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# TECHNICAL MEMORANDUM

**To:** Yaret Salas
San Luis Concrete
2130 West Highland Avenue
San Bernardino, California 92407

**From:** Italia Avila, Lead Natural Resources Project Manager

**Date:** September 6, 2024

**Re:** **Biological Resources Technical Memorandum for the Hesperia-Topaz Land Development Project, Hesperia, California / SWCA Project No. 86436**

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## INTRODUCTION

This memorandum describes the general field survey and western Joshua tree (*Yucca brevifolia*) field census conducted by SWCA Environmental Consultants (SWCA) for the Hesperia-Topaz Land Development Project (project). The project site is located northwest of the intersection of Topaz Avenue and Courtney Street in Hesperia, San Bernardino County, California (Figure 1, Figure 2, and Figure 3). San Luis Concrete retained SWCA to determine the potential for the project to have a significant effect on biological and potentially jurisdictional aquatic resources.

The proposed project includes construction of seven single family residences, a retention basin, a paved site access driveway and cul-de-sac, and other associated on-site improvements on a 2.51-acre (ac) property and off-site improvements along the property frontage.

The project site consists of eight total lots ranging from 7,210 square feet to 13,924 square feet in size. The lot located in the northeastern corner of the project site would be developed with a stormwater retention basin, while the remaining seven lots would be developed with residential single-family uses.

Based on an initial review of existing aerial imagery the proposed 2.3-ac residential development project appeared to support several western Joshua trees on-site and potentially other sensitive natural resource features. Therefore, a site visit was determined necessary to confirm the locations of western Joshua trees in and on adjacent parcels, and to determine the presence—or indicators of presence—of other special-status species.

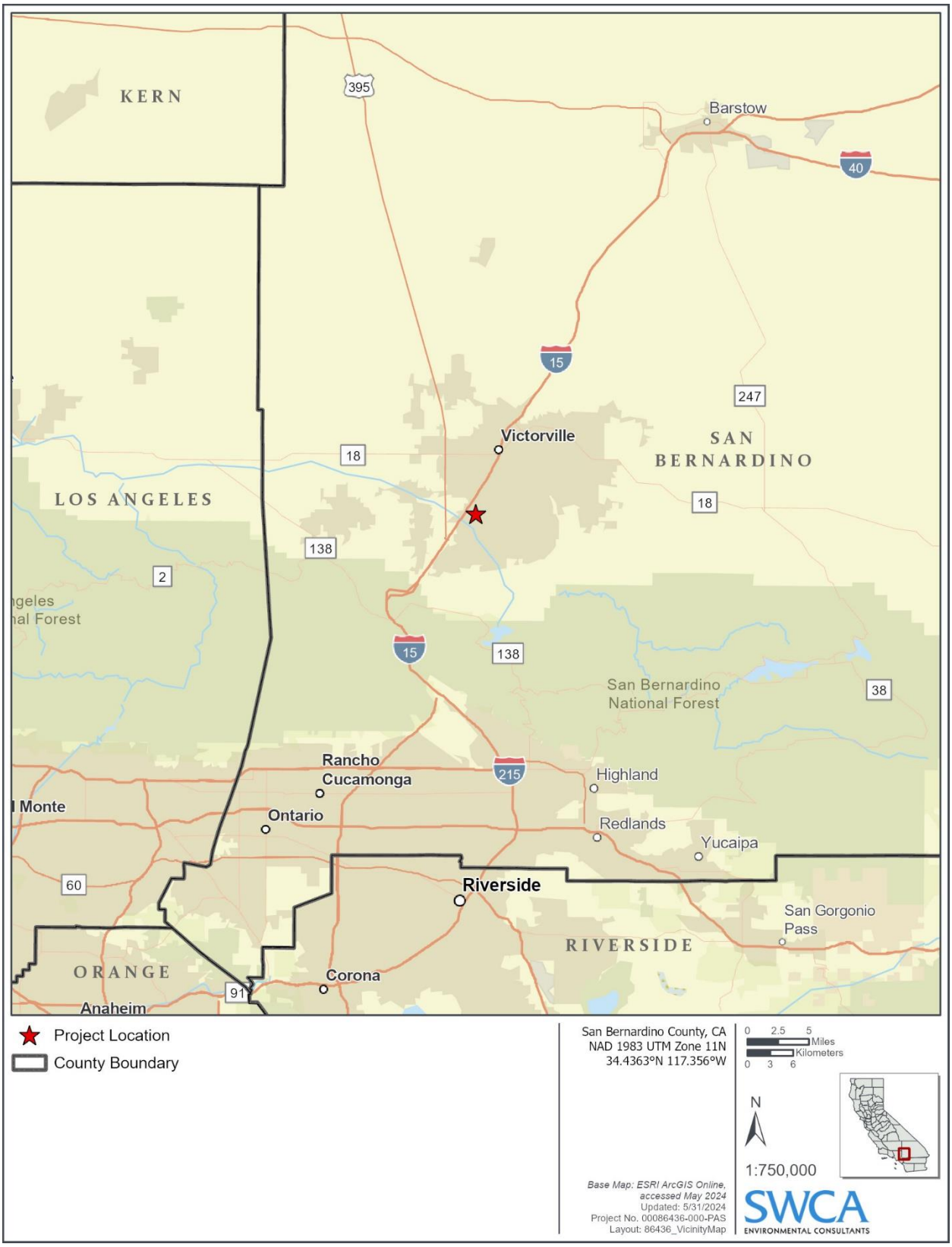


**Figure 1. Vicinity Map**

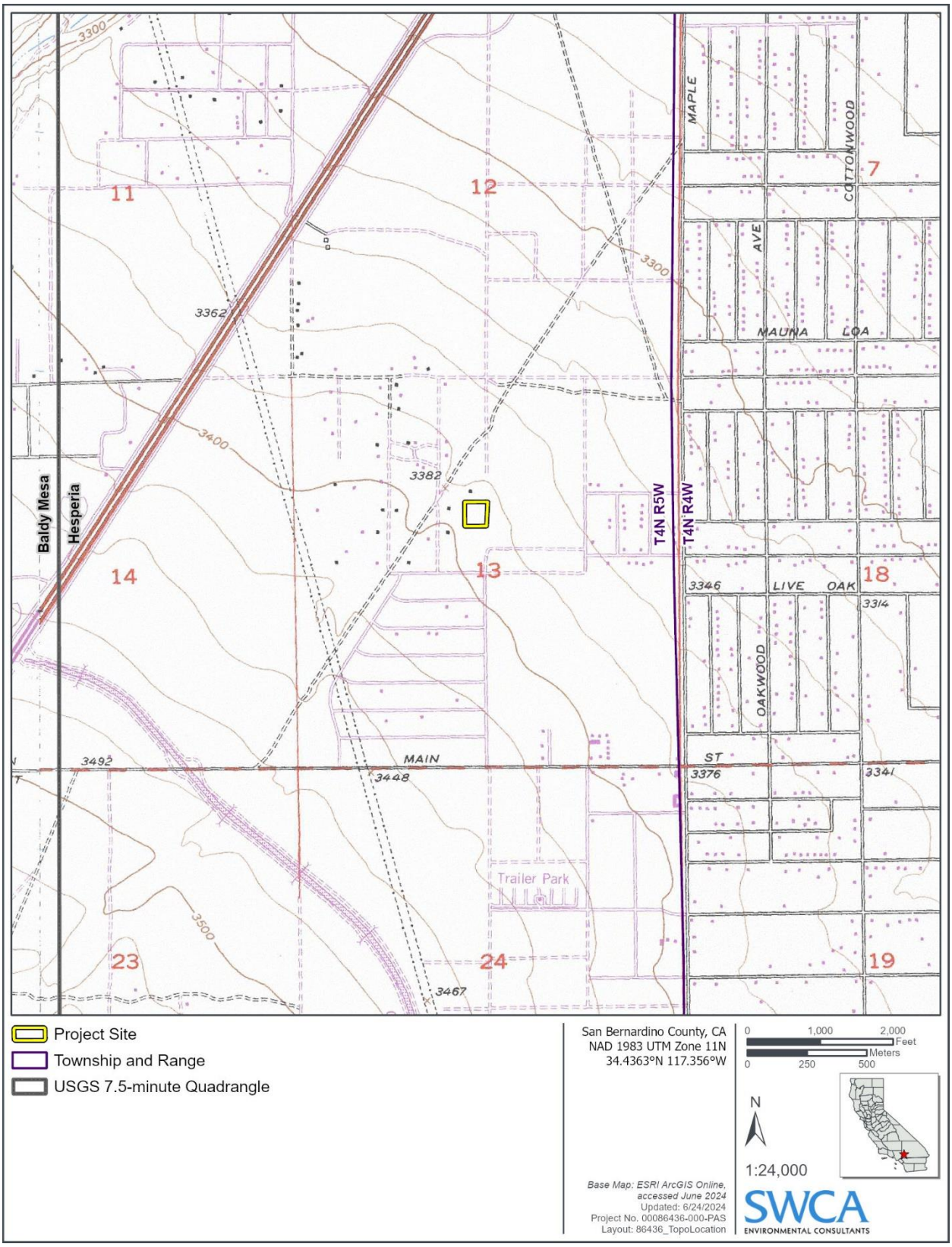


**Figure 2. Project Site on a Topographic Map Background.**

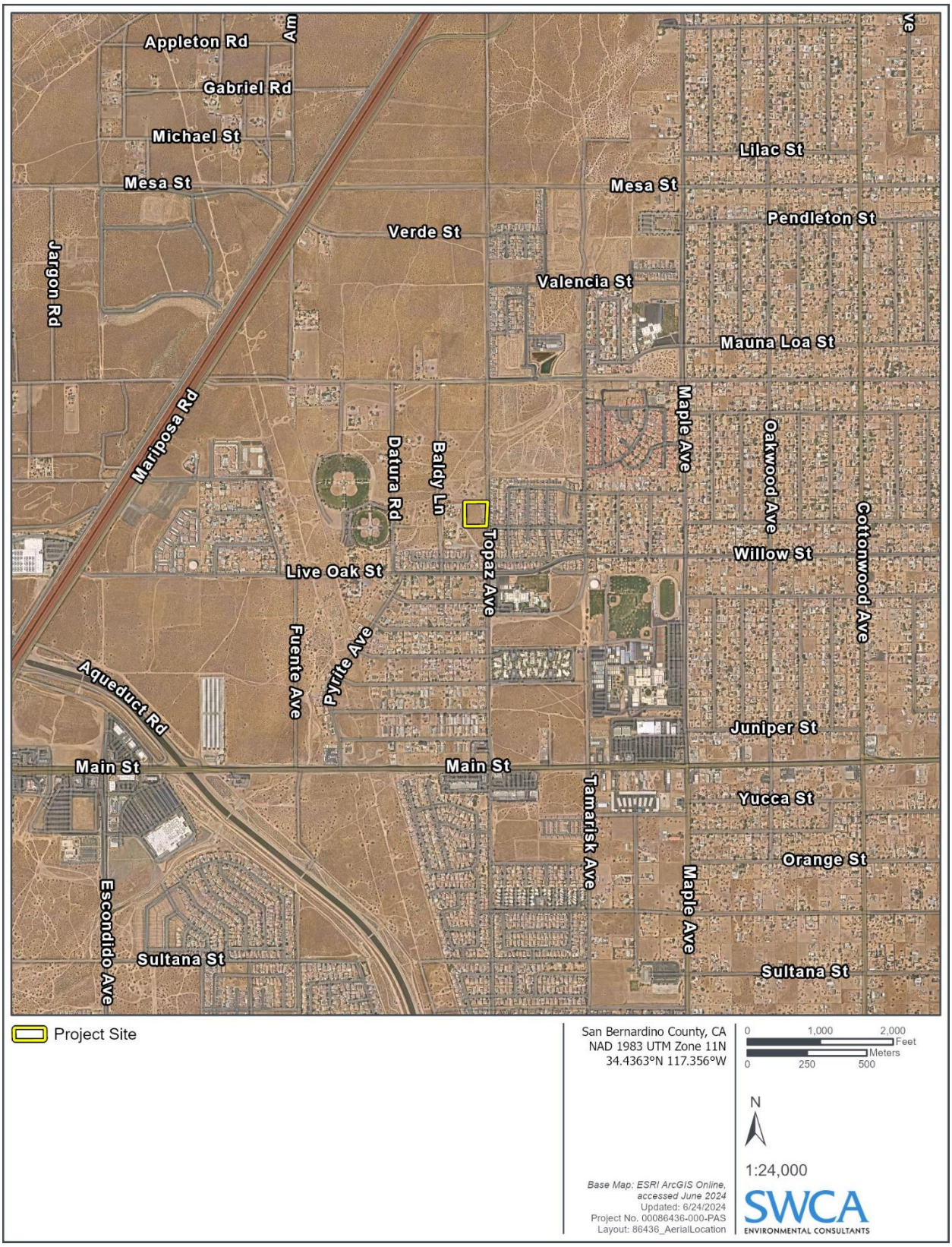


**Figure 3. Project Site on an Aerial Map Background.**

## METHODS

A combination of a literature review and a biological field survey were used to document biological resources within the project site. The biological survey focused on vegetation community boundaries and landcover types, special-status species and habitat, and potentially jurisdictional aquatic resources. For the purposes of this report, the literature review and field survey considered the project site and areas within 50 feet (15 meters [m]), collectively referred to as the study area.

