS			
<i>Anaxyrus californicus</i> arroyo toad	Fed: END CA: SSC	Typical breeding habitat includes creek and pool, and typical nonbreeding (terrestrial) habitat includes cropland/hedgerow, grassland, playa/salt flat, savanna, chaparral, and woodlands.	Presumed Absent. No suitable habitat is present on the Project Area. Arroyo toads use extremely specialized habitat including sandy stream sides and quiet waters free of predatory fish, none of which are present on or adjacent to the Project Area.
<i>Rana boylei</i> foothill yellow-legged frog	Fed: none CA: SSC	Found near rocky streams like valley-foothill hardwood, hardwood-conifer- riparian, ponderosa pine, mixed conifer, coastal scrub, mixed chaparral, and wet meadows	Presumed Absent. No rocky stream habitat is present on the Project Area.
<i>Rana muscosa</i> Southern mountain yellow-legged frog	Fed: END CA: END	Ponds, streams, lakes, and isolated pools in southern Sierra Nevada Mountains and rocky streams within narrow canyons and the chaparral belt in Southern California mountains.	Presumed Absent. No ponds, streams or lake habitat present on the Project Area.

Scientific Name Common Name	Status		Habitat	Potential for Occurrence
<i>Taricha torosa</i> Coast Range newt	Fed: CA:	none SSC	Typically occurs in coastal drainages and breeds in ponds, reservoirs, and slow-moving streams.	Presumed Absent. No suitable coastal drainages, ponds, reservoirs, or slow-moving streams are present on the Project Area.
REPTILES				
<i>Arizona elegans occidentalis</i> California glossy snake	Fed: Ca:	none SSC	Typically occurs in rocky washes, chaparral, scrub and grassland habitat, often with loose or sandy soils.	Moderate. Limited suitable habitat is present on the Project Area in the recovering chaparral areas. One recent occurrence within 5-miles of the Project Area.
<i>Aspidoscelis tigris stejnegeri</i> coastal whiptail	Fed: Ca:	none SSC	Arid habitats including chaparral, woodlands, and dry riparian areas.	Present. An individual of this species was observed on the Project Area during the May 2022 reconnaissance survey.
<i>Emys marmorata</i> western pond turtle	Fed: CA:	none SSC	Typically occurs in slow moving permanent or intermittent streams, small ponds, small lakes, reservoirs, and other long-term water deposits, where abundant cover is available.	Presumed Absent. No suitable streams, ponds, lakes, or reservoirs, are present on the Project Area.
<i>Gopherus agassizii</i> desert tortoise	Fed: CA:	THR THR	Desert valleys with vegetation communities such as alluvial fan, saltbush, creosote bush, desert scrub, and tree yuccas. Burrows in soil, under rocks, and along washes.	Presumed Absent. No desert valley habitat is present on the Project Area.
<i>Phrynosoma blainvillii</i> Blainville's horned lizard	Fed: CA:	none SSC	Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Prefers open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of native ants and other insects.	Present. Two individuals of this species were observed on the Project Area during the September 2023 reconnaissance survey.
<i>Thamnophis hammondi</i> two-striped garter snake	Fed: CA:	none SSC	Typically occurs near permanent or semi-permanent water in a variety of habitats containing rocky or densely vegetated banks.	Presumed Absent. No suitable streams, ponds, lakes, or reservoirs, are present on the Project Area.

