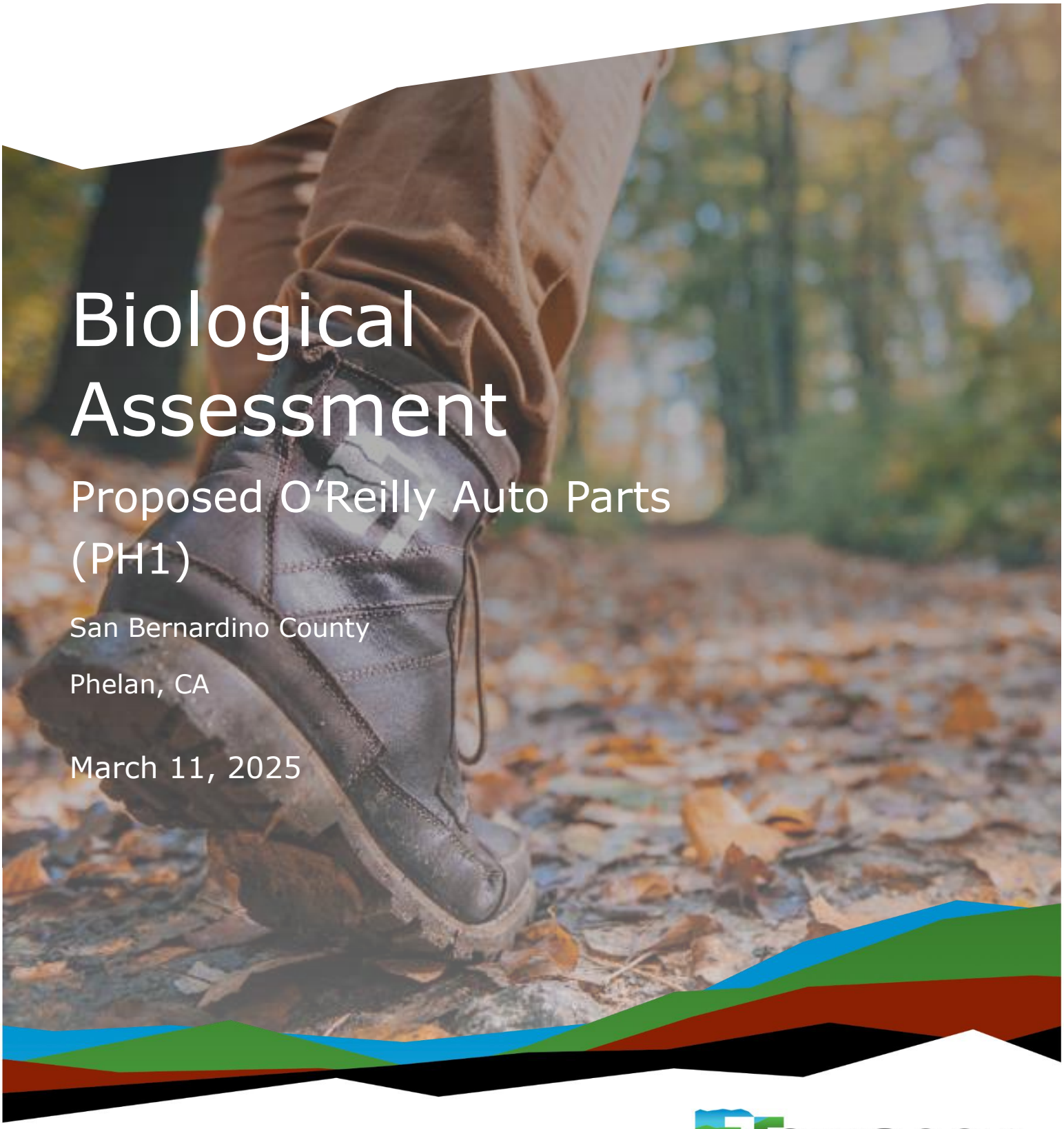

Biological Assessment

Proposed O'Reilly Auto Parts (PH1)

San Bernardino County

Phelan, CA

March 11, 2025

23041 Avenida De La Carlota Suite 350
Laguna Hills, California 92653
P (949) 261-0051
F (949) 261-6110
Terracon.com

March 11, 2025

O'Reilly Auto Enterprises, LLC
233 South Patterson Avenue
Springfield, MO 65802

Attn: Ms. Joy Lunardini
P: (417) 862-2674 ext. 68046
E: jlunardini@oreillyauto.com

RE: Biological Assessment Report
O'Reilly Phelan (PH1)
Phelan, San Bernardino County, California 92329
Terracon Project No. LA237684

Dear Ms. Lunardini:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Biological Assessment Report for the above referenced project. The following report details our findings and presents an opinion regarding the potential impacts to biological resources on the site. This review was performed in accordance with our Master Services Agreement, dated June 27, 2007, and a Work Order dated October 17, 2023. Please feel free to contact us at 925-285-9740 or at cailan.patel@terracon.com if you have any questions or concerns.