### Literature and Data Review

Prior to the field survey, SWCA reviewed relevant information from federal, state, and local resource agencies. The following documents and data sources were reviewed while preparing this report:

- California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB) RareFind 5 (CDFW 2024a)
- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (Inventory) (CNPS 2024a)
- Calflora online database of California plants (Calflora 2024)
- Consortium of California Herbaria (2024)
- eBird online database of bird distribution and abundance (eBird 2024)
- iNaturalist (2024)
- U.S. Fish and Wildlife Service (USFWS) Critical Habitat Portal (USFWS 2024a)
- USFWS National Wetlands Inventory (USFWS 2024b)
- U.S. Geological Survey (USGS) National Hydrography Dataset (USGS 2024).
- Google Earth aerial imagery of the proposed project (Google Earth 2024).

An initial list of species to be considered for their occurrence likelihood was compiled based on a search of the CNDDB and CNPS Inventory that focused on USGS 7.5 quadrangles centered on Hesperia (project site location) and the surrounding eight quadrangles: Apple Valley South, Apple Valley North, Victorville, Adelanto, Baldy Mesa, Cajon, Silverwood Lake, and Lake Arrowhead. Other sources listed above were reviewed for information and records about particular species and biological resources.

Biological resources geospatial datasets from a variety of sources were reviewed to develop a project-specific geospatial database. This was the first level of analysis, which provided reviewers with essential sensitive species location data, preliminary habitat information, potential drainages, and other jurisdictional waters and designated critical habitat for federally listed species. For the purposes of this study, sensitive plants and animals were defined to include species, subspecies, varieties, and populations recognized by CDFW or the USFWS and that have been classified into one or more of the following categories:

- Species, subspecies, and populations listed or proposed for listing at the federal and state level as threatened or endangered pursuant to the federal Endangered Species Act and the California Endangered Species Act, and species that are candidates for such listings (CDFW 2024b, 2024c)
- Plants designated as California Rare Plant Rank (CRPR) 1, or 2 by CNPS (CNPS 2024b)

- Plants covered by the California Desert Native Plant Act (CDNPA).
- Animals listed on the California Special Animals List as Species of Special Concern, Fully Protected, and all invertebrates on the CDFW Special Animals list (CDFW 2024b).

Potential for occurrence of special-status species within the study area and the immediate vicinity was assessed following the database searches. During the pre-field desktop assessment, each species was assigned to one of the categories listed below:

- **High Potential**: The species has been documented in the vicinity (within 5 miles of the project site based on recent [within 20 years] CNDDB or other records or based on professional expertise specific to the area or species), and there is suitable habitat within the project site that makes the probability of the species occurring there high. Alternatively, there is high-quality suitable habitat within the project site and the project site is within the known range of the species. Bird species in this category were differentiated based on their occurrence within the project site as breeding, foraging only, and/or transients.
- **Moderate Potential**: Species is known to occur within the project site (based on non-historic [within 40 years] CNDDB or other records or based on professional expertise specific to the area or species), and there is moderate quality habitat at the project site that makes the probability of the species occurring there moderate. Alternatively, there is moderate-quality habitat in the part of the project site that falls within the known range of the species.
- **Low Potential**: The project site is within the species' currently known range, but vegetation communities, soils, etc., do not resemble those known to be used by the species; or conditions appear suitable, but the project site is beyond the species' currently known range; or the species was recorded more than 40 years ago within the project site.
- **Absent**: There is no suitable habitat for the species within the project site, or the area is located well outside the known range of the species.

## Field Survey

SWCA biologist, Ryan Myers conducted a general field survey on April 4-5, 2024. The purpose of the survey was to document existing plants, wildlife, vegetation communities, and potentially regulated aquatic resources. The survey included plant and wildlife inventories, vegetation mapping, and mapping the maximum extent of potentially regulated aquatic resources. The surveyor noted and recorded wildlife species encountered through direct observation and sign (scat, remains, or tracks). Birds were identified through direct observations, signs, and their species-specific vocalizations. Binoculars were used to facilitate wildlife identification. Plant species or subspecies were identified to the highest taxonomic level possible when encountered. Plant taxonomic naming conventions follow Jepson eFlora (Jepson Flora Project 2024). Location data for biological and aquatic resources were mapped using a Geode® GPS unit with sub-meter accuracy. Vegetation alliances were mapped using *A Manual of California Vegetation Online* (MCV) (CNPS 2024b)

## Western Joshua Tree Census

On April 4-5, 2024, in conjunction with the general field survey, biologist Ryan Myers conducted a western Joshua tree census per the WJTCA guidelines (CDFW 2024d). The biologist walked parallel transects spaced approximately 10 m (approximately 33 feet) apart to achieve 100% visual coverage of the entire study area. The biologist recorded each tree on a GPS unit with submeter accuracy using the California Department of Fish and Wildlife (CDFW) Survey123 Western Joshua Tree Census Form. Each tree was measured and photographed in accordance with the WJTCA guidelines. Trees that had evidence

of flowers and/or fruit were considered mature and were noted in the Survey123 form. Measurements and locations of trees located in the inaccessible portions of the study area were estimated from the project site. Tree locations located in the inaccessible portions were later refined via desktop.

## RESULTS

Conditions during the April 4-5, 2024, surveys were cool and windy. Conditions were ideal for performing visual surveys of the project site; however, wildlife detection may have been hindered due to the windy conditions. Table 1 summarizes the weather conditions during the surveys.

**Table 1. Survey Dates and Weather Conditions**

| Survey Date | Survey Time | Weather Conditions |
|---|---|---|
| 4/5/2024 | 1200-1500 | Mostly sunny skies, 53–68 degrees Fahrenheit, wind speeds of 25–32 miles per hour |
| 4/6/2024 | 0800-1300 | Partly cloudy, 37–41 degrees Fahrenheit, wind speeds of 14–16 miles per hour. Light precipitation in afternoon |

## Existing Conditions

The project site is located on undeveloped land consisting of scattered Joshua trees with an herbaceous understory dominated by non-native forbs and grasses. Based on a review of aerial imagery, a homogeneous shrub layer was formerly present on-site. This layer was subsequently grubbed sometime between 2020 and 2022. The project site is bounded by residential development to the east and undeveloped lands to the north. Private property, owned by the Cal-Earth Institute, is located immediately west and south of the project site. Disturbances observed include vegetation removal, trash piles, and unmaintained roads associated with off-road vehicle usage. Representative site photos of the project site can be found in Appendix A.

## Vegetation Communities and Landcover Types

The study area consists of two defined MCV vegetation communities: Joshua tree Woodland Alliance and Red Brome or Mediterranean Grass Grasslands (*Bromus rubens -Schismus arabicus*, *barbatus*) Herbaceous Semi-Natural Alliance (CNPS 2024b). Land Cover types mapped in the study area include Developed and Disturbed (Figure 4, Table 2).

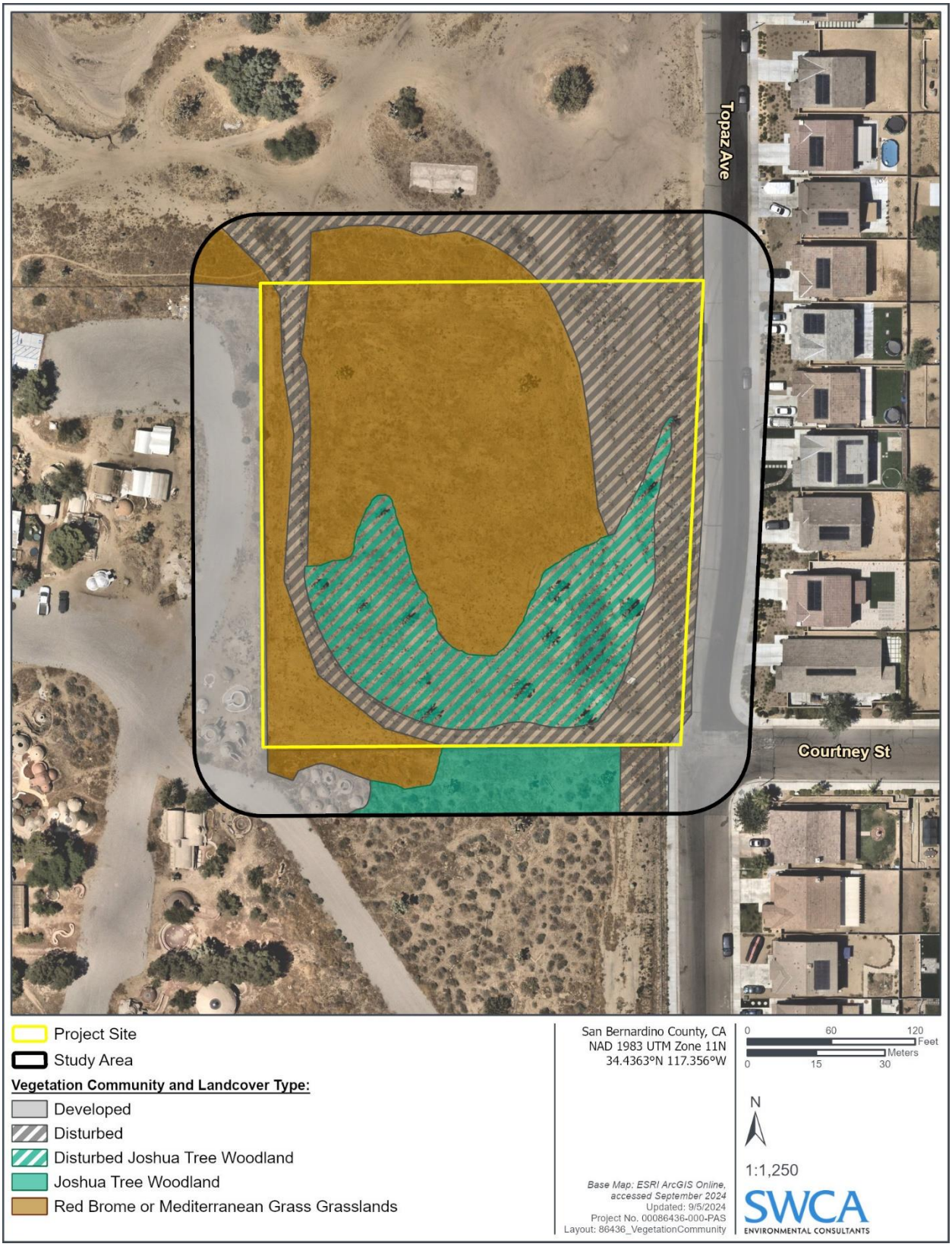


**Figure 4. Vegetation Communities and Landcover Types.**

**Table 2. Land Cover and Vegetation Communities within the Study Area**

| Vegetation Communities/Cover Types | Acres | Global/State Sensitivity |
|---|---|---|
| Joshua tree Woodland/Disturbed Joshua Tree Woodland | 0.71 | S3.2/G4 |
| Red Brome or Mediterranean Grass Grasslands | 1.39 | SNA/GNA |
| Developed | 0.92 | N/A |
| Disturbed | 0.93 | N/A |
| **Total** | **3.95** | N/A |

Natural communities with ranks of 1–3 are considered sensitive by CDFW (CDFW 2023). Global (G) and State (S) ranks are based on range/extent, occurrences/abundance, ecological integrity, threats, and trends, as defined below. All ranks are for the association level unless otherwise noted.