Scientific Name Common Name	Status	Habitat	Potential for Occurrence
AVES			
<i>Athene cunicularia</i> burrowing owl (burrow sites and some wintering sites)	Fed: none Ca: SSC	Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation.	Presumed Absent. No suitable habitat is present on the Project Area.
<i>Empidonax traillii extimus</i> southwestern willow flycatcher (nesting)	Fed: END Ca: END	Occurs in riparian woodlands in southern California.	Presumed Absent. No suitable riparian habitat is present on the Project Area.
<i>Lanius ludovicianus</i> loggerhead shrike	Fed: none Ca: SSC	Open country, with scattered shrubs and trees or other perches for hunting; includes agricultural fields, deserts, grasslands, savanna, and chaparral.	Low. Limited suitable habitat is present on the Project Area in the recovering chaparral areas. No records within 5-miles of the Project Area.
<i>Setophaga petechia</i> yellow warbler	Fed: none CA: SSC	In southern California, this species breeds in lowland and foothill riparian woodlands dominated by cottonwoods, alders, or willows and other small trees and shrubs typical of low, open-canopy riparian woodland. During migration, they occur in lowland and foothill woodland habitats such as desert oases, riparian woodlands, oak woodlands, mixed deciduous-coniferous woodlands, and suburban and urban gardens and parks.	Present. This species was observed on the Project Area during the May 2022 biological reconnaissance survey.
<i>Toxostoma lecontei</i> Le Conte's thrasher	Fed: none CA: SSC	Desert flats, dunes, and scrub with sparse saltbush and sometimes creosote bush.	Presumed Absent. No suitable habitat is present on the Project Area.
MAMMALS			
<i>Ammospermophilus nelsoni</i> Nelson's antelope squirrel	Fed: none CA: THR	Arid grassland, shrubland, and alkali sink habitats of the San Joaquin Valley and adjacent foothills.	Presumed Absent. No suitable habitat is present on the Project Area.

Scientific Name Common Name	Status		Habitat	Potential for Occurrence
<i>Corynorhinus townsendii</i> Townsend's big-eared bat	Fed: CA:	none SSC	Habitat generalist, but mostly commonly associated with forest and riparian areas in the summer months. Winter hibernacula include caves and mines throughout its range	Presumed Absent. No roosting habitat is present on the Project Area. No records within 5-miles of the Project Area.
<i>Eumops perotis californicus</i> western mastiff bat	Fed: CA:	none SSC	Occurs in many open, semi-arid to arid habitats, including conifer and deciduous woodlands, coastal scrub, annual and perennial grasslands, palm oases, chaparral, desert scrub, and urban. Roosts primarily in cliff faces and rock crevices but occasionally roosts in buildings.	Low. Habitat is present in the nearby cliffs close to the Project Area, species likely to pass through the Project Area but no roosting habitat is within the Project Area. No records within 5-miles of the Project Area.
<i>Microtus californicus stephensi</i> south coast marsh vole	Fed: CA:	none SSC	Occurs in wetland communities and associated grasslands.	Presumed Absent. No suitable wetland habitat is present on the Project Area.
<i>Onychomys torridus ramona</i> southern grasshopper mouse	Fed: CA:	none SSC	Low, semi-open, and open scrub habitats with flat, sandy valley floors. Habitats include coastal and mixed chaparral, coastal sage scrub, riparian scrub, low sagebrush, and grasslands with interspaced shrubs.	Presumed Absent. No suitable low scrub habitat is present on the Project Area. No records within 5-miles of the Project Area.
<i>Ovis canadensis nelson</i> desert bighorn sheep	Fed: CA:	none FP	Open, steep, and rocky terrain in arid desert mountains.	Low. Suitable steep / rocky terrain is located in close proximity to the Project Area. Potential for species to move through the Project Area. No records of this species have been documented within five miles.
<i>Taxidea taxus</i> American badger	Fed: CA:	none SSC	Open habitats with friable soil such as grasslands, brushlands with sparse ground cover, open chaparral, and sometimes riparian zones.	Low. Suitable habitat is present in the recovering chaparral areas on the Project Area and in the surrounding area. No records within 5-miles of the Project Area but there is potential for this species to pass through.

Scientific Name Common Name	Status		Habitat	Potential for Occurrence
<i>Xerospermophilus mohavensis</i> Mohave ground squirrel	Fed: CA:	none THR	Flat or moderately sloped desert habitats with deep sandy or gravelly friable soils. Found in habitats with abundant annual herbaceous vegetation, alluvial fans, desert sink shrublands, and creosote bush scrub.	Presumed Absent. No suitable desert habitats are present on the Project Area.

Federal Designations (Federal Endangered Species Act, USFWS)

END: federally listed, endangered
THR: federally listed, threatened
DL: federally delisted

State Designations: (California Endangered Species Act, CDFW)

END: state-listed, endangered
THR: state-listed, threatened
FP: Fully Protected species
SSC: California Species of Special Concern
CAN: Candidate for Listing (Endangered)

Source: California Natural Diversity Data Base (CNDDDB) Valyermo, Juniper hills, Littlerock, Lovejoy buttes, El mirage, Mescal creek, Mount San Jacinto, Crystal lake, and Waterman mountain. 7.5-minute topographic quadrangles.