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
ARD	Aquatic Resources Delineation
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDB	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
НСР	Habitat Conservation Plan
ITP	Incidental take permit
MBTA	Migratory Bird Treaty Act
NCCP	Natural Community Conservation Plan
NHD	National Hydrology Dataset
NPPA	Native Plant Protection Act
NRCS	Natural Resources Conservation Service
NWI	National Wetland Inventory
Project	Devil's Punchbowl Nature Center Proposed Project
SAA	Streambed Alteration Agreement
SSAR	Society for the Study of Amphibians and Reptiles
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
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

1.0 INTRODUCTION

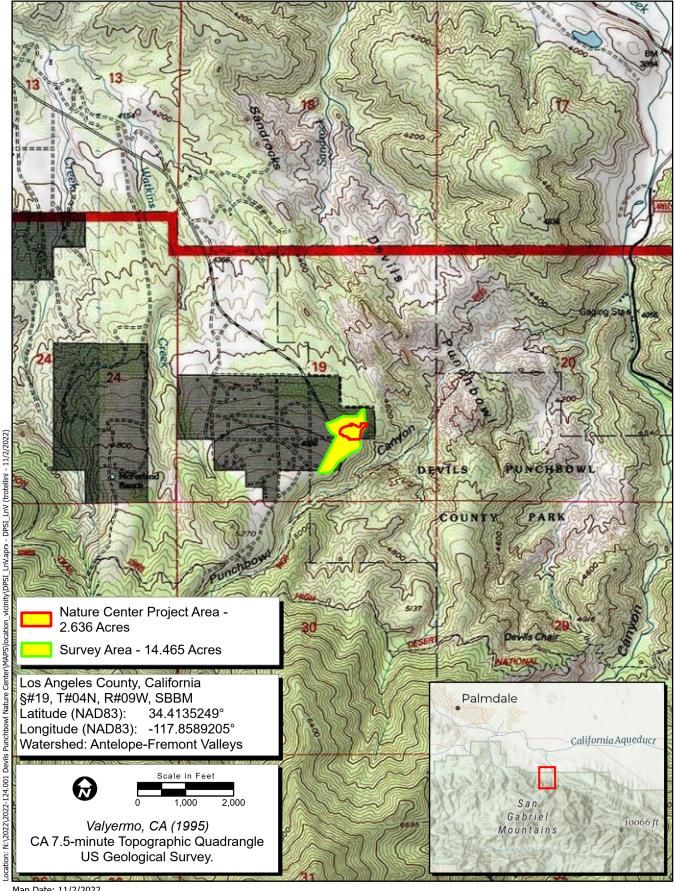
ECORP Consulting, Inc. conducted a biological reconnaissance survey at the Devil's Punchbowl Nature Center Proposed Project site (Project) plus some of the trails and areas surrounding the Project site (Survey Area). The Project entails rebuilding the nature center and associated site improvements at 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 survey of the Project site was 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 site 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 site, 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 site 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.

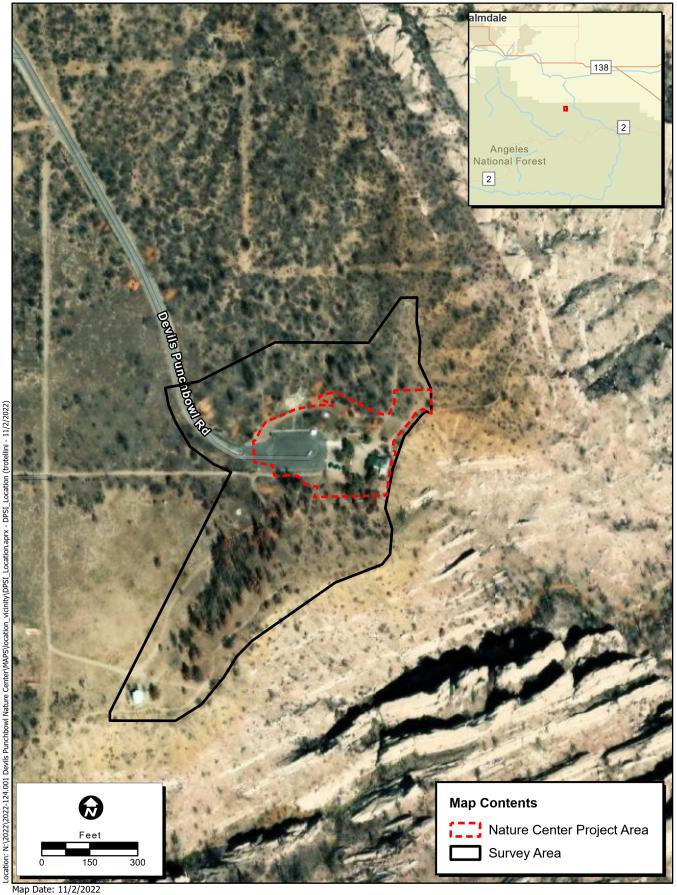
The proposed concept builds on the theme of site transformation, rebirth, and a new way to experience the landscape of Devil's Punchbowl. The architecture is inset into the landscape within the footprint of previously disturbed areas of the site and also includes a covered exterior courtyard. By grouping 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 someone travels down the path and makes their way to the rim of the Devil's Punchbowl. The newly planted native plantings will blend into the existing surrounding landscape and over time will imbed the architecture seamlessly into the site.



Map Date: 11/2/2022 Sources: ESRI, USGS

Figure 1. Project Location and Vicinity





Map Date: 11/2/2022

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Figure 2. Project Location

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;
- ADA access to buildings and trails;
- Improvements to the trailheads (signage, fencing, etc.);
- 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;
- No additional parking will be included as part of this Project; and
- Solar canopies over parking lot.

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 (ITPs) 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

The purpose of the federal Clean Water Act (CWA) is to "restore and maintain the chemical, physical, and biological integrity of the nation's waters." Section 404 of the CWA prohibits the discharge of dredged or fill material into Waters of the U.S. without a permit from the U.S. Army Corps of Engineers (USACE). The definition of Waters of the U.S. includes rivers, streams, estuaries, the territorial seas, ponds, lakes, and wetlands. Wetlands are defined as those areas "that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (33 CFR 328.3 7b). The U.S. Environmental Protection Agency (USEPA) acts as a cooperating agency to set policy, guidance, and criteria for use in evaluating permit applications and also reviews USACE permit applications.