Global (G) and State (S) Conservation Status Ranks (NatureServe 2024):

G3/S3 = Vulnerable — At moderate risk of extinction or elimination due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.

G4/S4 = Apparently Secure — At fairly low risk of extinction or elimination due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.

GNA/SNA = Not Applicable — A conservation status rank is not applicable because the species or ecosystem is not a suitable target for conservation activities. A global conservation status rank may not be applicable for several reasons related to its relevance as a conservation target. For species, typically the species is a hybrid without conservation value, or of domestic origin. For ecosystems, the type is typically non-native (e.g., many ruderal vegetation types), agricultural (e.g., pasture, orchard), or developed (e.g., lawn, garden, golf course).

Additional State Threat Rank:
0.2 = Threatened

### *Joshua Tree Woodland*

Joshua Tree Woodland is concentrated in the southern portion of the project site and study area. Within the project site, Joshua trees are dominant in an evenly distributed tree layer consisting of a sparse herbaceous understory comprising of Mediterranean grass, red brome and red-stem filaree (*Erodium cicutarium*). Isolated Joshua trees located in the northern portion of the project site were not included in the vegetation community. Joshua Tree Woodland located in the southern study area consists of Joshua trees with a subdominant shrub layer consisting of Nevada joint-fir (*Epehdra ephedra*) and rubber rabbitbrush (*Ericameria nauseosa*). Because of the disturbance caused by vegetation grubbing, Joshua Tree Woodland that intersects within the project site was classified as Disturbed Joshua Tree Woodland. Approximately 0.71 ac of the study area is classified as Joshua Tree Woodland and Disturbed Joshua Tree Woodland.

### *Red Brome or Mediterranean Grass Grasslands*

Red Brome or Mediterranean Grass Grasslands is the predominant community generally occupying the central and northern portion of the study area. Mediterranean grass, red brome and red-stem filaree were dominant in the herbaceous layer intermixed with a variety of forbs including native species such as devil's lettuce (*Amsinckia tessellata* var. *tessellata*). Approximately 1.39 ac of the study area is classified as Red Brome or Mediterranean Grass Grasslands.

### *Developed*

Areas classified as Developed include paved roads, maintained unpaved roads, road shoulders, and structures and buildings. In the study area, this includes paved Topaz Avenue and portions of the adjacent private property that intersect with the study area. Approximately 0.92 ac of the study area is classified as Developed.

### *Disturbed*

Areas classified as Disturbed are subject to heavy and include recently graded areas. These areas generally have little or no vegetation. Some areas classified as Disturbed consists of a composition of species that do not form a defined MCV alliance. In the study area, barren areas and unmaintained dirt roads were classified as Disturbed. Approximately 0.93 ac of the study area is classified as Disturbed.

### *Sensitive Vegetation Communities*

Sensitive vegetation communities are defined by CDFW as those "... communities that are of limited distribution statewide or within a county or region and are often vulnerable to environmental effects of projects" (CDFW 2018). Vegetation communities with a State Rank of 1, 2, or 3 are considered sensitive by CDFW. One sensitive vegetation community with a State Rank of 3 was identified in the study area: Joshua Tree Woodland.

## Critical Habitat

There is no designated critical habitat for federally listed species within or immediately adjacent to the project. The nearest critical habitat, which is designated for Southwestern Willow Flycatcher (*Empidonax traillii extimus*), is located approximately 6.2 miles northeast of the study area.

## Special-Status Species

### *Plants*

The CNDDB and CNPS query yielded 27 special-status plants species records located within the nine-quadrangle vicinity of the project site. There are no overlapping CNDDB occurrences or CNPS observations within the project site. Due to the anthropogenic disturbances and surrounding development on-site, there is minimal suitable habitat for special-status plant species. Joshua tree (Candidate State Threatened [SCT]) is present on-site; however, this species will be discussed separately as part of the census results. One species, Beaver Dam breadroot (*Pediomelum castoreum* [CRPR 1B.2; moderately threatened in California]), was determined to have low potential to occur. Beaver dam breadroot is known to occur in disturbed sites and there are some CNDDB records located in the vicinity of the project site. Since surveys occurred during the appropriate blooming period and the nearest CNDDB records are approximately six miles away from the project site it was determined that this species has a low potential to occur within the study area. No additional special-status plant species were determined to have any potential to occur within the study area, apart from the western Joshua tree.

One species covered by CDNPA was found during the survey. Seven silver chollas (*Cylindropuntia echinocarpa*; Figure 5) were found within the study area. None were found within the project site.

See Table B-1 in Appendix B for the potential for occurrence of all special-status plant species identified during the desktop review and informed by the field surveys. A full plant compendium can be found in Table C-1 in Appendix C.

### *Western Joshua Tree Census*

In total, 34 live western Joshua trees were present within the study and surrounding areas (Figure 6). No trees were considered dead. Of the trees present within the study area, 6 were Class A (less than 1 m in height), 17 trees were Class B (between 1 and 5 m in height), and 8 trees were Class C (greater than 5 m in height), resulting in a total of 31 direct impact trees (Table 3). Anticipated impacts to these western Joshua trees are discussed below in the Impact Analysis section. Three trees were incidentally surveyed

during the census and are not anticipated to be directly or indirectly impacted by project activities. See Table D-1 in Appendix D for the western Joshua tree data collected during the April 2024 census.

**Table 3. Western Joshua Trees within the Study Area and Incidentally by Size Class**

| Size Class | Number of Trees* |
|---|---|
| Class A (less than 1 m) | 6 |
| Class B (greater than 1 m, less than 5 m) | 17 (2) |
| Class C (greater than 5 m) | 8 (1) |
| Dead trees | 0 |
| Total | 31 (3) |

* Values in parentheses represent trees surveyed during the census but were later determined to be outside the study area.

### *Wildlife*

The CNDDB query resulted in 41 special-status wildlife records within the surrounding nine-quadrangle search area. No special-status wildlife species or sign were detected during the field survey. No special-status wildlife were determined to have a high potential to occur on-site.