Sincerely,
Terracon

Cailan Patel
Biologist

Jeremy Hanzlik
Authorized Project Reviewer
Environmental Planning National Manager

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Appendices

Executive Summary

This document provides the findings of a Biological Assessment (BA) prepared by Terracon Consultants, Inc. (Terracon) for the proposed development of a new O'Reilly Auto Center on a 1.94-acre tract of vacant graded land with sparse vegetative cover. The Study Area comprises of one (1) parcel, Assessor Parcel Number (APN) 306622101 in the unincorporated Phelan Pinon Hills community in San Bernardino County. The Study Area is located at 3919 Phelan Road, Phelan, California at the intersection of Phelan Road and Malpaso Road. The proposed building would be a 7,453 square foot single-story block building and includes a 20,577 square foot pavement area with 39 parking spaces. Ingress and egress would be from Malpaso Road. This Biological Assessment report documents existing conditions on the site proposed for development and assesses potential impacts to sensitive biological resources based on Terracon's understanding of the proposed project plans and the client provided Study Area. Western Joshua tree was observed and documented within the Study Area. Suitable habitat for four (4) special-status species (burrowing owl, Swainson's hawk, desert tortoise, and coast horned lizard) was observed within the Study Area during the initial field survey. Additional protocol level surveys were completed for burrowing owl and desert tortoise. For burrowing owl, no evidence, including burrowing owls, pellets, prey remains, whitewash, or decoration, was observed and only two burrows that met the size minimum for diameter were detected. Neither of the observed burrows met the depth minimum of 150 cm. Regarding desert tortoise, no evidence, including live desert tortoise, scat, carcasses, eggshells, or burrows were observed. Three non-desert tortoise burrows were documented on site. Burrowing owl likelihood of occurrence was kept at low whereas desert tortoise is not expected to be within the Study Area. Terracon's resulting recommendations include conducting pre-construction wildlife and nesting bird surveys prior to project activities.

1. Introduction

The Study Area is located at 3919 Phelan Road, San Bernardino County, California at the intersection of Phelan Road and Malpaso Road. The Study Area is comprised of one (1) parcel, Assessor Parcel Number (APN) 306622101 within the unincorporated Phelan Pinon Hills community and consists of an approximately 1.94-acre tract of vacant, graded land with sparse vegetation cover. The Study Area is proposed for the development of an O'Reilly Auto Parts Store. The proposed building would be a 7,453 square foot single-story block building and includes a 20,577 square foot pavement area with 39 parking spaces. Ingress and egress would be from Malpaso Road. The proposed facility would be staffed with 4-6 employees (2 shifts) with hours of operation from 7:00 am – 9:00 pm. The location of the Study Area as defined by the client and the adjoining properties are depicted on **Exhibit 1** of **Appendix A**. The project is overlaid over a portion of the Phelan, California, USGS 7.5-minute series topographic map (2021) and can be viewed in **Exhibit 2**. Terracon performed a Biological Assessment of the subject property on November 28, 2023.

2. Methodology

Biological conditions were evaluated by confirming applicable regulations, policies, and standards; reviewing biological literature and querying available databases pertinent to the Study Area and vicinity (nine [9] topographic quadrangles for CDFW's CNDDB and CNPS Inventory of Rare and Endangered Plants); and conducting a reconnaissance-level biological survey of the Study Area. This assessment provides existing biological conditions of the Study Area at the time of the literature review and reconnaissance surveys. The methods employed are described in detail below. The findings and opinions conveyed in this report are based on this methodology.

2.1 Literature Review

Terracon reviewed readily available literature and database resources to identify potential threatened and endangered species within the Study Area. A desktop review for historical aerial photographs, historic topographic maps, United States Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps, soil data from the Natural Resources Conservation Service (NRCS), Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM), U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) maps, publicly available light detection and ranging (LiDAR) data, plant and wildlife species data through California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) records, California Native Plant Society's (CNPS) Electronic Inventory of Rare and Endangered Vascular Plants of California, United States Fish and Wildlife Service (USFWS) Information, Planning and Conservation (IPaC) service, and National Oceanic and Atmospheric Administration (NOAA) Fisheries species Essential Fish Habitat (EFH) for Study Area quadrangles and other related data applicable based on availability. The preliminary database review assisted Terracon in identifying potential aquatic resources within the Study Area, as well as the potential for threatened/endangered species habitat.

Additionally, Terracon reviewed readily available applicable Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans that the site may be subject to jurisdiction under. These plans include the Upper Santa Ana River Habitat Conservation Plan, Upper Santa Ana River Wash Habitat Conservation Plan, and the Town of Apple Valley Multi-Species Conservation Plan. The Study Area was not identified as being located in an area within one of the above-stated plans. Additionally, the San Bernardino County Biotic Resource Map was also reviewed to assess the habitat for special-status species within the county.

2.2 Field Reconnaissance Survey

A Biological Assessment survey was conducted by Terracon biologists, Cailan Patel and Chelsea Robbins on November 28, 2023. These surveys involved noting observations regarding suitability of habitat or other visual evidence of the federally listed or state-listed species during a pedestrian survey. Additional protocol level surveys were completed for desert tortoise and burrowing owl by Terracon biologists, Sarah Winfrey and Chelsea Robbins on October 24, 2024 following the protocol outlined in the USFWS Desert Tortoise Mojave Population Field Manual (2009) and the protocol outlined in Appendices C and D of the CDFW Staff Report on Burrowing Owl Mitigation (2012), respectively. Field methods are outlined in Appendices F and G.GPS data were collected using a Trimble Juno T41, capable of sub-meter accuracy. GPS positions were processed and corrected to analyze data using ArcGIS.

The general biological assessment reconnaissance survey consisted primarily of pedestrian transects; 10-meter wide parallel transects were conducted to adequately assess the Study Area for vegetation communities and burrows of special-status species. Survey transect methodology was based on *Preparation for any action that may occur within the range of the Mojave desert tortoise (Gopherus agassizii)* (USFWS 2018) and *Burrowing Owl Survey Protocol and Mitigation Guidelines* (The California Burrowing Owl Consortium 1993).