The USACE regulates "fill" or dredging of fill material within its jurisdictional features. "Fill material" means any material used for the primary purpose of replacing an aquatic area with dry land or changing the bottom elevation of a water body. Substantial impacts to wetlands may require an individual permit. Projects that only minimally affect wetlands may meet the conditions of one of the existing Nationwide Permits. A Water Quality Certification or waiver pursuant to Section 401 of the CWA is required for Section 404 permit actions; this certification or waiver is issued by the State Water Resources Control Board (SWRCB), administered by each of nine California Regional Water Quality Control Boards (RWQCB).

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." 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 and reptiles, birds, and mammals. Most fully protected species have since been listed as threatened or endangered under the federal and/or California ESAs. 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. Furthermore, CDFW prohibits any state agency from issuing ITPs for fully protected species, except for necessary scientific research.

2.2.3 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 California Fish and Game Code

2.2.4.1 Streambed Alteration Agreement

Section 1602 of the California Fish and Game Code requires that a Notification of Lake or Streambed Alteration be submitted to CDFW 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." The CDFW reviews the proposed actions and, if necessary, submits to the Applicant a proposal for measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the Applicant is the Streambed Alteration Agreement (SAA). Often, projects that require an SAA also require a permit from the USACE under Section 404 of the CWA. In these instances, the conditions of the Section 404 permit and the SAA may overlap.

2.2.4.2 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 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. Based on these examples, impacts to biological resources would normally be considered significant if a project would:

- have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS;
- have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS;
- have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, and coastal) through direct removal, filling, hydrological interruption, or other means;
- interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;

- conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- conflict with the provisions of an adopted HCP, Natural Community Conservation Plan (NCCP), or other approved local, regional, or state HCP.

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 survey, ECORP biologists performed a literature review using the CDFW's California Natural Diversity Database (CNDDB; CDFW 2022a) and the California Native Plant Society's (CNPS) Electronic Inventory (CNPSEI; CNPS 2022) to determine the special-status plant and wildlife species that have been documented near the Project site. ECORP searched CNDDB and CNPSEI records within the Project site 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. The CNDDB 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 2022b);
- Special Animals List (CDFW 2022c);
- 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 2022).

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 site was generated. 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 site based on the following quidelines:

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 site 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 site 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 five miles of the Project site; or a recently documented observation occurs within 5 miles of the area and marginal or limited amounts of habitat occurs in the Project site.

Low: Limited or marginal habitat for the species occurs within the Project 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 site; 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 site.

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), National Hydrology Dataset (NHD; USGS 2022), and the corresponding USGS topographic maps was also conducted to determine if there were any blue line streams or drainages present on the Project site that potentially fall under the jurisdiction of either federal or state agencies.

3.2 Field Survey

3.2.1 Biological Reconnaissance Survey

The biological reconnaissance survey was conducted by walking the entire Survey Area to determine the vegetation communities and wildlife habitats present on the site. The biologist documented the plant and animal species present in the Survey Area and the location and condition of the Project 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 site. The Project site 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 biologist documented the vegetation communities present on the Project site.

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; SSAR 2017), *Check-list of North American Birds* (Chesser et al. 2021), 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 survey conducted for this report, immediately following the Bobcat Fire in 2020 the Project site was mapped by ECORP botanists to determine what communities were present prior to the fire. 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 Preliminary Aquatic Resources Delineation

A desktop review was conducted to identify potential streams and hydric soils on the property. This entailed examination of the NRCS, NWI mapping, NHD, aerial photography, and the USGS topographic mapping of the Project site 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 Ordinary High Water Mark 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 48 special-status plant species and 27 special-status wildlife species that could occur on and/or near the Project site.

4.1.1 Special-Status Plants and Wildlife

The literature review and database searches identified 48 special-status plant species and 27 special-status wildlife species that could occur near the Project site. A list was generated from the results of the literature review and the Project site 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 site is not located within any USFWS-designated Critical Habitat. Four designated Critical Habitat regions are present within 10 miles of the Project site: 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 on the Project site is primarily Haploxerolls, warm-Vista family association, 2- to 30-percent slope with rock outcrops. No aquatic features were depicted within the Project site in the NWI review. The closest documented aquatic resource is Holmes Creek located approximately 0.1 mile west of the Project site.

4.2 Biological Reconnaissance Survey

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

Table 1. Weather Conditions During the Survey								
Date	Time		Temperature (°F)		Cloud Cover (%)		Wind Speed (mph)	
	Start	end	Min	Max	min	max	min	max
5/12/2022	0800	1030	54.4	64	0	0	1-4	3-5

4.2.1 Property Characteristics

Immediately following the Bobcat Fire the Project site 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 site primarily consisted of single-leaf pinyon – juniper woodland vegetation communities. During the biological reconnaissance survey conducted in May 2022 the Project site consisted of burned and resprouting vegetation, and the plant species currently dominating these areas are typical of chaparral communities. There are remnants of previously existing structures present on the Project site including the nature center. There are also other facilities onsite including a parking lot and restroom facilities. The Project site 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 on the Project site include recovering chaparral communities with additional areas falling under the land cover types landscaped, developed, or disturbed. In addition to recovering chaparral communities, yerba santa scrub (*Eriodictyon* ssp. Shrubland Alliance) was observed outside of the Project site but within the Survey Area. These communities and land cover types within the Project site 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; 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*), bush mallow (*Malacothamnus* sp.), Tucker's oak (*Quercus john-tuckeri*), fragrant sumac (*Rhus aromatica*), and California yerba santa (*Eriodictyon californicum*). A high level of herbaceous cover was also present including Douglas' milkvetch (*Astragalus douglasii*), Mojave suncup (*Camissonia campestris*), western wallflower (*Erysimum capitatum*), Fremont's phacelia (*Phacelia fremontii*), and splendid gilia (*Saltugilia splendens*). In addition, several individuals of single-leaf pinyon and bigberry manzanita (*Arctostaphylos glauca*) had been planted in these areas in an effort to restore them to their pre-fire condition. Approximately 0.9 acre

of chaparral were mapped within the Project site and approximately 7.5 acres were mapped outside of the Project site within the Survey Area.