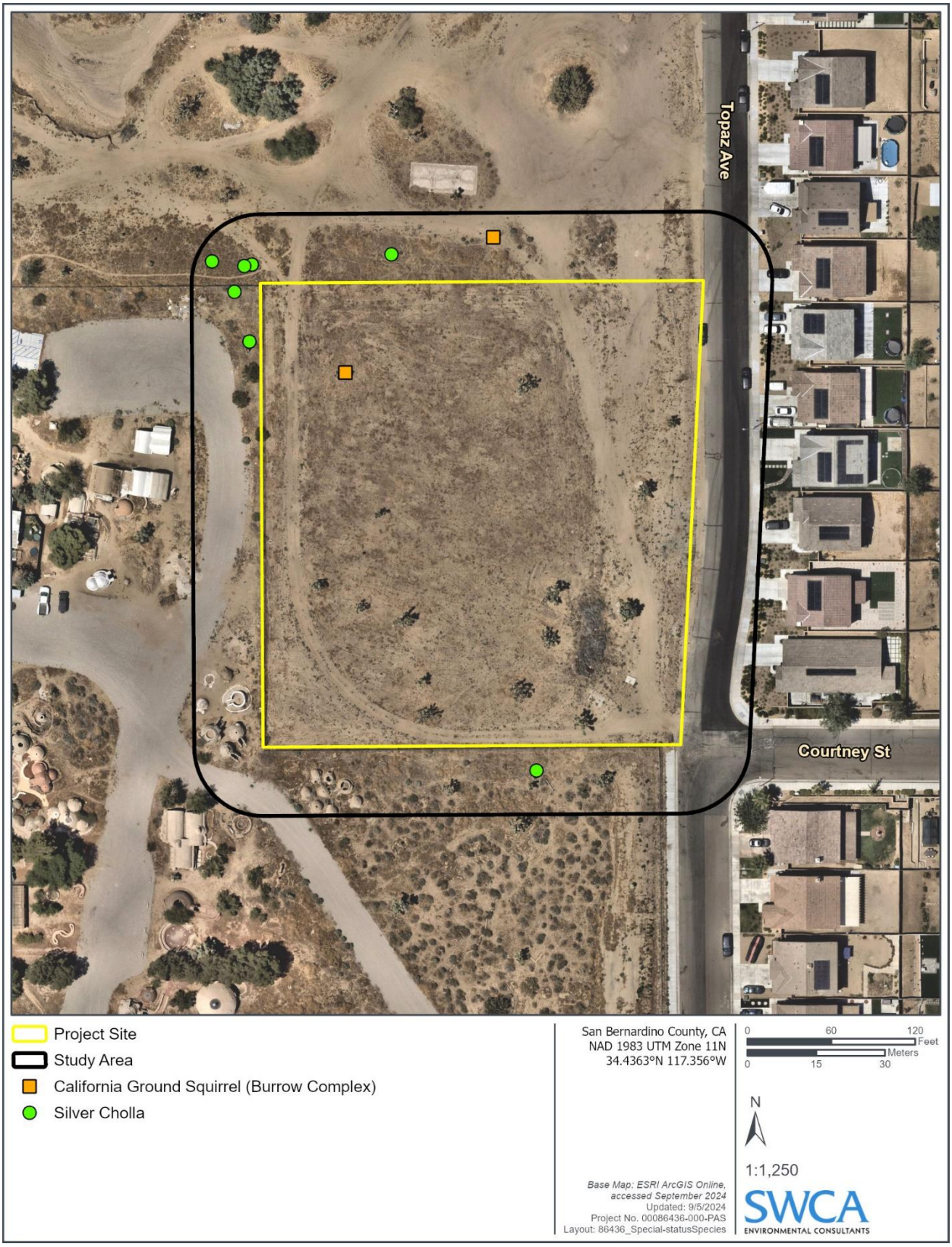


**Figure 5. Plant and Wildlife Observations within the Study Area.**

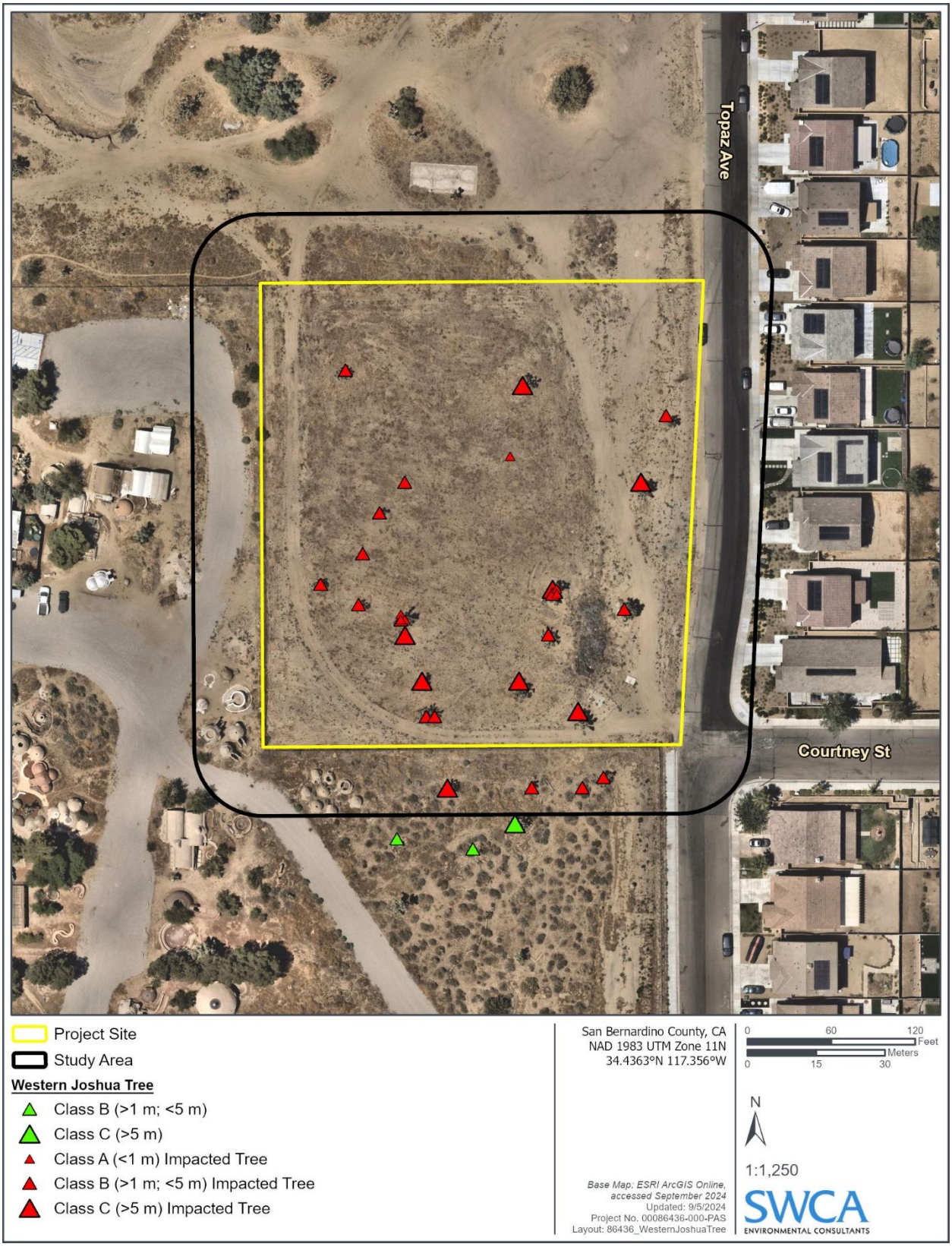


**Figure 6. Western Joshua Tree Census Results.**

Based on the existing habitat conditions and CNDDB records, one species was determined to have moderate potential to occur on-site: burrowing owl (*Athene cunicularia* [Species of Special Concern; SSC]). Several California ground squirrel (*Otospermophilus beecheyi*) burrow complexes found on-site were determined to be suitable for burrowing owls based on the size of the openings (Figure 5). However, no burrowing owl sign was observed on-site. There are also several occurrences of burrowing owls in CNDDB within the project vicinity.

The following species were determined to have low potential to occur based on the habitat conditions found on-site:

- Crotch bumble bee (*Bombus crotchii*; State Candidate Endangered; SCT),
- coast horned lizard (*Phrynosoma blainvillii* [SSC])
- Desert tortoise (*Gopherus agassizii* [Federally threatened; FT, State Endangered; SE])
- Golden eagle (*Aquila chrysaetos* [California Fully protected; FP])
- American badger (*Taxidea taxus* [SSC])
- loggerhead shrike (*Lanius ludovicianus* [SSC]).

Potentially suitable food plants for Crotch bumble bee were observed within the project site. Additionally, a Crotch bumble bee observation, from 2023, in iNaturalist is within 3.2 miles of the project site. Coast horned lizards require harvester ants which were not observed during the survey, but marginally suitable habitat is present. There is poor quality habitat available for desert tortoise. Given the surrounding development, and on-site disturbances desert tortoise is not expected to be on-site and no suitable desert tortoise burrows were observed on-site. However, there are some records within the vicinity of the project site including an observation made in 2000 approximately four miles southeast of the project. No suitable nesting habitat for golden eagle is present on-site or in the immediate vicinity, however the species may potentially utilize the project stie for foraging. Several recent eBird observations are located within the vicinity of the project site. American badgers are generalist occupying a wide range of habitats and could potentially utilize the site for denning. No suitable American badger dens were observed during the survey, however. Loggerhead shrikes generally maintain territories within open shrublands with abundant perches to forage for prey. While there were some appropriate habitat characteristics, the surrounding urbanized landscape and lack of recent proximate observation records indicate a low potential for loggerhead shrikes within the study area. See Table B-2 in Appendix B for the potential to occur for all special-status wildlife species in the vicinity of the project site. A full wildlife compendium can be found in Table C-2 in Appendix C.

## Nesting Birds

The Joshua trees located on-site would provide suitable nesting habitat for a variety of birds protected by the federal Migratory Bird Treaty Act (MBTA) and the State equivalent, California Fish and Game Codes (CFGC) 3503 and 3513. Commonly encountered bird species likely to nest on-site include common raven (*Corvus corax*), house finch (*Haemorhous mexicanus*), and mourning dove (*Zenaida macroura*). Ground nesting species such horned lark (*Eremophila alpestris*) could also utilize the project site. A full wildlife compendium can be found in Table C-2 in Appendix C.

## Aquatic Resources

The project site was surveyed for potentially regulated aquatic resources; however, a formal jurisdictional delineation was not conducted. There are no potentially regulated features within the project site. A

potentially regulated riverine feature, a tributary to the Mojave River, was observed approximately 320 feet northwest of the project site.

## IMPACT ANALYIS

This section describes the anticipated direct and indirect impacts to biological resources at the proposed project site that may result from implementation of the proposed project. This analysis was based on the results of the biological survey conducted at the site, information from literature and database resources, and the proposed project design and layout. Because the project design has not been finalized at this time, it is assumed for the purposes of this analysis that the entirety of the project site may be subject to temporary or permanent impacts.

Project implementation would result in the direct removal of on-site plant communities, and wildlife that depend on them for habitat. Many indirect impacts to off-site biotic resources are possible during construction (e.g., noise, dust) and after project completion (e.g., noise, night lighting, restriction of movement). Deposition of dust on off-site vegetation communities during construction could adversely affect quality of the habitat. Additionally, artificial night lighting could adversely affect the behavior of nocturnal wildlife, and increased trash produced by project activities could result in an increase of opportunistic predators to the area.

### Potential Impacts to Vegetation Communities

It is assumed that all impacts to vegetation and land cover types within the project site will be permanent. The permanent impacts within the project site are expected to be 2.34 acres. Permanent direct impacts are those that would result from the clearing and grading of vegetated areas to accommodate the project. Table 5 summarizes the acres of potential impacts to vegetation communities and land cover types.

**Table 5. Potential Impacts to Vegetation Communities and Land Cover Types**

| Vegetation Community | Approximate Acres within the Project Site | Approximate Acres within the Study Area |
|---|---|---|
| Joshua Tree Woodland/Disturbed Joshua tree Woodland | 0.54 | 0.71 |
| Red Brome or Mediterranean Grass Grasslands | 1.18 | 1.39 |
| Developed | 0.01 | 0.92 |
| Disturbed | 0.60 | 0.93 |
| **Total** | **2.34** | **3.95** |

Joshua Tree Woodland is designated as a sensitive natural community by CDFW, and permanent impacts to this community type may require mitigation. Compensatory mitigation addressing impacts to Joshua Tree Woodland may be incorporated into the mitigation measures implemented in support of the Joshua tree ITP. Impacts to the remaining vegetation and land cover types are not anticipated to require mitigation.

### Potential Impacts to Special-status Plants

Apart from the western Joshua tree, there is minimal suitable habitat on-site for special status plant species. One special-status plant was determined to have a low potential to occur on-site: Beaver Dam breadroot. A preconstruction survey is recommended prior to the ground disturbing activities to identify and flag any occurrences of Beaver Dam breadroot for avoidance. As per CDNPA regulations, silver

chollas and western Joshua trees in the study area but outside the project site would be identified and flagged for avoidance. Removal of the western Joshua trees within the project site would require a permit granted by the county commissioner to remain in compliance with the CDNPA.

### *Anticipated Western Joshua Tree Take*

Construction of the seven single family homes are anticipated to directly impact western Joshua trees on site. A total of 31 trees are anticipated to be subject to direct impacts, 8 size Class C,17 size Class B, and 6 size Class A. Twenty-seven trees including 18 mature trees, overlap with the project components and would be removed prior to construction. Four trees are within the study area outside of the boundary of the project site. Construction activities could potentially impact the roots of these four additional trees. These trees will be avoided to the greatest extent possible and will not be removed unless necessary. Three additional trees are located outside of the study area and no impacts are anticipated. Table 6 includes a summary of western Joshua trees that would be directly impacted by the proposed project.

**Table 6. Summary of Western Joshua Trees Subject to Direct Impacts**

| Tree ID | Size Class | Mature | Distance and Project Component | Type of Impact |
|---|---|---|---|---|
| 086439 - 1 | B | Yes | Overlaps project site | Remove |
| 086439 - 2 | C | Yes | Overlaps project site | Remove |
| 086439 - 3 | B | Yes | Overlaps project site | Remove |
| 086439 - 4 | C | Yes | Overlaps project site | Remove |
| 086439 - 5 | C | Yes | Overlaps project site | Remove |
| 086439 - 6 | B | Yes | Overlaps project site | Remove |
| 086439 - 7 | C | Yes | Overlaps project site | Remove |
| 086439 - 8 | B | No | Overlaps project site | Remove |
| 086439 - 9 | B | Yes | Overlaps project site | Remove |
| 086439 - 10 | A | No | Overlaps project site | Remove |
| 086439 - 11 | A | No | Overlaps project site | Remove |
| 086439 - 12 | A | No | Overlaps project site | Remove |
| 086439 - 13 | C | Yes | Overlaps project site | Remove |
| 086439 - 14 | B | Yes | Overlaps project site | Remove |
| 086439 - 15 | B | Yes | Overlaps project site | Remove |
| 086439 - 16 | B | Yes | Overlaps project site | Remove |
| 086439 - 17 | B | No | Overlaps project site | Remove |
| 086439 - 18 | B | Yes | Overlaps project site | Remove |
| 086439 - 19 | B | Yes | Overlaps project site | Remove |
| 086439 - 20 | C | Yes | Overlaps project site | Remove |
| 086439 - 21 | B | No | Overlaps project site | Remove |
| 086439 - 22 | A | No | Overlaps project site | Remove |
| 086439 - 23 | A | No | Overlaps project site | Remove |
| 086439 - 24 | A | No | Overlaps project site | Remove |
| 086439 - 25 | C | Yes | Overlaps project site | Remove |

| Tree ID | Size Class | Mature | Distance and Project Component | Type of Impact |
|---|---|---|---|---|
| 086439 - 26 | B | Yes | Overlaps project site | Remove |
| 086439 - 27 | B | Yes | Overlaps project site | Remove |
| 086439 - 28 | B | Yes | Approximately 22 feet south of project site | Other – roots may be impacted; tree will be avoided to the greatest extent possible. |
| 086439 - 29 | B | No | Approximately 28 feet south of project site | Other – roots may be impacted; tree will be avoided to the greatest extent possible. |
| 086439 - 30 | B | Yes | Approximately 28 feet south of project site | Other – roots may be impacted; tree will be avoided to the greatest extent possible. |
| 086439 - 33 | B | Yes | Approximately 28 feet south of project site | Other – roots may be impacted; tree will be avoided to the greatest extent possible. |

Removal of western Joshua trees would be completed using equipment such as a front-end loader (for large trees), tree spade (for small trees), or hand-clearing equipment such as chainsaws and tree-trimming tools. The removed vegetation would be collected and taken off-site for salvage preparation or disposal. A biological monitor would be on-site during removal operations to ensure equipment and crews stay within the proposed work area.