Additionally, Terracon staff conducted a census of Western Joshua trees *(Yucca brevifolia)* within the confines of the Study Area in accordance with the provisions outlined in the Fish and Game Code section 1927.3, subdivision (a)(1) of the CDFW. The census area includes the Study Area plus an additional 50-foot buffer around the Study Area. At the request of CDFW, two additional rounds of census surveys for Western Joshua Tree were completed on 7/9/2024 and 10/16/2024 to capture any potential impacts related to offsite road improvements and extend the buffer. Joshua trees situated within the demarcated census area were mapped and data were collected and recorded for each individual included in **Exhibit 10**. The census data table includes information regarding a unique identifier for each tree and a corresponding map, GPS locations for each tree, the height and class of each tree, indication of a mature or non-mature tree and if it is flowering or not. The table also includes if the impact to the tree is categorized as removal, trim, relocation, other, or none.

Representative photographs were taken to document vegetation communities, evidence of species or their habitat, or other notable biological resources observations. Photographs as well as a photo location map are provided in **Appendix B** and **Exhibit 11**, respectively.

3. Desktop Review

Terracon reviewed the desktop resources to gain understanding of the Study Area and to preliminarily evaluate the presence of potential habitat for special-status plant and wildlife species.

3.1 Topography

The Study Area is located in Phelan, California, north of Mt. San Antonio and east of Pinyon Hills. The United States Geologic Survey (USGS) 7.5-minute Topographic Map of the subject site, Phelan, California, was reviewed to identify potential Waters of the U.S. or other topographic features within and surrounding the Study Area. The Study Area is located at an elevation of approximately 4,100 feet. Based on this map, the Study Area is approximately 19 miles west of the Fremont Wash and approximately 2 miles east of Sheep Creek. Water within these features appears to flow northward. The topographic map does not identify aquatic features within the Study Area. See **Exhibit 2** for the topographic map.

3.2 Hydrology

Hydrology of the Study Area and vicinity was evaluated through review of topographic maps, aerial photos, the National Hydrography Dataset (USGS 2023), and the National Wetland Inventory (USFWS 2023), in conjunction with field survey data.

The Study Area is located within the Sheep Creek Watershed, Hydrologic Unit Code (HUC) 180902080401 (EPA 2023). Further, it is located within the Upper Mojave River Valley groundwater basin (Basin Number 6-042) (CDWR 2023).

Terracon reviewed National Wetland Inventory (NWI) data for the Study Area to identify potential wetland areas. No features were identified within the Study Area, however, NWI data identified two linear riverine features in the vicinity of the Study Area; one feature approximately 0.4 miles to the west and another approximately 0.5 miles to the southeast. Additionally, two freshwater ponds were identified approximately 1 mile to the southeast. See **Exhibit 3** for the NWI map.

Terracon reviewed the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM). According to the FIRM panel, the Study Area falls within a mapped 100-year floodplain. However, the areas surrounding this floodplain unit are mapped as areas with possible but undetermined flood hazards (i.e. No flood hazard analysis has been conducted). The FEMA Floodplain Map for the Study Area is included as **Exhibit 5**.

3.3 Soils

The U.S. Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) has mapped and inventoried soils at both landscape (course) and detailed (fine) scales. These data are catalogued in previously published soil surveys, the Soil Survey Geographic Database, and the U.S. General Soil Map. These can be accessed through the Web Soil Survey Application (USDA NRCS 2023).

The Study Area is covered by the *Soil Survey of San Bernardino County, California, Mojave River* Area (CA671). Within the Study Area, soils are associated with fan aprons. Based on Web Soil Survey data, the Study Area contains a single soil map unit, which is briefly described below. The soils map is shown on **Exhibit 4**.

Hydric soils are defined by the National Technical Committee for Hydric Soils as soils that in their undrained condition, are saturated, flooded, or ponded long enough during the growing season to develop anaerobic conditions that support the growth and regeneration of hydrophytic vegetation (59 Federal Register 16835). Soils that are sufficiently wet to support the growth and regeneration of hydrophytic vegetation due to artificial measures are included in the concept of hydric soils on the list "Hydric Soils of the United States" (National List) (USDA NRCS 2023). Soils are identified for inclusion on the list based on specific criteria established by law (67 Federal Register 58756). The National List is a compilation of all map units with either a major or minor component that is at least in part hydric. … Because the list includes both major and minor (small) percentages for map units, in some cases most of the map unit may not be hydric… Some components may be phases of soil series that have a range of characteristics… therefore, only a portion of that component's concept (or range in characteristics) may in fact be hydric. The list is useful in identifying map units that may contain hydric soils."

One minor component in the Tujunga sand, cool, 2 to 9 percent slopes map unit has been identified as hydric when they occur in fan remnants. The entire Study Area is mapped as "fan remnants", which may have hydric components.

Tujunga Sand, Cool, 2 to 9 Percent Slopes

This soil map unit typically occurs on fan aprons on backslopes. The dominant soil series, Tujunga sand, is formed in alluvium derived from granitic sources. These soils are found at elevations of 2,700 to 4,300 feet. This soil series is somewhat excessively drained with an occasional frequency of flooding and no frequency of ponding. The depth to the water table is greater than 80 inches and the typical soil profile is sand from 0 to 14 inches and stratified gravelly sand to gravelly loamy sand from 14 to 60 inches. The minor components within this soil map unit are Hanford, Soboba, and two unnamed soils. The dominant soil series, and its minor components Hanford, Soboba, and one unnamed soil are not rated as hydric soils. However, one of the unnamed minor components is rated as a hydric soil.

3.4 Climate

The Study Area has an arid climate, characteristic of the California high desert. A nearby weather station in Victorville, California (Victorville, Southern California Logistics Airport Weather Station 049325) has recorded weather conditions since 1917 (Western Regional Climate Center (WRCC) 2023). Average high temperatures range from 58.8 degrees Fahrenheit (°F) in January to 98.1°F in July, while average low temperatures range from 29.2°F in December to 60.8°F in July.

Climate data for this weather station indicate that average annual rainfall in the vicinity is approximately 5.52 inches and average annual snowfall is approximately 1.4 inches (WRCC 2023).