4.2.2.2 Yerba Santa Scrub (Eriodictyon spp. Shrubland Alliance)

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. 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 included thickleaf yerba santa (*Eriodictyon crassifolium*), common phacelia (*Phacelia distans*), Fremont's phacelia, fragrant sumac, and desert stipa (*Stipa speciosa*). Approximately 3.77 acres of yerba santa scrub were mapped outside of the Project site within the Survey Area.

4.2.2.3 Landscaped

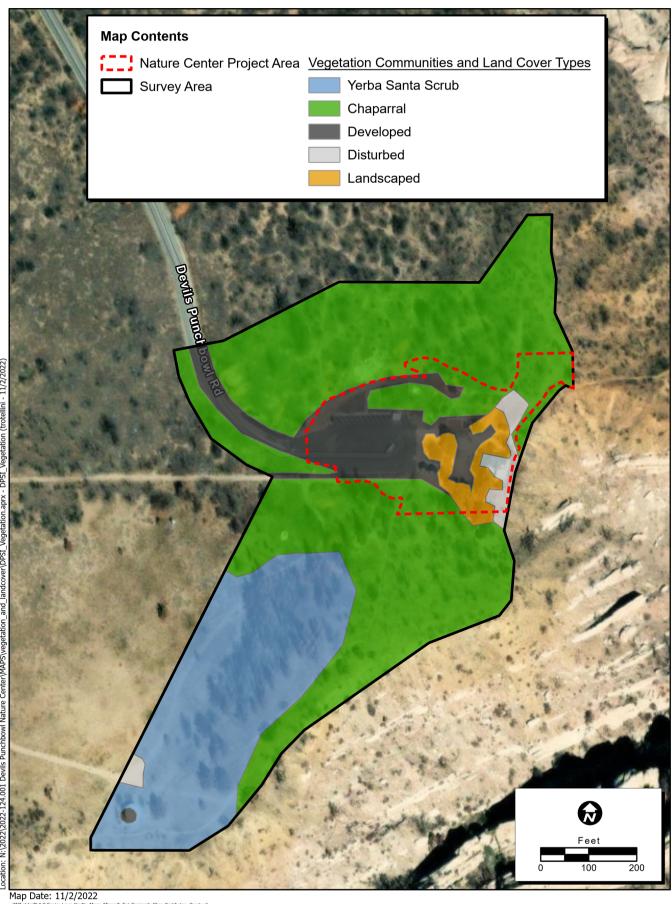
Landscaped is not a vegetation classification, but rather a land cover type. Landscaped areas were present within the Project Area near and adjacent to the existing structures onsite. Landscaped areas were made up of various native species including bigberry manzanita, mountain mahogany (*Cercocarpus betuloides*), single-leaf pinyon, black oak (*Quercus kelloggii*), and Joshua tree (*Yucca brevifolia*). Approximately 0.4 acre of landscaped areas were mapped within the Project site.

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 red brome (*Bromus madritensis*), cheatgrass (*Bromus tectorum*), and foxtail barley (*Hordeum murinum*). Approximately 0.2 acre of disturbed areas were mapped within the Project site and approximately 0.1 acre was mapped outside of the Project site within the Survey Area.

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 1.2 acres of developed areas were mapped within the Project site and approximately 0.4 acre was mapped outside of the Project site within the Survey Area.



ts: Maxar, Microsoft, Esri Community Maps Contributors, County of © OpenStreetMap, Microsoft, Esri, HERE, Garmin, SafeGraph, GS, Bureau of Land Management, EPA, NPS, US Census Bureau,

ECORP Consulting, Inc.

Figure 3. Vegetation Communities and Land Cover Types
2022-124.001 Devils Punchbowl Nature Center

4.2.3 Plants

Plant species observed in the Survey Area were those typically observed in chaparral communities for the time of the year in which the survey was conducted. Dominant species included flannel bush, thickleaf yerba santa, bush mallow, Tucker's oak, and fragrant sumac. Nonnative species observed on the Project site included lambs quarters (*Chenopodium album*), foxtail barley, red brome, and cheatgrass. A full list of plant species observed on and immediately adjacent to the Project site is included in Appendix B.

4.2.4 Wildlife

Wildlife species observed and detected in the Survey Area were characteristic of chaparral habitat. Twenty-five bird species were also detected on and in the vicinity of the Project site including yellow warbler (Setophaga petechia), white-throated swift (Aeronautes saxatalis), California scrub-jay (Aphelocoma californica), California quail (Callipepla californica), California towhee (Melozone crissalis), Costa's hummingbird (Calypte costa), common raven (Corvus corax), house finch (Haemorhous mexicanus), and mourning dove (Zenaida macroura). Three reptile species were observed onsite: San Diegan whiptail (Aspidoscelis tigris stejnegeri), Great Basin fence lizard (Sceloporus occidentalis longipes), and western side-blotched lizard (Uta stansburiana elegans). A complete list of wildlife species observed on or immediately adjacent to the Project site is included in Appendix C.

4.2.5 Potential for Special-Status Plant and Wildlife Species to Occur on the Project Site

The literature review and database searches identified 48 special-status plant species and 27 special-status wildlife species that have the potential to occur on or near the Project site. However, due to the recent effects on the landscape from the Bobcat Fire, many of the species are presumed absent from the Project site.