Western Joshua trees located outside the study area are not anticipated to be directly impacted by the proposed project (Figure 6). Construction activities would occur beyond a 50-ft buffer around these trees and would be avoided to the greatest extent possible. If necessary, these trees would be marked for avoidance using flagging or signage designating environmentally sensitive areas. Indirect impacts may include impacts from fugitive dust from construction activities. However, the dust control minimization measure would minimize impacts to these trees. Indirect impacts to the seed bank of trees located outside the study area are not anticipated due to the distance to the project components. The entire project parcel would be fully fenced, which would protect the remaining western Joshua trees from outside disturbances.

## Potential Impacts to Special-status Wildlife

Due to the on-site habitat degradation and fragmentation, there is minimal suitable habitat for special-status species on-site. Burrowing owls were determined to have a moderate potential to occur while several other species, including desert tortoise were determined to have a low potential to occur on-site.

Several California ground squirrel burrows were found in the project site that could be suitable for burrowing owls were found on-site. A preconstruction survey conducted no more than 30 days prior to any ground-disturbing activities is recommended. The survey should follow the methods outlined in the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). If burrowing owls are detected on-site prior to construction, appropriate buffers should be implemented to avoid direct impacts. Maximum buffer distances would be 500 m from the active nest but could likely be minimized based on the professional judgement of the biological monitor present on site. If avoidance is not feasible, passive relocation of burrowing owls during the non-nesting period may be possible following the development of a Burrowing Owl Relocation Plan approved by City of Hesperia and CDFW. A general preconstruction survey is recommended to determine absence or presence for the remaining special status species that may occur.

### *Nesting Birds*

Implementation of the project has the potential to directly impact birds that are nesting at the project site by causing active nests to fail. The project has suitable nesting habitat for burrowing owls and several common bird species. The western Joshua trees on site may support raptors and common raven nests. If

construction or vegetation removal activities must occur during the bird breeding season (February 1–August 31), surveys for active nests should be conducted by a qualified biologist no more than 14 days prior to the start of construction. Appropriate buffer sizes should be implemented depending on the species and tolerance levels to construction activities.

## AVOIDANCE AND MINIMIZATION MEASURES

The CESA stipulates the measures or alternatives required for an ITP should be proportional in extent to impacts on the species that result from a project. Implementation of the applicant-proposed avoidance and minimization measures are included below and will ensure take of western Joshua tree is minimized to the greatest practical extent and mitigated wherever feasible.

1. **Biological Monitor.** A biological monitor(s) will be present for the western Joshua tree removal and installation of the fence where western Joshua trees are present. In addition, the biological monitor will be present when work is within 50 feet of a live western Joshua tree. To enforce compliance with the ITP, biological monitor(s) will have authority to immediately stop any activity that does not comply with this ITP, and/or to order any reasonable measure to avoid unauthorized take of an individual western Joshua tree. In addition, the biological monitor will attend tailboard prior to work each morning and discuss the avoidance areas and ITP requirements for the duration of all activities impacting western Joshua trees. After removal, the biological monitor(s) will remain on call in the event of a special-status species encounter.
2. **Western Joshua Tree Avoidance.** Western Joshua trees shall be avoided to the greatest extent possible. The biological monitor will monitor on-site project activities and prevent unlawful take. The permittee will contact CDFW for consultation if additional potential impacts to western Joshua trees not covered by the ITP area could occur.
3. **Designated Work Areas.** Activities will be confined within designated work areas to minimize the disturbance footprint where practicable. To the greatest extent possible, crews will confine work areas to previously disturbed areas. The permittee will clearly delineate the boundaries of the project site with fencing, stakes, or flagging, as necessary.
4. **Dust Control.** Control of dust will be implemented during construction activities. The primary mechanism for dust control will be the use of water trucks with a spray bar and hose(s). Proactive controls will be instituted to reduce the amount of dust generated during site activities, including enforcement of low-speed limits (below 15 mph) for vehicular traffic, decontamination of trucks leaving the remediation work areas, and a 5-foot height limit for temporarily stockpiled material.
5. **Vehicles and Staging.** All vehicle staging will occur outside vegetated areas and outside aquatic resource drainages. Vehicles will be staged or stored at least 100 feet from all western Joshua trees for which take is not authorized.
6. **Hazardous Waste.** The permittee will immediately stop and, pursuant to pertinent state and federal statutes and regulations, arrange for repair and clean up by qualified individuals of any fuel or hazardous waste leaks or spills at the time of occurrence, or as soon as it is safe to do so. The permittee will exclude the storage and handling of hazardous materials from the project site and will properly contain and dispose of any unused or leftover hazardous products off-site.
7. **Refuse Removal.** Upon completion of each project component, all remaining materials and equipment will be removed from the site.
8. **Invasive Plants.** To prevent the spread of invasive plants that have the potential to outcompete native plant species, all vehicles and any ground- or vegetation-disturbing equipment and tools will be cleaned free of mud, soil, and plant material before entering the project site for the first

time, and any time after driving off pavement outside the project site. Cleaning can be through car washes, compressed air, pressure washes, brushes, or similar equipment.

9. **Worker Environmental Awareness Program.** Prior to the onset of construction activities, a workers' environmental awareness program (WEAP) training shall be provided. The WEAP will be developed by a qualified biologist. Any employee responsible for the operation and maintenance of the completed facilities will also attend the WEAP.
    a. The program will include information on the life history of sensitive biological resources that may occur within the project site, including western Joshua tree and other listed or special-status species that could be present on-site.
    b. The program will discuss each species' legal protection status, the definitions of take under CESA and the federal Endangered Species Act, measures the project operator is implementing to protect the species, reporting requirements, specific measures that each worker will employ to avoid take of wildlife species, and penalties for violation of the CESA and the federal Endangered Species Act.
    c. An acknowledgement form signed by each worker indicating that environmental training has been completed will be kept on record.
    d. A sticker will be placed on worker hard hats upon the worker's successful environmental training completion. Construction workers will not be permitted to operate vehicles or equipment within the construction areas unless they have attended the training and are wearing hard hats with the required sticker.
    e. The WEAP will identify a point of contact if a listed or special-status species is observed on the project site.
10. **Pre-construction Survey for Biological Resources.** Fourteen days prior to initial ground-disturbing activities, a qualified biologist will conduct pre-construction surveys of the project site for special-status wildlife, including burrowing owl and plants. In the event of an unanticipated discovery of a special-status ground-dwelling animal, a biologist holding the appropriate state and/or federal permits will recover and relocate the animal to adjacent suitable habitat adjacent to the project site. In the event of the discovery of a previously unknown special-status plant, the area will be marked as an environmentally sensitive area and avoided to the maximum extent practicable. If avoidance is not possible, the project proponent will consult with USFWS and/or CDFW as appropriate given the species' status.
11. **Nesting Bird Surveys.** If construction is scheduled to commence during the non-nesting season (September 1 to January 31), no pre-construction surveys or additional measures with regard to nesting birds and other raptors are required. To avoid impacts to nesting birds in the project site, a qualified biologist shall conduct pre-construction surveys of all suitable nesting habitat within the project site, and within a 150-foot buffer if access allows, for project activities that are initiated during the breeding season (February through August). The survey for special-status raptors shall focus on potential nest sites on-site and within a 500-foot buffer around the site. Surveys shall be conducted no more than 14 days prior to construction activities. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. Active nests will be avoided and monitored, and the qualified biologists will have authority to stop work, should it be determined that a nest is being impacted by the project activity.
12. **Nesting Bird Buffers.** If active nests of non-special status species or common raptors are found, a suitable buffer shall be established around active nests and no construction within the buffer allowed until a qualified biologist has determined that the nest is no longer active (e.g., the

nestlings have fledged and are no longer reliant on the nest). Encroachment into the buffer may occur at the discretion of the qualified biologist.

13. **Dead or Injured Special-status Wildlife.** If any dead or injured special-status wildlife and birds protected by the MBTA are discovered at the proposed project during construction, the Applicant will stop work in the immediate vicinity. The Applicant will notify the City, the on-call biologist, and the appropriate resource agency (USFWS and/or CDFW) before construction is allowed to resume.
14. **Harming or Feeding Wildlife.** No wildlife, including rattlesnakes, will be harmed except to protect life and limb. Firearms and pets will be prohibited in all project sites. In addition, feeding of wildlife will not be allowed. This includes keeping trash bins covered and secured at all times until the trash bins are removed from the project site.

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# APPENDIX A

# Photographs

**Photograph A-1. View of project site, facing southwest.**

**Photograph A-2 Disturbed Joshua Tree Woodland in the project site, facing southeast.**

**Photograph A-3 View of trash pile of grubbed vegetation located in the southeastern portion the project site, facing southwest.**

**Photograph A-4. View of project site, facing north.**

**Photograph A-5. View of California ground squirrel burrows. Several burrows were determined to be suitable for burrowing owls. facing northeast.**

**Photograph A-6. Example of silver cholla, a CDNPA covered plant located the Study Area.**

# APPENDIX B

## Potential for Occurrence and Habitat Requirements for Special Status Species in the Project Site

**Table B-1. Potential for Occurrence and Habitat Requirements for Special Status Species in the Project site**

| Common Name (Species Name) | Status* | Range or Habitat Requirements† | Potential for Occurrence in Project Site |
|---|---|---|---|
| ***Plants*** | | | |
| Beaver Dam breadroot *(Pediomelum castoreum)* | CRPR 1B.2 | Joshua tree woodland, Mojavean desert scrub. Sandy soils; washes and roadcuts. 605–1,485 meters amsl. Blooming period: April–May. | **Low Potential.** The project is within the known range of the species. Marginally, suitable habitat present as the species is known to occur in disturbed areas. The nearest occurrence is undated, approximately 6.7 miles northeast of the project site. |
| black bog-rush *Schoenus nigricans* | CRPR 2B.2 | Marshes and swamps. Often in alkaline marshes. 120–1,525 m. Blooming period: August–September. | **Absent.** The project is within the known range of the species, however no suitable habitat is present. The nearest occurrence is from 1923, approximately 7.7 miles southwest of the project site. |
| Booth's evening-primrose *(Eremothera boothii* ssp. *boothii)* | CRPR 2B.3 | Joshua tree woodland, pinyon and juniper woodland. 285–2,290 m. Blooming period: May–August. | **Absent.** Based on Jepson's geographic floristics ranges, the project is outside the accepted range of the species. The nearest occurrences may be misidentifications. The nearest occurrence is from 1992, approximately 7.6 miles northeast of the project site. |
| Desert cymopterus *(Cymopterus deserticola)* | CRPR 1B.2 | Joshua tree woodland, Mojavean desert scrub. On fine to coarse, loose, sandy soil of flats in old dune areas with well-drained sand. 625–1,220 m. Blooming period: March–May. | **Absent.** The project is within the known range of the species, however no suitable habitat is present. The nearest occurrence is from 1941, approximately 9.7 miles northeast of the project site. This occurrence is considered possibly extirpated due to development |
| Greata's aster (*Symphyotrichum greatae*) | CRPR 1B.3 | Chaparral, cismontane woodland, broadleafed upland forest, lower montane coniferous forest, riparian woodland. Mesic canyons. 335–2015 m amsl. Blooming periods: June–October. | **Absent.** The Project site is outside the known range of the species. Habitat for this species is not present. The nearest occurrence is from 1994, approximately 14.4 miles southwest of the project site. |
| hot springs fimbristylis (*Fimbristylis thermalis*) | CRPR 2B.2 | Meadow & seeps; wetlands. Near hot springs. 115–1,585 m amsl. Blooming periods: July–September. | **Absent.** The project is within the known range of the species, however no suitable habitat is present. The nearest CNDDB occurrence is from 2005, located 18 miles southeast of the project site. |
| Latimer's woodland-gilia (*Saltugilia latimeri*) | CRPR 1B.2 | Chaparral, Mojavean desert scrub, pinyon and juniper woodland. Rocky or sandy substrate; sometimes in washes, sometimes limestone. 120–2,200 m. Blooming periods: March–June. | **Absent.** The project is within the known range of the species, however no suitable habitat is present. The nearest CNDDB occurrence is from 1996, located 20.3 miles southeast of the project site |
| lemon lily (*Lilium parryi*) | CRPR 1B.2 | Lower montane coniferous forest, meadows and seeps, riparian forest, upper montane coniferous forest. Wet, mountainous terrain; generally in forested areas; on shady edges of streams, in open boggy meadows and seeps. 625-2,930 m. Blooming periods: July–August. | **Absent.** The Project site is outside the known range of the species. Habitat for this species is not present. The nearest occurrence is undated, approximately 16.7 miles southeast of the project site. |
| Mojave milkweed (*Asclepias nyctaginifolia*) | CRPR 2B.1 | Mojavean desert scrub, pinyon and juniper woodland. 775–1,605 m. Blooming periods: May–June. | **Absent.** The Project is within the known range for this species. The nearest occurrence is from 1916, approximately 7.7 miles southwest |