3.5 Surrounding Land Uses

The Study Area is zoned for general commercial use (San Bernardino County 2023). Primary uses immediately surrounding the Study Area are general commercial land use to the north, east and south, residence on commercial to the southwest, and vacant land zoned general commercial to the west and northwest.

3.6 Special-status Plants

Based on the database review of IPaC, CNDDB, and CNPS, Terracon identified 2 special-status plant species that required evaluation for potential to occur in the Study Area, Western Joshua tree (*Yucca brevifolia*) and short-joint beavertail (*Opuntia basilaris* var. *brachyclada*). Western Joshua tree (*Yucca brevifolia*) was observed within the Study Area. Short-joint beavertail, was identified as having suitable habitat and potential to occur within the Study Area but was not observed. These species and their habitats are listed in **Table 1** below.

3.7 Special-status Wildlife

Based on the database review of IPaC, and CNDDB, Terracon identified 17 special-status wildlife species and 1 migratory bird of conservation concern that required evaluation for potential to occur in the Study Area. These species include Crotch's bumble bee (*Bombus crotchii*), monarch butterfly (*Danaus plexippus*), Quino checkerspot butterfly (*Euphydryas editha quino*), arroyo toad (*Anaxyrus californicus*), southern mountain yellow-legged frog (*Rana muscosa*), Santa Ana sucker (*Catostomus santaanae*), Mohave tui chub (*Siphateles bicolor mohavensis*), desert tortoise (*Gopherus agassizii*), coast horned lizard (*Phyrnosoma blainvillii*), Swainson's hawk (*Buteo swainsoni*), southwestern flycatcher (*Empidonax taillii extimus*), California condor (*Gymnogyps californianus*), Le Conte's thrasher (*Toxostoma lecontei*), least Bell's vireo (*Vireo bellii pusillus*), burrowing owl (*Athene cunicularia*), Mohave ground squirrel (*Xerospermophilus mohavensis*), and Nelson's antelope squirrel (*Ammospermophilus nelsoni*). These species and their habitats are listed in **Table 1** below.

Table 1.

Special-Status Species Potentially Occurring within the Study Area					
Common Name	***Scientific Name***	***Status Fed/CA/ other***	***Habitat and Seasonal Distribution in California***	***Habitat Present/ Absent***	***Likelihood of Occurrence Within the Study Area***
Plants					
Short-joint Beavertail	*Opuntia basilaris* var. *brachyclada*	--/--/1B.2	Found in chaparral, Joshua tree woodland, Mojavean desert scrub, and Pinyon and Juniper woodland habitats. Blooms: April – August Elevation: 425 to 1800 m	HP	**Not Expected:** Although potential suitable habitat present, species was not observed during the site visit.
Western Joshua Tree	*Yucca brevifolia*	--/SC/1B.1	Large, slow-growing evergreen, tree native only to the Mojave Desert of the southwestern United States. It is found growing at elevations between 487 m to 2195 m.	HP	**Present:** Species observed within Study Area.
Invertebrates					
Crotch's bumble bee	*Bombus crotchii*	--/SC/--	Found between San Diego and Redding, California in open grasslands, shrublands, chaparral, including desert margins including Joshua tree woodland and creosote scrub, and semi-urban settings.	HP	**Not Expected:** Joshua tree woodland present in Study Area may provide suitable habitat however, only one of the typical food plant species were observed within Study Area in low density.

Special-Status Species Potentially Occurring within the Study Area					
Common Name	***Scientific Name***	***Status Fed/CA/ other***	***Habitat and Seasonal Distribution in California***	***Habitat Present/ Absent***	***Likelihood of Occurrence Within the Study Area***
Monarch Butterfly	*Danaus plexippus*	FC/--/--	Grasslands and milkweed plants. Low incidence in California during winter. Critically important wintering areas in Coastal California.	HP	**Not Expected:** Grassland understory present in the Study Area may provide suitable foraging habitat.
Quino Checkerspot Butterfly	*Euphydryas editha quino*	FE/--/--	Scrub habitats including California sagebrush, chamise and non-native/native grasslands.	HP	**Not Expected:** Grassland understory present in Study Area may provide suitable habitat.
Amphibians					
Arroyo Toad	*Anaxyrus californicus*	FE/--/--	Found in riparian scrub, riparian woodland and south coast flowing waters. Likes rivers with sandy banks, willows, and cottonwoods.	A	**Not Expected:** Suitable habitat not present in Study Area.
Southern Mountain Yellow-legged Frog	*Rana muscosa*	FE/SE/--	Found in San Jacinto Mountains, 1,000 to 12,000 feet in lakes and creeks that stem from springs and snowmelt. Mouth of the canyons of the upper Santa Ana River wash.	A	**Not Expected:** Suitable habitat not present in Study Area.
Fish					
Santa Ana Sucker	*Catostomus santaanae*	FT/--/--	Primarily found in small to medium freshwater stream systems.	A	**Not Expected:** Suitable habitat not present in Study Area.

Special-Status Species Potentially Occurring within the Study Area					
Common Name	***Scientific Name***	***Status Fed/CA/ other***	***Habitat and Seasonal Distribution in California***	***Habitat Present/ Absent***	***Likelihood of Occurrence Within the Study Area***
Mohave Tui Chub	*Siphateles bicolor mohavensis*	FE/SE/--	Occurs in mineralized, alkaline waters in deep pools or shallow out-flow streams. Prefers lakes and mineral spring pools. Dominant plants in their likely habitat include ditchgrass, bulrush, cattail, and saltgrass.	A	**Not Expected:** Suitable habitat not present in Study Area.
Reptiles					
Desert Tortoise	*Gopherus agassizii*	FT/ST/--	Most common in desert scrub, desert wash, and Joshua Tree habitats. Required friable soil for burrow and nest construction. Creosote bush habitat with large annual wildflower blooms preferred. Typically found at elevations ranging from sea level to 1600 m.	HP	**Not Expected:** Joshua tree woodland may provide suitable habitat although evidence of the species was not observed with the Study Area. Protocol-level surveys were completed to support this analysis and negative findings were reported.