4.2.5.1 Special-Status Plants

There were 48 special-status plant species that appeared in the literature review and database searches for the Project site (CDFW 2022a; CNPS 2022). 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. Descriptions of the CNPS designations are found in Table 2. Of the 48 special-status plants identified, two were present on the Project site, one was present adjacent to the Project site, and one has 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 site. Species were presumed to be absent if suitable habitat, including soils and elevation factors, were not present on the Project site and/or if that species was not observed during the biological reconnaissance 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)			

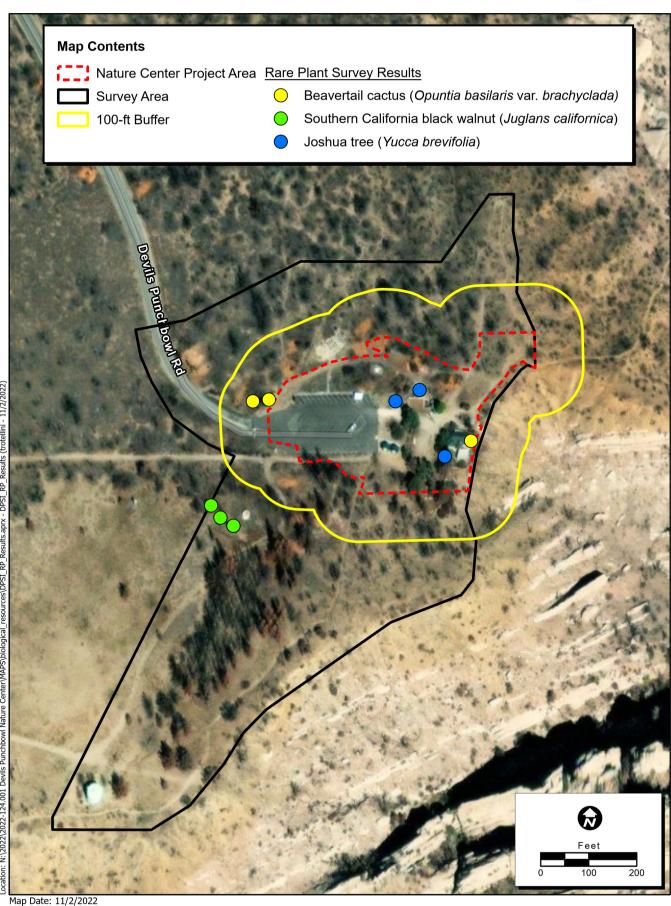
Note: According to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10, of the California Fish and Game Code (California Department of Fish and Game 1984). This interpretation is inconsistent with other definitions.

4.2.5.2 Plant Species that are Present

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

Joshua Tree

Joshua trees were identified within the Project site during the reconnaissance survey. The locations of the Joshua trees observed are depicted on Figure 4. Joshua tree is currently a Candidate for listing under the California ESA and is protected on interim status while CDFW is conducting a review to decide whether it will get permanent state protections. The review period has been extended to October 2022. The Joshua tree is a member of the agave family that blooms from March to June. It is found in desert flats and slopes.



FFT style="Italic">Service Layer Credits: Maxar, Microsoft, Esri Community Maps Contributors, County or Los Angeles, California State Parks, © OpenStreeMap, Microsoft, Esri, HERE, Garmin, SafeGraph GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau USDA

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Figure 4. Rare Plant Survey Results

Southern California Black Walnut

Southern California black walnut (*Juglans californica*) was identified adjacent to the Project site in the Survey Area during the reconnaissance survey. The locations of the southern California black walnut trees observed are depicted on Figure 4. Southern California black walnut is a CNPS 4.2 species, indicating that it is uncommon and moderately threatened in California (CNPS 2022). 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* var. *brachyclada*) was identified within the Project site and adjacent to the Project site in the Survey Area during the reconnaissance survey. The locations of the short-joint beavertails observed are depicted on Figure 4. Short-joint beavertail is a CNPS 1B.2 species, indicating that it is rare and moderately threatened in California (CNPS 2022). 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 on the Project site.

4.2.5.3 Plant Species with a Low Potential to Occur

The following species was determined to have a low potential to occur on the Project site because limited or marginal habitat for that species occurs within the transitional chaparral scrub habitat on the Project 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 site; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search. The limited size and existing disturbances of the recovering chaparral habitat on the Project site likely preclude these species from occurring.

Crowned muilla (Muilla coronata), CNPS 4.2.

4.2.5.4 Plant Species Presumed Absent

The following species are presumed absent from the Project site 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. Antonius), 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 cunefolia* 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;
- San Gabriel linanthus (Linanthus concinnus), CNPS 1B.2;
- 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;
- Peirson's lupine (Lupinus peirsonii), CNPS 1B.3;
- Torrey's boxthorn (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 popcornflower (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 27 special-status wildlife species identified in the literature review, two were found to have moderate potential to occur, six were found to have a low potential to occur, and the remaining 19 species are presumed absent from the Project site. In addition, one special-status wildlife species that was not identified in the literature review was observed during the reconnaissance survey: yellow warbler (*Setophaga petechia*), a CDFW SSC. The sensitive wildlife species with a potential to occur in the area were not observed during the reconnaissance survey.

4.2.5.6 Wildlife Species with a Moderate Potential to Occur

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

- Crotch bumble bee (Bombus crotchii), state Candidate Endangered; and
- California glossy snake (Arizona elegans occidentalis), CDFW SSC;

4.2.5.7 Wildlife Species with a Low Potential to Occur

The following species have a low potential to occur on the Project site 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 site; or suitable habitat strongly associated with the species occurs onsite, but no records or only historic records were found within the database search.

- Coast horned lizard (Phrynosoma blainvillii), CDFW SSC;
- Loggerhead shrike (Lanius ludovicianus), CDFW SSC.
- Pallid San Diego pocket mouse (Chaetodipus fallax pallidus), 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

4.2.5.8 Wildlife Species Presumed Absent

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

- 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), CDFW SSC;
- Arroyo toad (Anaxyrus californicus), federally listed Endangered, CDFW SSC;
- Foothill yellow-legged frog (Rana boylii), 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 hammondii), 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 tamona), CDFW SSC; and
- Mojave ground squirrel (Xerospermophilus mohavensis) CDFW SSC.

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 identified Holmes Creek as the closest aquatic resource, approximately 0.1 mile west at the closest point to the Project site.