| Common Name (Species Name) | Status* | Range or Habitat Requirements† | Potential for Occurrence in Project Site |
|---|---|---|---|
| | | | of the project site. The occurrence notes indicate this may be a misidentification. |
| Mojave monkeyflower (*Diplacus mohavensis*) | CRPR 1B.2 | Joshua tree woodland, Mojavean desert scrub. Dry sandy or rocky washes along the Mojave River. 660–1,270 m. Blooming periods: April–June. | **Absent.** The Project is within the known range for this species, however no suitable habitat is present. The nearest occurrence is from 1998, approximately 11.6 miles north of the project site. |
| Mojave tarplant *(Deinandra mohavensis*) | SE, CRPR 1B.3 | Riparian scrub, coastal scrub, chaparral. Low sand bars in river bed; mostly in riparian areas or in ephemeral grassy areas. 640–1,645 m. Blooming periods: June–October, occasionally beginning as early as January | **Absent.** The Project is within the known range for this species, however no suitable habitat is present. The nearest occurrence is from 2019, approximately 9 miles southeast of the project site. |
| Mt. Pinos onion (Allium howellii var. clokeyi) | CRPR 1B.3 | Great Basin scrub, pinyon and juniper woodland, meadows and seeps (edges). 1,385–1,800 m. Blooming periods: April–June. | **Absent.** The Project site is outside the known range of the species. Habitat for this species is not present. The nearest occurrence is from 1938, approximately 14.7 miles southeast of the project site. |
| Palmer's mariposa-lily | CRPR 1B.2 | Meadows and seeps, chaparral, lower montane coniferous forest. Vernally moist places in yellow-pine forest, chaparral. 195–2,530 m. Blooming Period: April–July. | **Absent.** The Project site is outside the known range of the species. Habitat for this species is not present. The nearest occurrence is from 12017, approximately 9.1 miles southwest of the project site. |
| Parish's alumroot (*Heuchera parishii*) | CRPR 1B.3 | Lower montane coniferous forest, subalpine coniferous forest, upper montane coniferous forest, alpine boulder and rock field. Rocky places. Sometimes on carbonate. 1,340–3,505 m. Blooming period: June–August. | **Absent.** The Project is outside the known range for this species. No suitable habitat is present for the species. The nearest occurrence is from 2007, approximately 12.1 miles south of the project site. |
| Parish's daisy (*Erigeron parishii*) | FT, CRPR 1B.1 | Mojavean desert scrub, pinyon and juniper woodland. Often on carbonate; limestone mountain slopes; often associated with drainages. Sometimes on granite. 1,050–2,245 m. Blooming period: May–August. | **Absent.** The Project is outside the known range for this species. No suitable habitat is present for the species. The nearest occurrence is from 2017, approximately 13.3 miles southeast of the project site. |
| Parish's desert-thorn (*Lycium parishii*) | CRPR 2B.3 | Coastal scrub, Sonoran desert scrub. Sandy, rocky slopes, canyons. 3 m below mean sea level–570 m amsl. Blooming period: March–April. | **Absent.** The Project is outside the known range for this species. No suitable habitat is present for the species. The nearest occurrence, which is considered extirpated, is from 1885, approximately 12.7 miles south of the project site. |
| Parish's yampah (*Perideridia parishii* ssp. p*arishi*i) | CRPR 2B.2 | Lower montane coniferous forest, meadows and seeps, upper montane coniferous forest. Damp meadows or along streambeds-prefers an open pine canopy. 1,470 1–2,530 m. Blooming Period: June–August | **Absent.** The Project is outside the known range for this species. No suitable habitat is present for the species. The nearest occurrence is from 2007, approximately 13.1 miles southeast of the project site. |
| pinyon rockcress *Boechera dispar* | CRPR 2B.3 | Joshua tree woodland, pinyon and juniper woodland, Mojavean desert scrub. Granitic, gravelly slopes and mesas. Often under desert shrubs which support it as it grows. 1,005–2,805 m. Blooming Period: March–June | **Absent.** The Project is within the known range for this species, however no suitable granitic or limestone substrates are present for the species. The nearest occurrence is from 2011, approximately 10.2 miles southeast of the project site. |

| Common Name (Species Name) | Status* | Range or Habitat Requirements† | Potential for Occurrence in Project Site |
|---|---|---|---|
| sagebrush loeflingia *(Loeflingia squarrosa* var. *artemisiarum)* | CRPR 2B.2 | Great Basin scrub, Sonoran desert scrub, desert dunes. Sandy flats and dunes. Sandy areas around clay slicks with greasewood (*Sarcobatus*), saltbush (*Atriplex*), horsebush (*Tetradymia)*, etc. 700–1,615 m. Blooming period: April–May. | **Absent.** The project is within the known range of the species, however no suitable sandy flats or dune habitat is present. The nearest occurrence is from 2005, approximately 3.9 miles northeast of the project site. |
| San Bernardino aster (Symphyotrichum defoliatum) | CRPR 1B.2 | Meadows and seeps, cismontane woodland, coastal scrub, lower montane coniferous forest, marshes and swamps, valley and foothill grassland. Vernally mesic grassland or near ditches, streams and springs; disturbed areas. 3–2,045 m. Blooming period: July–November. | **Absent.** The project is within the known range of the species, however no suitable habitat is present. The nearest occurrence is from 1991, approximately 7.1 miles northwest of the project site. |
| San Bernardino Mountains dudleya *(Dudleya abramsii* ssp. *affinis)* | CRPR 1B.2 | Pebble (pavement) plain, upper montane coniferous forest, pinyon and juniper woodland. Outcrops, granite or quartzite, rarely limestone. 1,200–2,425 m. Blooming period: April–July. | **Absent.** The Project is outside the known range for this species. No suitable habitat is present for the species. The nearest occurrence is from 2011, approximately 9.8 miles southeast of the project site. |
| San Bernardino Mountains owl's-clover (*Castilleja lasiorhyncha*) | CRPR 1B.2 | Meadows and seeps, pebble plain, upper montane coniferous forest, chaparral, riparian woodland. Mesic to drying soils in open areas of stream and meadow margins or in vernally wet areas. 1,140–2,320 m. Blooming period: May–August. | **Absent.** The Project is outside the known range for this species. No suitable habitat is present for the species. The nearest occurrence is from 1967, approximately 11.8 miles southeast of the project site. |
| short-joint beavertail (*Opuntia basilaris* var. *brachyclada*) | CRPR 1B.2 | Chaparral, Joshua tree woodland, Mojavean desert scrub, pinyon and juniper woodland. Sandy soil or coarse, granitic loam. 425–2015 m. Blooming period: April–June, occasionally August. | **Absent.** The project is outside the known range for the species. Additionally, no beavertail (*Opuntia* spp.) was observed in the project site. The nearest occurrence is from 1989 approximately 3.2 miles southwest of the project site. |
| silver-haired ivesia (Ivesia *argyrocoma* var. *argyrocoma*) | CRPR 1B.2 | Meadows and seeps, pebble plains, upper montane coniferous forest. In pebble plains and meadows with other rare plants. 1,490–2,960 m. Blooming period: June–August. | **Absent.** The Project is outside the known range for this species. No suitable habitat is present for the species. The nearest occurrence is from 2008, approximately 16.4 miles southeast of the project site. |
| southern mountains skullcap (Scutellaria bolanderi ssp. austromontana) | CRPR 1B.2 | Chaparral, cismontane woodland, lower montane coniferous forest. In gravelly soils on streambanks or in mesic sites in oak or pine woodland. 425–2,000 m. Blooming period: June–August. | **Absent.** The project is within the known range of the species, however no suitable habitat is present. The nearest occurrence is from 1915, approximately 6.7 miles northwest of the project site. |
| western Joshua tree *(Yucca brevifolia)* | SCT | Joshua Tree Woodland, montane chaparral, pinyon and juniper woodland, Sonoran and Mojavean desert scrub. 750–2,200 m. | **Present.** western Joshua trees are visible from aerial imagery. Approximately 34 individual trees were mapped in the Project site. |
| white-bracted spineflower *Chorizanthe xanti* var. *leucotheca* | CRPR 1B.2 | Mojavean desert scrub, pinyon and juniper woodland, coastal scrub (alluvial fans). Sandy or gravelly places. 365–1830 m. Blooming period: April–June. | **Absent.** The project is outside of known range of the species. No suitable habitat is present for the species. The nearest occurrence is from 2011, approximately 11.5 miles southwest of the project site. |

| Common Name (Species Name) | Status* | Range or Habitat Requirements† | Potential for Occurrence in Project Site |
|---|---|---|---|
| ***Invertebrates*** | | | |
| Andrew's marble butterfly (Euchloe hyantis andrewsi) | SA | Inhabits yellow pine forest near Lake Arrowhead and Big Bear Lake, San Bernardino Mtns, San Bernardino Co, 1,524–1,828 (5000–6000 ft.) amsl. Hostplants are Laguna Mountains jewelflower (*Streptanthus bernardinus*)and woodland rockcress (*Arabis holboellii* var *pinetorum*); larval foodplant is mountain tansymustard (*Descurainia richardsonii*). | **Absent.** The Project is outside of the known range for the species. There is no suitable habitat; host plants and larval food plants would not be expected to occur**.** The nearest occurrence is from 1928, approximately 12.3 miles south of the project site. |
| Crotch's bumble bee *(Bombus crotchii)* | SCE | Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include snapdragons (*Antirrhinum),* phacelias (*Phacelia),* clarkias (*Clarkia),* bush poppies (*Dendromecon),* poppies *(Eschscholzia)*, and buckwheats *(Eriogonum).* | **Low Potential.** The project is within the known range of the species. Due to the on-site disturbance and grubbing, few host plants are anticipated to be present. The nearest occurrence is from 1939, approximately 8.3 miles southeast of the project site. A 2023 inaturalist occurrence is located 3.2 miles south southeast of the project. |
| Dohrn's elegant eucnemid beetle *Palaeoxenus dohrni* | SA | No information available for this species in CNDDB. | **Absent.** The only record for this species in CNDDB is located approximately 12.3 miles south of the project site. Habitat in occurrence details described as forest dominated by ponderosa pine (*Pinus ponderosa*) and incense cedar (*Calocedrus decurrens*). |
| Morrison bumble bee *Bombus morrisoni* | SA | From the Sierra-Cascade ranges eastward across the intermountain west. Food plant genera include thistles (*Cirsium* spp.), bladderpods (*Cleome* spp.), sunflowers (*Helianthus* spp.), lupines (*Lupinus* spp.), goldenbushes (*Chrysothamnus [=Ericamera]* spp.) and sweetclovers (*Melilotus* spp.). | **Absent** The project is within the known range of the species. Due to the on-site disturbance and grubbing, few host plants are anticipated to be present, however rubber rabbitbrush (*Ericameria nauseosa*) was observed. The nearest occurrence is from 1937, approximately 12.3 miles southeast of the project site. Most non-historic occurrences in in CA are located east of the Sierra Nevada. |
| quino checkerspot butterfly (*Euphydryas editha quino*) | FE | Sunny openings within chaparral and coastal sage shrublands in parts of Riverside and San Diego counties. Hills and mesas near the coast. Need high densities of food plants California plantain (*Plantago erecta*), desert plantain (*P. insularis*), and purple owl's -clover (*Orthocarpus purpurescens*). | **Absent.** The Project is outside of the known range for the species. There is no suitable habitat; food plants would not be expected to occur**.** The nearest occurrence from 1958, is considered extirpated. The occurrence is located approximately 12. miles south of the project site. |
| San Emigdio blue butterfly *(Plebulina emigdionis)* | SA | Found in desert canyons and along riverbeds in Inyo, Kern, Los Angeles, and San Bernardino counties. Host plant is four-wing saltbush (*Atriplex canescens*); maybe Spanish lotus (*Lotus purshianus*) also. | **Absent.** The Project is within the known range of the species. However, no suitable habitat is present; host plants not observed on-site. The nearest occurrence is from 1987, approximately 8.3 miles northeast of the project site. |
| Victorville shoulderband (*Helminthoglypta mohaveana*) | SA | Known only from along the Mojave River in San Bernardino County. Found among granite boulders and at the base of rocky cliffs. | **Absent.** The Project is outside of the known range for the species. There is no suitable habitat. The nearest occurrence, from 1939 is located 8.3 miles northeast along the Mojave River. |