Special-Status Species Potentially Occurring within the Study Area					
Common Name	***Scientific Name***	***Status Fed/CA/ other***	***Habitat and Seasonal Distribution in California***	***Habitat Present/ Absent***	***Likelihood of Occurrence Within the Study Area***
Coast Horned Lizard	*Phyrnosoma blainvillii*	--/SSC/--	Inhabits open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains. Found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads.	HP	**Low:** Potential suitable habitat present within and surrounding Study Area. However, in Joshua tree woodland they are typically found at higher elevations from 1230-1670 m.
Birds					
Swainson's Hawk	*Buteo swainsoni*	--/ST/--	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa fields supporting rodent populations.	HP	**Low:** Potential suitable habitat present within and surrounding Study Area.
Southwestern Willow Flycatcher	*Empidonax traillii extimus*	FE/SE/--	Inhabits freshwater marshes, wet meadows and shallow margins of saltwater marshes bordering larger bays. Breeds in dense riparian vegetation near surface water or saturated soils in the American Southwest.	A	**Not Expected:** Suitable habitat not present in Study Area.

Special-Status Species Potentially Occurring within the Study Area					
Common Name	***Scientific Name***	***Status Fed/CA/ other***	***Habitat and Seasonal Distribution in California***	***Habitat Present/ Absent***	***Likelihood of Occurrence Within the Study Area***
California Condor	*Gymnogyps californianus*	FE/--/CH	Spends majority of their life on rocky shrubland, coniferous forest, and Oak Savanna. Often found near cliffs or large trees. Nests on cliff ledges or cave openings and inside large sequoia and redwood trees.	A	**Not Expected:** Suitable habitat not present in Study Area.
Le Conte's Trasher	*Toxostoma lecontei*	--/SCC/--	Desert resident; primarily of open desert wash, desert scrub, alkali desert scrub, desert succulent scrub, and Joshua tree habitat. Prefer mesquite, tall riparian brush and chapparal.	HP	**Low:** Joshua tree habitat may provide suitable habitat.
Least Bell's Vireo	*Vireo bellii pusillus*	FE/SE/--	Inhabits low-elevation, riparian habitats with a dense shrub understory that is near water. The ideal habitat contains both canopy and shrub layers. They prefer to nest in willows but will also use shrubs, trees, and vines. Most least Bell's vireos are found below 2,000 feet elevation. Their breeding range is primarily coastal southern California, but they also occur at isolated oases in Mojave, Colorado and Vizcaino deserts.	A	**Not Expected:** Suitable habitat not present in Study Area.

Special-Status Species Potentially Occurring within the Study Area					
Common Name	***Scientific Name***	***Status Fed/CA/ other***	***Habitat and Seasonal Distribution in California***	***Habitat Present/ Absent***	***Likelihood of Occurrence Within the Study Area***
Burrowing Owl	*Athene cunicularia*	--/C/--	Found in wide-open, sparsely vegetated areas like praries, deserts, grasslands, and agricultural fields.	HP	**Low:** Sparsely vegetated areas with mammal burrows in Study Area may provide suitable habitat.However, a protocol level survey was completed with negative findings of burrowing owl presence.
Mammals					
Mohave Ground Squirrel	*Xerospermophilus mohavensis*	--/ST/--	Found in the northwest portion of the Mojave Desert in Inyo, Kern, Los Angeles, and San Bernardino Counties. Occurs in a variety of desert shrubland habitats. Most often found in creosote bush scrub, desert greasewood scrub, and Joshua Tree woodland. Prefer deep, sandy gravely soils on flat to moderately sloping terrain. They construct burrows to provide temperature regulation, avoid predators, and for use during the inactive season.	HP	**Not Expected:** Suitable habitat present in the Study Area. Burrows were observed throughout the Study Area, however, the project area lies on the edge of the mohave ground squirrel range and just outside the general population area and the predicted occupied habitat for the species.

Special-Status Species Potentially Occurring within the Study Area					
Common Name	***Scientific Name***	***Status Fed/CA/ other***	***Habitat and Seasonal Distribution in California***	***Habitat Present/ Absent***	***Likelihood of Occurrence Within the Study Area***
Nelson's Antelope Squirrel	*Ammospermophilus nelsoni*	--/ST	Found in arid annual grassland and shrubland communities, particularly Chenopod scrub.	HP	**Not Expected:** Annual grasses present within Study Area may provide suitable habitat. However, no recent occurrences within the vicinity.

SOURCE:

- CDFW Natural Diversity Database (CNDDB), November 2023 for the U.S. Geological Survey's (USGS) 7.5-minute Phelan quadrangle and eight surrounding quadrangles, and San Bernardino County.
- California Native Plant Society (CNPS), November 2023 for the U.S. Geological Survey's (USGS) 7.5-minute Phelan quadrangle and eight surrounding quadrangles.
- U.S. Fish and Wildlife Service (USFWS), November 2023 for San Bernardino County and Project Area coordinates.

a. Status:

Federal

FE	Federally listed as Endangered
FT	Federally listed as Threatened
FPD	Federally Proposed for Delisting
FC	Federal Candidate
PE	Proposed Endangered
S	Federally Sensitive
SC	National Marine Fisheries Service or U.S. Fish and Wildlife Service designated Species of Concern. Species of Concern status does not carry any procedural or substantive protections under the ESA.