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 on the Project site and adjacent to the Project site in the Survey 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 site and the Survey 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 site was assessed for its ability to function as a wildlife corridor. The Project site is located within the Devil's Punchbowl Natural Area, a Los Angeles Parks and Recreation site. The site 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, Los Angeles National Forest to the northwest, and the San Bernardino National Forest to the east. The Project site is not located within a Significant Ecological Area.

5.0 IMPACT ANALYSIS

5.1 Special-Status Species

The Project site is generally classified as in a state of recovery following wildfires in the area; the recovering land cover is predominately chaparral habitat. Forty-eight (48) special-status plant species

were identified in the literature review and database searches but based on the condition of the Project site and the available habitat, only one species (crowned muilla) was determined to have low potential to occur. No special-status plant species have a high or moderate potential to occur on the site. Three special-status plant species (Joshua tree, short-joint beavertail, and southern California black walnut) were observed on or adjacent to the Project site during the biological reconnaissance survey and previous habitat mapping efforts immediately following the Bobcat Fire. Based on the information provided by the Los Angeles County, ECORP assumes that the Project will not impact the vegetation surrounding the previously developed portions of the Project site. If additional impacts are to occur outside of the footprint of the existing developed areas, then impacts to special status-plant species may occur and additional measures including rare plant surveys are warranted. If impacts are contained within the previously developed portions of the Project site no impacts to special-status plants would occur.

One special-status wildlife species not identified in the literature review, yellow warbler, was observed during the biological reconnaissance survey. The literature review and database searches identified 27 special-status wildlife species that have previously been documented in the vicinity of the Project site. Two species (Crotch bumblebee and California glossy snake) were determined to have moderate potential to occur on the site and six species (coast horned lizard, loggerhead shrike, pallid San Diego pocket mouse, western mastiff bat, desert bighorn sheep, and American badger) were determined to have low potential to occur on the Project site. The remaining 19 species were presumed absent from the Project site.

The only native vegetation communities on the Project site are the recovering chapparal communities. The majority of the Project footprint is within existing disturbed, developed, or landscaped areas that were present on the site prior to the Bobcat Fire. The lack of substantial 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 site. The 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 having a potential to occur are described below.

Yellow warbler was observed during the biological reconnaissance survey. Yellow warbler would not be expected to nest within the Project site itself due to lack of suitable nesting habitat but may use tree habitat adjacent to the Project site for nesting. Indirect impacts to yellow warbler may occur from construction noise and vibrations should the species nest within 500 feet of the Project site. 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-1, -3, and -4. The Mitigation Measures for the Proposed Project are discussed in Section 5.

The Project site is located within and adjacent to suitable habitat for desert bighorn sheep, American badger, and western mastiff bat, but habitat features within the Project site itself are not sufficient to sustain populations of these species. As such, these species may be expected to pass through the Project site but would not be expected to be directly impacted 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-2, -3, and -4.

The approximately 0.9 acre of recovering chaparral habitat provides marginally suitable habitat for the Crotch bumble bee, California glossy snake, coast horned lizard, and pallid San Diego pocket mouse. As such, direct impacts to these species through ground disturbance and indirect impacts from habitat loss may occur. Based on the information provided by Los Angeles County, ECORP assumes that the Project will not impact the vegetation surrounding the previously developed portions of the Project site. If present, direct impacts to these species may occur as a result of the Project in the form of mortality or injury due to ground-disturbing activities in areas adjacent to the species habitat. 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-2, -3, and -4.

The Project site also contained suitable nesting habitat for bird species protected under the MBTA. Development of the Project site will be required to comply with the MBTA and avoid impacts to nesting birds. If construction of the 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-1.

5.2 Sensitive Natural Communities

The Project site consists of recovering chaparral vegetation communities with landscaped, disturbed, and developed land cover present. The Project site does not contain any riparian habitat 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 State and Federally Protected Wetlands and Waters of the United States

According to the results of the desktop review and preliminary ARD, no Waters of the U.S. or areas that would qualify under CDFW and SWRCB jurisdiction are present within the Project site. Therefore, no impacts to state or federally protected wetlands and Waters of the U.S. would occur during development of the Project site.

5.4 Wildlife Corridors and Nursery Sites

The Project site is located within the Devil's Punchbowl Natural Area, a Los Angeles Parks and Recreation site, which 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 site. The Project would only develop upon previously developed and disturbed areas and Project construction would occur during daytime hours; as a result this Project is not anticipated to impact the site's ability to function as a wildlife corridor.

5.5 Habitat Conservation Plans and Natural Community Conservation Plans

The Project site is not located within an HCP or NCCP. Therefore, development of the Project site 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: 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 site 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.

BIO-2: 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 (nonlisted) 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 permits allow). 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 site, the Project will be temporarily halted until agency consultation can be completed. Observations of special-

status species made during the surveys shall be recorded onto a CNDDB field data sheet and submitted to CDFW for inclusion into the CNDDB.

BIO-3: 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 will 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-4: Biological Monitoring: A biologist shall be present to monitor all vegetation clearing 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 clearing activities and their presence should continue as necessary to maintain protective measures and to monitor for species in harm's way. These protection measures may include redirecting wildlife or capturing and relocating wildlife to areas outside the work area. Any captured species shall be relocated out of harm's way to adjacent appropriate habitat that is outside of Project impact areas. Biological monitoring shall take place until the Project site has been completely cleared of any vegetation.

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 site.
- Use of rodenticides and herbicides on the Project site 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.

DATE:

8/2/2023

SIGNED: Lauren Simpson

Senior Biologist

ECORP Consulting, Inc.

8.0 LITERATURE CITED

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APPENDIX A

Representative Site Photographs



Photo 1. Chaparral habitat with fenced remnants of previously existing structures.



Photo 2. Recovering chaparral habitat in area burned by the Bobcat Fire.



Photo 3. Recovering chaparral habitat with existing structure visible in the background.



Photo 4. Disturbed / developed existing infrastructure on the Project site.