| Common Name (Species Name) | Status* | Range or Habitat Requirements† | Potential for Occurrence in Project Site |
|---|---|---|---|
| westfork shoulderband (*Helminthoglypta taylori*) | SA | Vicinity of the Mojave River. Under logs and leaves. | **Absent.** The Project is outside of the known range for the species. There is no suitable habitat. The nearest occurrence, from 2012 is located 8.7 miles south at Horsethief Creek. |
| ***Fish*** | | | |
| Mohave tui chub *Siphateles bicolor mohavensis* | FE, SE, FP | Endemic to the Mojave River basin, adapted to alkaline, mineralized waters. Needs deep pools, ponds, or slough-like areas. Needs vegetation for spawning. | **Absent.** No suitable aquatic habitat is present in the project site. |
| Santa Ana speckled dace *Rhinichthys osculus* ssp. 8 | SSC | Headwaters of the Santa Ana and San Gabriel rivers. May be extirpated from the Los Angeles River system. Requires permanent flowing streams with summer water temps of 17-20 degrees Celsius. Usually inhabits shallow cobble and gravel riffles. | **Absent.** No suitable aquatic habitat is present in the project site. |
| ***Amphibians*** | | | |
| arroyo toad *Anaxyrus californicus* | FE, SSC | Semi-arid regions near washes or intermittent streams, including valley-foothill and desert riparian, desert wash, etc. Rivers with sandy banks, willows, cottonwoods, and sycamores; loose, gravelly areas of streams in drier parts of range. | **Absent.** No suitable desert wash or other streambed habitat present in the project site. The ephemeral wash located north of the project would not be anticipated to support the species due to lack of suitable required habitat elements. The nearest occurrence from 2006 is located approximately 8 miles southeast near Horsechief Canyon and West Fork Mojave River. |
| California red-legged frog *Rana draytonii* | FT, SSC | Lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat. | **Absent**. No suitable aquatic habitat is present. The nearest occurrence is a historical undated record located approximately 6.7 miles northeast of the project site along the Mojave River. |
| southern mountain yellow-legged frog *Rana muscosa* | FE, SE | Disjunct populations known from southern Sierras (northern DPS) and San Gabriel, San Bernardino, and San Jacinto Mtns (southern DPS). Found at 1,000 to 12,000 ft in lakes and creeks that stem from springs and snowmelt. May overwinter under frozen lakes. Often encountered within a few feet of water. Tadpoles may require 2 - 4 yrs to complete their aquatic development. | **Absent**. The Project is outside of the known range for the species No suitable aquatic habitat is present. The nearest occurrence, from 1941, is located 7.8 miles south, the record is considered extirpated. |
| ***Reptiles*** | | | |
| coast horned lizard (*Phrynosoma blainvillii*) | SSC | Frequents a wide variety of habitats, most common in lowlands along sandy washes with scattered low bushes. Open areas for sunning, bushes for cover, patches of loose soil for burial, and abundant supply of ants and other insects. | **Low Potential.** The project is within the known range of the species. Marginally suitable habitat is present, however on-site disturbances and surrounding development limits the likelihood of occurrence. The nearest occurrence, from 1919 is located 2.7 miles southeast of the project site. A non-historical occurrence, from 2008 is located 4.7 miles south closer to the foothills of the San Bernardino Mountains. |

| Common Name (Species Name) | Status* | Range or Habitat Requirements† | Potential for Occurrence in Project Site |
|---|---|---|---|
| coastal whiptail (*Aspidoscelis tigris stejnegeri*) | SSC | Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland and riparian areas. Ground may be firm soil, sandy, or rocky. | **Absent.** The Project is outside of the known range for the species. The nearest occurrence, from 2015, is located 12. 8 mile southeast. |
| desert tortoise *(Gopherus agassizii)* | FT, SE | Most common in desert scrub, desert wash, and Joshua tree habitats; occurs in almost every desert habitat. Require friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred. | **Low Potential.** The project is within the historic range for the species. The project site supports minimal habitat for the species due to the high level of on-site disturbance. Surrounding development including buildings and highways would limit migration of the species into the project site. The nearest occurrence is from 2000 is located approximately 4.3 miles southeast of the project site. An additional occurrence from 2007 is located 6.4 miles north of the project site. |
| Southern California legless lizard *(Anniella stebbinsi)* | SSC | Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content. | **Absent.** The Project is outside of the known range for the species. No suitable habitat is present on-stie. The nearest occurrence, from a vague date in the1950s is located 15.3 miles southeast in the San Bernardino Mountains. |
| southern rubber boa (*Charina umbratical*) | ST | Found in a variety of montane forest habitats. Previously considered morphologically intermediate, recent (2022) genomic analysis clarifies individuals from Mt Pinos, Tehachapi Mts, and southern Sierra Nevada are southern rubber boa. Found in vicinity of streams or wet meadows; requires loose, moist soil for burrowing; seeks cover in rotting logs, rock outcrops, and under surface litter. | **Absent.** The Project is outside of the known range for the species. Species is restricted to montane forested habitat. |
| two-striped gartersnake (*Thamnophis hammondii*) | SSC | Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth. | **Absent.** The Project is outside of the known range for the species. No suitable habitat is present on-site. The nearest occurrences are located in the northern foothills of the San Bernardino Mountains. |
| western pond turtle (*Emys marmorata*) | FC, SSC | A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying. | **Absent.** The project is within the known range for the species, however no suitable habitat is present on-site. The nearest occurrence is from 1989, located approximately 7 miles northeast of the project site in the Mojave River. |
| ***Birds*** | | | |
| bald eagle (*Haliaeetus leucocephalus*) | SE, FP, BGEPA | Ocean shore, lake margins, and rivers for both nesting and wintering. Most nests within 1 mile of water. Nests in large, old-growth, or dominant live tree with | **Absent.** No suitable nesting or wintering habitat present. The nearest known occurrences are over 8.2 miles southeast of the project site. |

| Common Name (Species Name) | Status* | Range or Habitat Requirements† | Potential for Occurrence in Project Site |
|---|---|---|---|
| | | open branches, especially ponderosa pine. Roosts communally in winter. | |
| burrowing owl *(Athene cunicularia)* | SSC | Open, dry annual or perennial grasslands, deserts, and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, the California ground squirrel. | **Moderate Potential.** The project is within the known range of the species and suitable habitat is present. However, the project site is relatively small, subject to disturbances and partially surrounded by development which limits the likelihood of occurrence. Suitable California ground squirrel burrows are present. The nearest known CNDDB record is from 2006, approximately 0.5 miles northeast of the project site. |
| Golden eagle *(Aquila chrysaetos)* | FP, BGEPA | Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas. | **Low (foraging only).** No suitable nesting habitat is present within the project site, but the species may forage on-site. A historic nest site was documented in 1927, approximately 6.6 miles northeast of the project site. More recent nest sites, from 2011 are documented approximately 14 miles northeast of the project site. There are some recent incidental records of the species in the general vicinity of the project site recorded in iNaturalist and eBird. |
| gray vireo *Vireo vicinior* | SSC | Dry chaparral; west of desert, in chamise-dominated habitat; mountains of Mojave Desert, associated with juniper and Artemisia. Forage, nest, and sing in areas formed by a continuous growth of twigs, 1-5 ft above ground. | **Absent.** The project is within the known range of the species, however no suitable habitat is present. The nearest occurrence is historic from 1937 and is located 3.2 miles southeast of the project site. |
| Loggerhead shrike *(Lanius ludovicianus)* | SSC | Broken woodlands, savannah, pinyon-juniper, Joshua tree, and riparian woodlands, desert oases, scrub, and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting. | **Low Potential.** The project is within the known range for this species. The species is known to nest in Joshua trees which are present, however the project site is disturbed with sparse coverage of native shrubs. The nearest CNDDB record is from 2007, 3 miles northwest of the project site. There are several eBird records in the vicinity of the project site. |
| Long-eared owl *(Asio otus)* | SSC | Riparian bottomlands grown to tall willows and cottonwoods; also, belts of live oak paralleling stream courses. Require adjacent open land, productive of mice and the presence of old nests of crows, hawks, or magpies for breeding. | **Absent.** No suitable nesting or foraging habitat present. The nearest CNDDB occurrence is from 1950, located 5.5 miles southwest of the project site. |
| southwestern willow flycatcher *(Empidonax traillii extimus)* | FE, SE | Riparian woodlands in Southern California. | **Absent.** No suitable nesting habitat is present within the project site. The nearest CNDDB occurrence, from 1990, is located 7.6 miles northeast of the project site near the Mojave River. |
| summer tanager *(Piranga rubra)* | SSC | Summer resident of desert riparian along lower Colorado River, and locally elsewhere in California deserts. | **Absent.** No suitable nesting habitat is present within the project site. The nearest CNDDB occurrence, from 1990, is located 7 miles northeast of the project site near the Mojave River. |

| Common Name (Species Name) | Status* | Range or Habitat Requirements† | Potential for Occurrence in Project Site |
|---|---|---|---|
| Swainson's hawk *(Buteo swainsoni*) | FT, | Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations. | **Absent.** No suitable nesting habitat is present in the project site. The nearest CNDDB occurrence, from 1920 is located 6.7 miles northeast of the project site. All CNDDB records indicate the species is possibly extirpated, however the species may still be seen as a flyover during spring and autumn migration. Ebird indicates several recent records near Mojave River |
| tricolored blackbird (*Agelaius tricolor*) | ST, SSC | Highly colonial species, most numerous in Central Valley and vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony. | **Absent.** No suitable nesting habitat is present within the project site. The nearest CNDDB occurrence, from 2014, is located 9.4 miles northeast of the project site near the Mojave River. |
| western yellow-billed cuckoo (*Coccyzus americanus occidentalis*) | FT, SE | Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape. | **Absent.** No suitable nesting habitat is present within the project site. The nearest CNDDB occurrence, from 2012, is located 6.4 miles northeast of the project site near the Mojave River. The occurrence is considered possibly extirpated. |
| yellow warbler (*Setophaga petechia*) | SSC | Riparian plant associations in close proximity to water. Also nests in montane shrubbery in open conifer forests in Cascades and Sierra Nevada. Frequently found nesting and foraging in willow shrubs and thickets, and in other riparian plants including cottonwoods, sycamores, ash, and alders. | **Absent.** No suitable nesting habitat is present within the project site. The nearest CNDDB occurrence, from 1953 is located 3.2 miles south of the project are. |
| yellow-breasted chat (*Icteria virens*) | SSC | Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Nests in low, dense riparian, consisting of willow, blackberry, wild grape; forages and nests within 10 ft of ground. | **Absent.** No suitable nesting habitat is present within the project site. The nearest CNDDB occurrence, from 1990, is located 7.5 miles northeast of the project site near the Mojave River. |
| ***Mammals*** | | | |
| American badger *(Taxidea taxus)* | SSC | Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils, and open, uncultivated ground. Preys on burrowing rodents. Digs burrows. | **Low Potential.** The project is within the known range of the species and marginally suitable habitat is present. However, the project site is relatively small, subject to disturbances and partially surrounded by development which limits the likelihood of occurrence. The nearest CNDDB occurrence is from 1987, approximately 7.3 miles south of the project site. |
| hoary bat (*Lasiurus cinereus*) | N/A | Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water. | **Absent.** No suitable foraging or roosting habitat is present within the project site. The nearest CNDDB occurrence, from 1984 is located 6.7 miles northeast of the project are. |
| Mohave ground squirrel *(Xerospermophilus mohavensis)* | ST | Open desert scrub, alkali scrub and Joshua Tree Woodland. Also feeds in annual grasslands. | **Absent.** The project is within the known eastern limits of the range. The project site is highly disturbed, and the site is generally |