State

SE	State-listed as Endangered
ST	State-listed as Threatened
C	State Candidate
SPD	State-Proposed for Delisting
S	State Sensitive
SR	State Rare
PE	Proposed Endangered
WL	Watch List
SSC	California Department of Fish and Game designated "Species of Special Concern"

Other

CH	Critical Habitat
FP	California Department of Fish and Game designated "Fully Protected"– Permit required for "take"
CWL	California Department of Fish and Game designated "California Watch List"
SLC	California Native Plant Society (CNPS) Ranking Species of Local Concern
1B	California Native Plant Society (CNPS) Ranking. Defined as plants that are rare, threatened, or endangered in California and elsewhere.
2	California Native Plant Society (CNPS) Ranking. Defined as plants that are rare, threatened, or endangered in California, but more common elsewhere.
3	California Native Plant Society (CNPS) Ranking. Plants About Which More Information is Needed - A Review List.

Recent modifications to the CNPS Ranking System include the addition of a new Threat Code extension to listed species (e.g., List 1B.1, List 2.2 etc.). A Threat Code extension of x.1 signifies that a species is seriously endangered in California; x.2 is fairly endangered in California; and x.3 is not very endangered in California.

b. Likelihood of occurrence evaluations:

A rating of **"High"** indicates that all of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high poitential of being found on the site.

A rating of **"Moderate"** indicates that some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate potential of being found on the site.

A rating of **"Low"** indicates that few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

A rating of "**Present"** indicates that the species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last 5 years).

A rating of "**Not Expected"** indicates that habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbane regime). The species is not expected to be found on the site.

3.8 Migratory Bird Treaty Act

The Migratory Bird Treaty Act of 1918 (MBTA) decrees that migratory birds and their parts (including eggs, nests, and feathers) are federally protected. The MBTA is the domestic law that affirms, or implements, the United States commitment to four international conventions (with Canada, Japan, Mexico, and Russia) for the protection of a shared migratory bird resource. Each of the conventions protect selected species of birds that are common to these countries (i.e., they occur in these countries at some point during their annual life cycle). Certain birds are protected under the MBTA and the Bald and Golden Eagle Protection Act (BGEPA). Activities that result in a take of migratory birds or eagles is prohibited unless permitted and authorized by the USFWS.

Based on the IPaC database review, Terracon identified 1 migratory bird of conservation concern that may require evaluation for potential to occur in the Study Area. The species is listed in **Table 2** below.

Table 2. Migratory Birds with Potential of Presence in Study Area

Species Name	Bird of Conservation Concern (BCC)	Seasonal Occurrence in Study Area
Golden Eagle (*Auila chysaetos*)	Yes	Breeds Dec 1 to Aug 31

Based on a review of readily available documentation for the Study Area including the IPaC report and aerial imagery, it appears that the Study Area contains suitable habitat for the above-mentioned migratory bird of concern.

4. Biological Survey Results

The following section describes the observations and results of the field reconnaissance surveys conducted by Terracon biologists.

4.1 Vegetation

Terracon biologists mapped one natural vegetation community within the Study Area: Joshua tree woodland (*Yucca brevifolia* Woodland Alliance) (CNPS 2023). The Joshua tree woodland community consists of clusters of Joshua trees in the southwestern portion of the Study Area. Brief descriptions of the natural vegetation communities and other areas present in the Study Area are provided below. Vegetation observed within the Study Area consisted primarily of native and invasive species including Western Joshua tree (*Yucca brevifolia*), common stork's-bill (*Erodium cicutarium*), cholla (*Cylindropuntia* sp.), cheatgrass (*Bromus tectorum*), prickly Russian thistle (*Salsola tragus*), broadleaf filaree (*Erodium botrys*), rubber rabbitbrush (*Ericameria nauseosa*), smooth Arizona cypress (*Cupressus glabra*), jointfir (*Ephedra* sp.), California buckwheat (*Eriogonum fasciculatum*), buckwheat (*Eriogonum* sp.), California evening primrose (*Oenothera californica*), red brome (*Bromus rubens*), sapphire woolystar (*Eriastrum sapphirinum*), tall tumblemustard (*Sisymbrium altissimum*), valley

lessingia (*Lessingia glandulifera*), Bermuda grass (*Cynodon dactylon*), desert inkcap (*Montagnea arenaria*), Colorado pinyon pine (*Pinus edulis*), and Saharan mustard (*Brassica tournefortii*). Since multiple western Joshua trees were observed within the Study Area, a Western Joshua Tree Census Data Table was produced and included as **Appendix E**.

Joshua Tree Woodland (*Yucca brevifolia* Woodland Alliance)

This community is defined as having western Joshua tree as being the dominant species over shrubs or grass layers. Cooccurring species may include but are not limited to *Ambrosia dumosa, Ambrosia salsola, Astemisia tridentata, Chrysothamnus viscidiflorus, Coleogyne ramosissima, Cylindropuntia acanthocarpa, Ephedra nevadensis, Eriogonum fasciculatum, Gutierr ezia microcephala, Krascheninnikovia lanata, Larrea tridentata, Lycium andersonii, Yucca baccata* and *Yucca schidigera*. Other trees may be present at lower cover, including *Juniperus californica, Juniperus osteosperma or Pinus monophylla*. Membership rules for this community include *Yucca brevifolia* evenly distributed at ≥1% cover, Juniperus and/or Pinus spp. 1% absolute cover in the tree canopy (CNPS 2023). Joshua tree woodland is found throughout the Study Area. In the portions of the Study Area where this community was observed, *Yucca brevifolia* was observed with a cover of between 1 to 5 percent cover typically with associated species in the understory including those listed above.