APPENDIX B

Plant Species Observed

Scientific Name	Common Name					
VASCULAF	PLANTS					
ANGIOSPERMS (DICOTYLEDONS)						
AGAVACAEAE	CENTURY PLANT FAMILY					
Hesperoyucca whipplei	Chaparral yucca					
Yucca brevifolia	Joshua tree					
ANACARDIACEAE	CASHEW FAMILY					
Rhus aromatica	Fragrant sumac					
ALLIACEAE	ONION FAMILY					
Allium fimbriatum	Fringed onion					
AMARANTHACEAE	AMARANTH FAMILY					
Chenopodium album*	Lamb's quarters					
APIACEAE	CARROT FAMILY					
Lomatium dissectum	Desert parsley					
ASTERACEAE	SUNFLOWER FAMILY					
Anisocoma acaulis	Scalebud					
Artemisia tridentata	Sagebrush					
Lasthenia californica	California goldfields					
Senecio flaccidus	Threadleaf ragwort					
BORAGINACEAE	BORAGE FAMILY					
Cryptantha intermedia	Cryptantha					
Eriodictyon crassifolium	Thickleaf yerba santa					
BRASSICACEAE	MUSTARD FAMILY					
Descurainia pinnata	Western tansymustard					
Erysimum capitatum	Sanddune wallflower					
CACTUS	CACTUS FAMILY					
Cylindropuntia echinocarpa	Silver cholla					
Opuntia basilaris	Beavertail pricklypear					
ERICACEAE	HEATH FAMILY					
Arctostaphylos glandulosa	Eastwood manzanita					
ONAGRACEAE	EVENING PRIMROSE FAMILY					
Camissonia bistorta	California sun cup					
Camissonia campestris	Field primrose					
Camissonia micrantha	Small flowered evening primrose					

Scientific Name	Common Name		
FABACEAE	PEA FAMILY		
Acmispon strigosus	Hairy lotus		
Astragalus douglasii	Douglas's milk-vetch		
FAGACEAE	BEECH, CHESTNUT AND OAK FAMILY		
Quercus berberidifolia	Scrub oak		
Quercus velutina	Black oak		
HYDROPHYLLACEAE	WATERLEAF FAMILY		
Phacelia cicutaria	Caterpillar phacelia		
Phacelia distans	Common phacelia		
Phacelia fremontii	Fremont's phacelia		
JUGLANDACEAE	WALNUT FAMILY		
Juglans californica	California black walnut		
LAMINACEAE	MINT FAMILY		
Monardella breweri	Brewer's monardella		
Salvia columbariae	Chia sage		
LOASACEAE	LOASA FAMILY		
Mentzelia albicaulis	Small flowered blazing star		
MALVACEAE	MALLOW FAMILY		
Fremontodendron californicum	Flannel bush		
Malacothamnus sp.	Mallow species		
MONTIACEAE	MINER'S LETTUCE FAMILY		
Calyptridium umbellatum	Pussy paws		
NYCTAGINACEAE	FOUR 'O' CLOCK FAMILY		
Abronia turbinata	Transmontane sand-verbana		
PHRYMACEAE	LOPSEED FAMILY		
Mimulus fremontii	Freemont's monkeyflower		
PINACEAE	PINE FAMILY		
Pinus coulteri	Coulter pine		
Pinus monophylla	Single-leaf pinyon pine		
POLEMONIACEAE	PHLOX FAMILY		
Gilia brecciarum	Nevada gilia		
Leptosiphon breviculus	Mojave linanthus		
Loesaliastrum matthewsii	Desert calico		
Saltugilia splendens	Splendid woodland-gilia		

Scientific Name	Common Name
POLYGONACEAE	BUCKWHEAT FAMILY
Eriogonum fasciculatum	California buckwheat
Eriogonum reniforme	Kidney-leaf wild buckwheat
ROSACEAE	ROSE FAMILY
Cercocarpus betuloides	Mountain mahogany
SOLANACEAE	NIGHTSHADE FAMILY
Nicotiana attenuata	Coyote tobacco
THEMIDACEAE	BRODIAEA
Dipterostemon capitatus	Blue dicks
ANGIOSPERMS (MC	NOCOTYLEDONS)
POACEAE	GRASS FAMILY
Bromus madritensis*	Foxtail brome
Bromus tectorum	cheatgrass
Hordeum murinum*	False barley
Stipa hymenoides	Indian ricegrass
Stipa speciosa	Desert stipa

^{*}non-native species

APPENDIX C

Wildlife Species Observed

Scientific Name	Common Name		
	REPTILES		
Phyronosomatidae	Zebra tailed, Earless, Spiny, Side-blotched		
Sceloporus occidentalis longipes	Great basin fence lizard		
Uta stansburiana elegans	Western side-blotched lizard		
Teiidae	Whiptails and Racerunners		
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail		
	BIRDS		
Apodidae	Swifts		
Aeronautes saxatalis	White-throated swift		
Cardinalidae	Cardinals, Grosbeaks and Buntings		
Passerina amoena	Lazuli bunting		
Pheucticus melanocephalus	Black-headed grosbeak		
Piranga ludoviciana	Western tanager		
Columbidae	Pigeons and Doves		
Zenaida macroura	Mourning dove		
Corvidae	Jays and Crows		
Aphelocoma californica	California scrub jay		
Corvus corax	Common raven		
Fringillidae	New World Seedeaters		
Haemorhous mexicanus	House finch		
Spinus Lawrencei	Lawrence's goldfinch		
Spinus psaltria	Lesser goldfinch		
Hirundidae	Swallows, Martins and Saw-wings		
Tachycineta thalassina	Violet green swallow		
Mimidae	Thrashers, Mockingbirds and Tremblers		
Mimus polyglottos	Northern mockingbird		
Odontophoridae	New World Quail		
Callipepla californica	California quail		
Parulidae	New World Warblers		
Setophaga occidentalis	Hermit warbler		
Setophaga petechia**	Yellow warbler		
Passerellidae	New World Sparrows		
Chondestes grammacus	Lark sparrow		
Melozone crissalis	California Towhee		
Pipilo chlorurus	Green-tailed towhee		
Pipilo maculatus	Spotted towhee		