| Common Name (Species Name) | Status* | Range or Habitat Requirements† | Potential for Occurrence in Project Site |
|---|---|---|---|
| | | Restricted to Mojave Desert. Prefers sandy to gravelly soils, avoids rocky areas. Uses burrows at base of shrubs for cover. Nests are in burrows. | surrounded by development limiting migration into the area. Additionally, soils may not be suitable for the species. The nearest extant occurrence, from 2005 is located 3 miles northwest. Additional occurrence in the project vicinity are considered extirpated. |
| Mohave river vole *(Microtus californicus mohavensis)* | SSC | Occurs only in weedy herbaceous growth in wet areas along the Mojave River. May be found in some irrigated pastures. Burrows into soft soil. Feeds on leafy parts of grasses, sedges, and herbs. Clips grasses to form runways from burrow. | **Absent.** The project is outside of the known range for this species, and no suitable habitat is present. The nearest CNDDB occurrence, from 1967 is located 6.9 miles northeast of the project site. |
| pallid bat (*Antrozous pallidus*) | SSC | Deserts, grasslands, shrublands, woodlands and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites. | **Absent.** No suitable foraging or roosting habitat is present within the project site. The nearest CNDDB occurrence, from 2016 is located 6.2 miles northeast of the project are. |
| pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*) | SSC | Desert border areas of San Diego, Riverside, San Bernardino, and Los Angeles counties in desert wash, desert scrub, desert succulent scrub, pinyon-juniper, etc. Sandy, herbaceous areas, usually in association with rocks or coarse gravel. | **Absent.** No suitable habitat is present is present due to the high level of on-site disturbance The nearest CNDDB occurrence, from 1921 is located 6.7 miles northeast of the project site. No recent records recorded in the project vicinity. |
| San Bernardino flying squirrel *Glaucomys oregonensis californicus* | SSC | Known from black oak or white fir dominated woodlands between 5200 - 8500 ft in the San Bernardino and San Jacinto ranges. May be extirpated from San Jacinto range. Needs cavities in trees/snags for nests and cover. Needs nearby water. | **Absent.** No suitable habitat is present in the project site. Nearest CNDDB records located south in San Bernardino Mountains. |
| Townsend's big-eared bat (*Corynorhinus townsendii*) | SSC | Throughout California in a wide variety of habitats. Most common in mesic sites. Roosts in the open, hanging from walls and ceilings. Roosting sites limiting. Extremely sensitive to human disturbance. | **Absent.** No suitable foraging or roosting habitat is present within the project site. The nearest CNDDB occurrence, from 1930 is located 10.1 miles north of the project are. |

*Status Codes:
Federal Status:
BGEPA = Bald and Golden Eagle Protection Act
FE = Federally Listed Endangered
FT = Federally Listed Threatened
FC = Federal Candidate for Listing

California State Status:
FP = CDFW Fully Protected
SCT = California Candidate Threatened
SSC = CDFW Species of Special Concern
SE = California State Listed Endangered
ST = California State-Listed Threatened

California Rare Plant Ranks (CRPR):
1B = Plants rare, threatened, or endangered in California and elsewhere
2B = Plants rare, threatened, or endangered in California, but more common elsewhere
0.1 = Seriously threatened in California
0.2 = Moderately threatened in California
0.3 = Not very threatened in California

†The habitat descriptions are directly from the CNDDB database (CDFW 2024a). Blooming period for plants is from CNPS (CNPS 2024a).

# APPENDIX C

## Floral and Faunal Compendia

## Table C-1. Floral Compendium

| Scientific Name | Common Name | Life Form |
|---|---|---|
| | **GYMNOSPERMS (DICOTS)** | |
| **Ephedraceae (Ephedra Family)** | | |
| *Ephedra nevadensis*+ | Nevada ephedra | shrub |
| | **ANGIOSPERMS (DICOTS)** | |
| **Asteraceae (Aster Family)** | | |
| *Ambrosia acanthicarpa* | annual bursage | annual herb |
| *Ericameria nauseosa*+ | rubber rabbitbrush | shrub |
| *Lessingia glandulifera* var. *glandulifera*+ | valley lessignia | annual herb |
| **Boraginaceae (Borage Family)** | | |
| *Amsinckia intermedia* | common fiddleneck | annual herb |
| *Amsinckia tessellata* var. *tessellata* | devil's lettuce | annual herb |
| *Pectocarya penicillata* | northern pectocarya | annual herb |
| **Brassicaceae (Mustard Family)** | | |
| *Descurainia pinnata* ssp. *glabra*+ | smooth western tansy mustard | annual herb |
| *Descurainia sophia* | flix weed, herb sophia | annual herb |
| *Hirschfeldia incana** | shortpod mustard | perennial herb |
| *Sisymbrium altissimum** | tumble mustard | annual herb |
| *Tropidocarpum gracile*+ | dobie pod | annual herb |
| **Cactaceae (Cactus Family)** | | |
| *Cylindropunita echinocarpa* | silver cholla | shrub (stem succulent) |
| **Geraniaceae (Storksbill Family)** | | |
| *Erodium cicutarium** | redstem filaree | annual herb |
| **Lamiaceae (Mint Family)** | | |
| *Scutellaria mexicana* | bladder-sage | shrub |
| **Polygonaceae (Buckwheat Family)** | | |
| *Eriogonum* fasciculatum | California buckwheat | shrub |
| *Eriogonum sp.* | annual wild buckwheat | annual herb |
| **Solanaceae (Nightshade Family)** | | |
| *Lycium cooperi* | Cooper's box thorn | shrub |
| **Zygophyllaceae (Caltrop Family)** | | |
| *Larrea tridentata* | Creosote bush | shrub |
| | **ANGIOSPERMS (MONOCOTS)** | |
| **Agavaceae (Agave Family)** | | |
| *Yucca brevifolia* | western Joshua tree | tree |
| **Poaceae (Grass Family)** | | |
| *Bromus rubens** | red brome | annual grass |
| *Bromus tectorum** | cheat grass | annual grass |
| *Hordeum murinum** | wall barley | annual grass |
| *Schismus barbatus** | common Mediterranean grass | annual grass |

Note: *non-native species. +Observed in 100-foot buffer only

## Table C-2. Faunal Compendium

| Scientific Name | Common Name | Additional Observation Notes |
|---|---|---|
| **CLASS AVES (BIRDS)** | | |
| **Charadriidae (plovers)** | | |
| *Charadrius vociferus* | killdeer | |
| **Columbidae (pigeons and doves)** | | |
| *Columba livia** | rock pigeon | |
| *Zenaida macroura* | mourning dove | |
| **Corvidae (jay's and crows)** | | |
| *Corvus corax* | common raven | |
| **Fringillidae (finches)** | | |
| *Haemorhous mexicanus* | house finch | |
| **Hirudinidae (swallows, martins, and saw-wings)** | | |
| *Hirundo rustica* | barn swallow | |
| **Mimidae (mockingbirds and thrashers)** | | |
| *Mimus polyglottos* | northern mockingbird | |
| **Passerellidae (New World sparrows)** | | |
| *Zonotrichia leucophrys* | white-crowned sparrow | |
| **Passeridae (Old World sparrows)** | | |
| *Passer domesticus** | house sparrow | |
| **Poliptilidae (gnatcatchers)** | | |
| **Sturnidae (starlings)** | | |
| *Sturnus vulgaris ** | European starling | |
| **Remizidae (penduline tits)** | | |
| *Auriparus flaviceps* | verdin | |
| **Tyrannidae (tyrant flycatchers)** | | |
| *Sayornis nigricans* | black phoebe | |
| **CLASS MAMMALIA (MAMMALS)** | | |
| **Leporidae (rabbits and hares)** | | |
| *Sylvilagus audubonii* | desert cottontail | |
| **Sciuridae (squirrels))** | | |
| *Otospermophilus beecheyi* | California ground squirrel | Active burrow complexes. |

*Non-native species

# APPENDIX D

## Western Joshua Tree Census Survey123 Data

**Table D-1. Western Joshua Tree Survey123 Data (April 2024)**

| Tree ID | Size Class* | Mature† (yes/no) | Approximate Height (meters) | Living (yes/no) | Flowers (yes/no) | Fruits (yes/no) | Impacts (yes/no) | Impact Type |
|---|---|---|---|---|---|---|---|---|
| 086439 - 1 | B | Yes | 3.7 | Yes | No | No | Yes | Remove |
| 086439 - 2 | C | Yes | 5.1 | Yes | No | No | Yes | Remove |
| 086439 - 3 | B | Yes | 4.8 | Yes | No | No | Yes | Remove |
| 086439 - 4 | C | Yes | 5.5 | Yes | No | No | Yes | Remove |
| 086439 - 5 | C | Yes | 5.1 | Yes | No | No | Yes | Remove |
| 086439 - 6 | B | Yes | 3.8 | Yes | No | No | Yes | Remove |
| 086439 - 7 | C | Yes | 5.5 | Yes | No | No | Yes | Remove |
| 086439 - 8 | B | No | 1.6 | Yes | No | No | Yes | Remove |
| 086439 - 9 | B | Yes | 2.3 | Yes | No | No | Yes | Remove |
| 086439 - 10 | A | No | 0.4 | Yes | No | No | Yes | Remove |
| 086439 - 11 | A | No | 0.3 | Yes | No | No | Yes | Remove |
| 086439 - 12 | A | No | 0.5 | Yes | No | No | Yes | Remove |
| 086439 - 13 | C | Yes | 5.6 | Yes | No | No | Yes | Remove |
| 086439 - 14 | B | Yes | 3.0 | Yes | No | No | Yes | Remove |
| 086439 - 15 | B | Yes | 3.2 | Yes | No | No | Yes | Remove |
| 086439 - 16 | B | Yes | 2.6 | Yes | No | No | Yes | Remove |
| 086439 - 17 | B | No | 1.5 | Yes | No | No | Yes | Remove |
| 086439 - 18 | B | Yes | 3.6 | Yes | No | No | Yes | Remove |
| 086439 - 19 | B | Yes | 3.6 | Yes | No | No | Yes | Remove |
| 086439 - 20 | C | Yes | 5.1 | Yes | No | No | Yes | Remove |
| 086439 - 21 | B | No | 1.0 | Yes | No | No | Yes | Remove |
| 086439 - 22 | A | No | 0.8 | Yes | No | No | Yes | Remove |
| 086439 - 23 | A | No | 0.3 | Yes | No | No | Yes | Remove |
| 086439 - 24 | A | No | 0.2 | Yes | No | No | Yes | Remove |
| 086439 - 25 | C | Yes | 5.1 | Yes | No | No | Yes | Remove |
| 086439 - 26 | B | Yes | 4.9 | Yes | No | No | Yes | Remove |
| 086439 - 27 | B | Yes | 3.5 | Yes | No | No | Yes | Remove |
| 086439 - 28 | B | Yes | 3.6 | Yes | No | No | Yes | Other |
| 086439 - 29 | B | No | 1.8 | Yes | No | No | Yes | Other |
| 086439 - 30 | B | Yes | 3.4 | Yes | No | No | Yes | Other |
| 086439 - 31 | C | Yes | 5.0 | Yes | No | No | No | N/A |
| 086439 - 32 | C | Yes | 5.1 | Yes | No | No | Yes | Other |
| 086439 - 33 | B | Yes | 1.5 | Yes | No | No | No | N/A |
| 086439 - 34 | B | No | 1.1 | Yes | No | No | No | N/A |