4.2 General Wildlife

The Joshua tree woodland community in the Study Area supports a variety of reptiles, birds, and mammals. Wildlife species observed included western fence lizard (*Sceloporus* occidentalis), chirping sparrow (*Spizella* passerine), common raven (*Corvus corax*) and house finch (*Haemorhous mexicanus*). During the follow-up protocol level surveys for burrowing owl and desert tortoise, additional observed species included European starling (*Sturnus vulgaris*), house sparrow (*Passer domesticus*), Northern mockingbird (*Mimus polyglottus*), rock pigeon (*Columbia livia*), and turkey vulture (*Cathartes aura*). Mammal burrows were observed throughout the Study Area. Many of these burrows appeared to be inactive and no mammals were observed during the Study Area visit. Observed biological resources are displayed in **Exhibit 7**.

4.3 Sensitive Biological Resources

Local, State, and Federal agencies regulate special-status species and require an assessment of their presence or potential presence to be conducted on-site prior to the approval of a proposed activity on a property. This section discusses biological resources observed in the Study Area and evaluates the potential for the Study Area to support other sensitive biological resources. Assessments for the potential occurrence of special-status species are based upon known ranges, habitat preferences for the species, and species occurrence records from the CNDDB. The potential for each special-status species to occur in the Study Area was evaluated according to the following criteria:

- **Not Expected.** Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime). The species is not expected to be found on the site.

- **Low Potential.** Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.
- **Moderate Potential.** Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate potential of being found on the site.
- **High Potential.** All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high potential of being found on the site.
- **Present.** Species is observed on the site or has been recorded (e.g., CNDDB, other reports) on the site recently (within the last 5 years).

Appendices C and D provide the complete list of all special-status resources with records for IPaC query and within a 9-quad CNDDB query for the Study Area respectively.

4.3.1 Special-Status Wildlife Species

Terracon evaluated 17 special-status wildlife species for their potential to occur within the Study Area. Species are considered to have special status based on a State and/or Federal listing, or because they are considered a California Species of Special Concern (SSC) or are protected by CESA as candidate species. These species are:

- Mohave ground squirrel (*Xerospermophilus mohavensis*), State Threatened
- Swainson's Hawk *(Buteo swainsoni)*, State Threatened
- Southwestern Willow Flycatcher *(Empidonax traillii extimus)*, Federally and State Endangered
- California Condor *(Gymnogyps californianus)*, Federally Endangered
- Least Bell's Vireo *(Vireo bellii pusillus)*, Federally and State Endangered
- Desert tortoise (*Gopherus agassizii*), Federally and State Threatened
- Santa Ana Sucker (Catostomus santaanae), Federally Threatened
- Mohave tui chub (*Siphateles bicolor mohavensis*), Federally and State Endangered
- Arroyo toad (*Anaxyrus californicus*), Federally Endangered
- Southern Mountain Yellow-legged Frog *(Rana muscosa)*, Federally and State Endangered
- Quino Checkerspot Butterfly *(Euphydryas editha ouino)*, Federally Endangered
- Nelson's Antelope Squirrel (*Ammospermophilus nelson*), State Threatened
- Burrowing Owl (*Athene cunicularia*), State Species of Special Concern

- Monarch Butterfly (*Danaus plexippus*), Federally Candidate
- Crotch's bumble bee (*Bombus crotchii*), State Candidate
- Le Conte's thrasher (*Toxostoma lecontei*), State Species of Special Concern
- Coast horned lizard (Phyrnosoma blainvillii), State Species of Special Concern

Four species have been assessed as having a low potential to occur within the Study Area: Swainson's hawk *(Buteo swainsoni)*, Coast horned lizard (*Phyrnosoma blainvillii*), Le Conte's thrasher (*Toxostoma lecontei*), and Burrowing owl (*Athene cunicularia*).

Thirteen species have been assessed as not expected to occur within the Study Area: Southwestern willow flycatcher *(Empidonax traillii extimus)*, California condor *(Gymnogyps californianus)*, Least Bell's Vireo *(Vireo bellii pusillus)*, Santa Ana Sucker *(Catostomus santaanae)*, Mohave tui chub *(Siphateles bicolor mohavensis)*, Arroyo toad (*Anaxyrus californicus*), Crotch's bumble bee *(Bombus crotchii*), Quino checkerspot butterfly *(Euphydryas editha quino*), Southern mountain yellow-legged frog *(Rana muscosa)*, Desert tortoise (*Gopherus agassizii*), Monarch butterfly *(Danaus plexippus)*, mohave ground squirrel *(Xerospermophilus mohavensis*), and Nelson's antelope squirrel (*Ammospermophilus nelsoni*).

Desert Tortoise

The desert tortoise is a long-lived species known for its slow growth and limited reproductive rates. It inhabits various terrains within the Mojave Desert, including flats, alluvial fans, bajadas, and rocky areas. The species possesses a range of adaptations to thrive in arid environments, allowing it to manager water, salt, and energy imbalances over both short and long periods. This adaptability enables individuals to fulfill their annual energy requirements, even when water and food resources are uncertain (Peterson 1996).

The activity patterns of desert tortoises are heavily influenced by temperature. They exhibit different daily activity patterns that vary across seasons and within seasons due to fluctuations in ambient temperature. While plant species composition may play a role in local distribution, the preferred habitats can differ among different populations. In the Western Mojave Desert, they are frequently associated with creosote scrub habitats, Joshua tree woodlands, saltbush scrublands, desert washes, and other ecological communities (Jennings 1997; Germano et al. 1994).

The desert tortoise is Federally and State-listed as threatened. Therefore, potential impacts to the species require incidental take permits from both USFWS and CDFW.

The Study Area contains approximately 1.9 acres of suitable habitat for desert tortoise where Joshua tree woodland are present. This habitat, however, is surrounded by development and is relatively disturbed. Multiple small mammal burrows were observed throughout the Study Area (**Exhibit 7**). See **Appendix B** for photos of the burrows.