Scientific Name	Common Name
Trochilidae	Hummingbirds
Calypte anna	Anna's hummingbird
Calypte costa	Costa's hummingbird
Tyrannidae	Tyrant flycatchers
Contopus sordidulus	Western wood pewee
Empidonax difficilis	Pacific-slope flycatcher
Myiarchus cinerascens	Ash-throated flycatcher
Tyrannus vociferans	Cassin's kingbird

^{**}CDFW California Species of Special Concern/CDFW Fully Protected Species/Watch List Species

APPENDIX D

Potential for Occurrence of Sensitive Plant Species

Scientific Name Common Name	Statu	s	Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
Acanthoscyphus parishii var. abramsii 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 site. No records of this species within five miles of the Project site. This species was not observed within the Project site during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
Acanthoscyphus parishii var. parishii 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 site. No records of this species within 5-miles of the Project site. This species was not observed within the Project site during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
Anomobryum julaceum Slender silver moss	Fed: Ca: CRPR:	None None 4.2	100-1000	Occurs in broadleafed upland forest, lower montane coniferous forest, and north coast coniferous forest.	Presumed Absent. Limited suitable habitat is present on the Project site. However, this species was not observed within the Project site during the biological reconnaissance survey. In addition, the Project site is outside the known elevation range for the species.
Arctostaphylos glandulosa ssp. gabrielensis 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 site and there is one historic records within five miles. However, this species was not observed within the Project site 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 site that had the vegetative characteristics of this species
Astragalus lentiginosus var. Antonius San Antonio milk- vetch	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 site. However, this species was not observed within the Project site during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species. In addition, the Project site is outside the known elevation range for the species.
Astragalus leucolobus 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 site. However, this species was not observed within the Project site during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
Astragalus pulsiferae var. coronensis 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 site. However, this species was not observed within the Project site during the biological reconnaissance survey which was conducted during the appropriate bloom period for this species.

Scientific Name Common Name	Statu	s	Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
Botrychium crenulatum 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 site during the biological reconnaissance survey.
Calochortus clavatus var. gracilis 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 site. However, this species was not observed within the Project site during the biological reconnaissance survey which was conducted during the appropriate bloom period for this species. In addition, the Project site is outside the known elevation range for the species.
Calochortus palmeri var. palmeri 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 site during the biological reconnaissance survey.
Calochortus plummerae 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 site. However, this species was not observed within the Project site during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
Calochortus striatus 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 site during the biological reconnaissance survey.
Calystegia peirsonii 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 site. However, this species was not observed within the Project site during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
Canbya candida 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 site. However, this species was not observed within the Project site during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
Carex occidentalis 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 site during the biological reconnaissance survey.
Castilleja gleasoni 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 site during the biological reconnaissance survey.

Scientific Name Common Name	Statu	s	Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
Clarkia xantiana ssp. parviflora 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 site and there is one historic record within five miles. However, this species was not observed within the Project site during the biological reconnaissance survey or focused plant surveys, which were conducted during the appropriate bloom period for this species.
Claytonia peirsonii ssp. peirsonii 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 site during the biological reconnaissance survey.
Drymocallis cuneifolia var. ewanii 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 site during the biological reconnaissance survey. In addition, the Project site is outside the known elevation range for the species.
Dudleya cymosa ssp. crebrifolia San Gabriel River dudleya	Fed: Ca: CRPR:	None None 1B.2	Apr-Jul 275-457	Occurs in chaparral habitat.	Presumed Absent. The Project site is outside the known elevation range for the species. In addition, this species was not observed within the Project site during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
Dudleya densiflora 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 site is outside the known elevation range for the species. In addition, this species was not observed within the Project site during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
Eriogonum kennedyi var. alpigenum 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 site during the biological reconnaissance survey. In addition, the Project site is outside the known elevation range for the species.
Eriogonum microthecum var. johnstonii 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 site during the biological reconnaissance survey. In addition, the Project site is outside the known elevation range for the species.
Fimbristylis thermalis 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 site during the biological reconnaissance survey. In addition, the Project site is outside the known elevation range for the species.

Scientific Name Common Name	Statu	s	Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
Galium angustifolium ssp. gracillimum 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 site, no records within five miles. This species was not observed within the Project site during the biological reconnaissance survey or focused plant surveys, which were conducted during the appropriate bloom period for this species.
Horkelia cuneata var. puberula 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 site during the biological reconnaissance survey. In addition, the Project site is outside the known elevation range for the species.
Juglans californica 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 site during the biological reconnaissance survey; however, no individuals were observed within the Project site.
Juncus nodosus 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 site during the biological reconnaissance survey.
Linanthus concinnus San Gabriel linanthus	Fed: Ca: CRPR:	None None 1B.2	Apr-Jul 1520-2800	Occurs in chaparral, lower montane coniferous forest, and upper montane coniferous forest	Presumed Absent. Limited suitable haitat present on site. No records within five miles of the Project site. This species was not observed within the Project site during the biological reconnaissance survey or focused plant surveys, which were conducted during the appropriate bloom period for this species. In addition, the Project site is outside of the known elevation range for this species.
Lewisia brachycalyx 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 site during the biological reconnaissance survey. In addition, the Project site is outside of the known elevation range for this species.
Lilium humboldtii ssp. ocellatum 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 site. However, there are no recent records within five miles and this species was not observed within the Project site during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.
Lilium parryi 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 site during the biological reconnaissance survey.
Lupinus peirsonii 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 site. Recent records within five miles. However, this species was not observed within the Project site during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.

Scientific Name Common Name	Statu	s	Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
Lycium torreyi 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 site during the biological reconnaissance survey.
Muilla coronata 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 site; however, there were no records returned within five miles of the Project site.
Nemacladus secundiflorus var. robbinsii 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 site. One historic record within five miles. However, this species was not observed within the Project site during the biological reconnaissance survey or focused plant surveys, which were conducted during the appropriate bloom period for this species.
Opuntia basilaris var. brachyclada 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 Site during the biological reconnaissance survey.
Oreonana vestita 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 site. However, this species was not observed within the Project site during the biological reconnaissance survey, which was conducted during the appropriate bloom period for this species.In addition, the Project site is outside the known elevation range for the species.
Orobanche valida ssp. valida 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 site. Two recent records of this species were returned within five miles of the Project site during the literature review. However, this species was not observed within the Project site during the biological reconnaissance survey or focused plant surveys, which were conducted during the appropriate bloom period for this species.
Oxytropis oreophila var. oreophila 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 site during the biological reconnaissance survey. In addition, the Project site is outside the known elevation range for the species.
Parnassia cirrata var. cirrata 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 site during the biological reconnaissance survey.
Plagiobothrys parishii Parish's popcornflower	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 site during the biological reconnaissance survey.

Scientific Name Common Name	Statu	s	Bloom Period & Elevation (meters)	Habitat Requirements	Potential for Occurrence; Habitat
Quercus durata var. gabrielensis 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 site during the biological reconnaissance survey.
Quercus engelmannii 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 site during the biological reconnaissance survey.
Symphyotrichum defoliatum San Bernardino aster	Fed: Ca: CRPR NCCP/HCP:	None None 1B.2 None	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 site during the biological reconnaissance survey.
Symphyotrichum greatae 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 site during the biological reconnaissance survey.
Viola pinetorum ssp. grisea 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 site during the biological reconnaissance survey.
Yucca brevifolia Western Joshua tree	Fed: Ca: CRPR:	None CAN None	Mar-Jun 400-2300	Occurs in desest flats and slopes.	Present. Observed on the Project site 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 Rare Plant Rank (CRPR) 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 (CNDDB) 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 7.5-minute topographic quadrangles.

APPENDIX E

Potential for Occurrence of Sensitive Wildlife Species

Scientific Name Common Name	Status		Habitat	Potential for Occurrence
INVERTEBRATES				
Bombus crotchii Crotch bumble bee	Fed: Ca:	none CAN	Occurs in open grassland and scrub habitats.	Moderate. Limited suitable habitat is present on the Project site in the recovering chaparral areas. Five recent observations within 5-miles of the Project site.
Euphydryas editha quino Quino checkerspot butterfly	Fed: CA:	END none	Found in chaparral and coastal sage scrublands.	Moderate. Suitable habitat present on the Project site. One historic observation within 5-miles of the Project site. Presumed Absent. Outside of the known range of this species.
FISH				
Catostomus santaanae Santa Ana sucker	Fed: Ca:	THR none	Permanent flowing creeks and streams with gravel, rubble, or boulder substrates.	Presumed Absent. No suitable stream habitat is present on the Project site.
Gila orcutti arroyo chub	Fed: Ca:	none SSC	Typically occurs in slow water stream sections with mud or sand bottoms.	Presumed Absent. No suitable stream habitat is present on the Project site.
Rhinichthys osculus ssp. 8 Santa Ana speckled dace	Fed: Ca:	none SSC	Permanent flowing creeks and streams with shallow gravel and cobble riffles.	Presumed Absent. No suitable stream habitat is present on the Project site.
AMPHIBIANS				
Anaxyrus californicus arroyo toad	Fed: Ca:	END 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 site. 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 site.
Rana boylii foothill yellow-legged frog	Fed: Ca:	none 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 site.
Rana muscosa southern mountain yellow-legged frog	Fed: CA:	END 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 site.
Taricha torosa 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 site.
REPTILES				
Arizona elegans occidentalis 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 is habitat present on the Project site in the recovering chaparral areas. One recent occurrence within 5-miles of the Project site.

Scientific Name Common Name	Status		Habitat	Potential for Occurrence		
Emys marmorata 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 site.		
Gopherus agassizii 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 site.		
Phrynosoma blainvillii coast 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.	Low. Marginal suitable habitat is present on the Project site. All records of this species within five miles of the Project site are historic (1977 or older).		
Thamnophis hammondii 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 site.		
AVES						
Athene cunicularia burrowing owl (burrow sites and some wintering sites)	Fed: Ca:	none SSC	Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation.	Presumed Absent. No suitable habitat is present on the Project site.		
Empidonax traillii extimus Southwestern willow flycatcher (nesting)	Fed: Ca:	END END	Occurs in riparian woodlands in southern California.	Presumed Absent. No suitable riparian habitat is present on the Project site.		
Lanius Iudovicianus loggerhead shrike	Fed: Ca:	none 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 site in the recovering chaparral areas. No records within 5-miles of the Project site.		
Toxostoma lecontei Le Conte's thrasher	Fed: Ca:	none SSC	Desert flats, dunes, and scrub with sparse saltbush and sometimes creosote bush.	Presumed Absent. No suitable habitat is present on the Project site.		
MAMMALS						
Ammospermophilus 2elson Nelson's antelope squirrel	Fed: Ca:	none 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 site.		

Scientific Name Common Name	Status		Habitat	Potential for Occurrence
Chaetodipus fallax pallidus Pallid San Diego pocket mouse	Fed: Ca:	none SSC	Found in arid coastal and desert borders with stony soils above sandy desert fans and rocky areas within shrub communities such as coastal sage scrub, chamise-redshank chaparral, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent scrub, pinyon-juniper, and annual grassland.	Low. Limited suitable habitat is present on site in the recovering chaparral areas. Three historic occurrences within 5-miles of the Project site.
Corynorhinus townsendii 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 site. No records within 5-miles of the Project site.
Eumops perotis californicus 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 site, species likely to pass through the Project site but no roosting habitat is within the Project site. No records within 5-miles of the Project site.
Microtus californicus stephensi 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 site.
Onychomys torridus ramona 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 site. No records within 5-miles of the Project site.
Ovis canadensis nelson 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 site. Potential for species to move through the Project site. No records of this species have been documented within five miles.
Taxidea taxus 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 site and in the surrounding area. No records within 5-miles of the Project site but there is potential for this species to pass through.

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

Federal Designations (Federal Endangered

State designations: (California Endangered Species Act, CDFW)

Species Act, USFWS)

END: state-listed, endangered THR: state-listed, threatened FP: Fully Protected species

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

SSC: California Species of Special Concern Candidate for Listing (Endangered) CAN:

Source:

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