The CNDDB does not contain listed occurrences of desert tortoise within 5 miles of the Study Area. However, there is 1 occurrence just outside of a 5-mile buffer of the Study Area to the north (Occurrence No. 984, 2017). Additionally, critical habitat for desert tortoise is present approximately 18.5 miles to the north of the Study Area (**Exhibit 6**). A protocol level survey was completed for this

species on October 24, 2024 and the determination made that the species is not expected to occur. Surveys were conducted following the protocol outline in the USFWS Desert Tortoise Mojave Population Field Manual (2009). All portions of the project site were surveyed (100% coverage) by walking straight-line transects (north-south) spaced 10 m apart for a total of 12 transects. During the survey, all potential burrows were recorded. No evidence, including live desert tortoise, scat, carcasses, eggshells, or burrows, was observed. Three non-desert tortoise burrows were documented on the site.

In addition, San Bernardino County Biotic Resource Overlay identified the Study Area and surroundings as sparsely populated desert tortoise habitat. Based on the results of the protocol level desert tortoise survey the desert tortoise is not expected to occur within the Study Area.

Swainson's Hawk

The Swainson's hawk, is a sizable raptor with a vast habitat range and breeds across open landscapes in the western regions of North America, spanning from southern Canada to northern Mexico and from California to the Great Plains. The species thrives in various lowland environments, including expanses with sparse vegetation such as valleys, plateaus, floodplains, and desert areas. It predominantly hunts in dry lands, pastures, fallow and low-cropped fields, an open shrublands, desert scrub communities, as well as grasslands.

Swainson's hawk nesting sites are commonly found in tall, solitary trees, often bordering riparian woodlands near open spaces with suitable foraging grounds. In the absence of tall trees, nests may be situated in smaller tree species like junipers, or in rare cases, on rock ledges or outcrops, human-made structures, or even on the ground (Bechard et al. 2010). In specific areas like the Mojave Desert, this species may utilize Joshua tree woodlands or desert riparian strips as nesting locations.

The Swainson's hawk is a State-listed as threatened and the closest CNDDB occurrence is approximately 14 miles to the northeast of the Study Area (Occurrence No. 2544, 1939).

The Study Area consists of Joshua tree woodland, with a few small trees present in and within the vicinity. The Study Area may provide suitable foraging and nesting habitat, however, because these habitats are of low quality, the Swainson's hawk has a low potential to occur within the Study Area.

Burrowing Owl

The burrowing owl is a diminutive owl species that inhabits arid, open regions with sparse vegetation in the western part of North America. Its preferred environments encompass grasslands, rangelands, and agricultural areas, but it can also be found in fallow fields or vacant lots within urbanized areas. The primary diet of burrowing owls consists of insects, although they occasionally consume small mammals like mice and voles. These owls depend on pre-existing burrows made by other animals, particularly ground squirrels, which they adapt for their own shelter. The burrowing owl is an SSC and is protected by CFGC Section 3503 et. Seq. and the Federal MBTA.

The Study Area exhibits an abundance of mammal burrows, which present a favorable habitat for burrowing owls. A protocol level survey was completed for this species on October 24, 2024 and the determination made that the species was not present on site but the species has low potential to occur within the Study Area. Following the protocol outlined in Appendices C and D of the CDFW Staff Report on Burrowing Owl Mitigation (2012), full coverage of the project area was surveyed on October 24,

2024. Surveys were conducted in all portions of the project site (100% coverage) by walking straight-line transects (north-south) spaced 10 m apart for a total of 12 transects. At the start of each transect and, at least, every 100 m, surveyors scanned the entire visible project area for burrowing owls using binoculars. During the survey, all potential burrows were recorded. No evidence, including burrowing owls, pellets, prey remains, whitewash, or decoration, was observed and only two burrows that met the size minimum for diameter were detected. Neither of these burrows met the depth minimum of 150 cm. Based on these findings, the burrowing owl has a low potential to occur within the Study Area.

Mohave Ground Squirrel

The Mohave ground squirrel is a compact mammal, measuring approximately 8 to 9 inches in length. It is brown and devoid of distinct markings and has a short, broadly haired tail. This diurnal ground squirrel thrives in a variety of desert vegetation types, although it shows a preference for sandy or gravelly soils as the substrate for its burrows (Burt 1936). The species relies on a specific set of plant species as food resources including Joshua tree fruits, winterfat (*Krasheninnikovia lanata*), and spiny hopsage (*Grayia spinosa*) (Stewart 2005); however, the Mohave ground squirrel often exhibits generalist feeding behavior, switching among several plant species seasonally (Burt 1936; Recht 1977; Zembal & Gall 1980).

The Mojave ground squirrel is State-listed as threatened and found in the Western Mohave Desert and its historical range totaled roughly 20,000 square kilometers (Leitner 2008). This species' range from Palmdale and Victorville in the south to Owens Lake in the north and is generally bounded to the west by the slopes of the Sierra Nevada, and to the east by the Mojave River (CDFW 2021). The closest CNDDB occurrences are approximately 10 miles to the northwest and northeast of the Study Area (Occurrence No. 257, 1992 and No. 318, 2005); however, the most recent occurrence within the vicinity was in 2005.

Mammal burrows were observed throughout the Study Area, however, the Study Area lies on the edge of the mohave ground squirrel range and just outside the general population area and the predicted occupied habitat for the species. Based on available information, the Mohave ground squirrel is not expected to occur in the Study Area. The Study Area is located outside of the general population area and the predicted occupied habitat for the species and there are no recent occurrences in the vicinity of the Study Area.

Arroyo Toad

The arroyo toad is predominantly found in the southern part of the California Coast Ranges stretching from northern San Luis Obispo County south to Baja California (Simon 2005). This species is found in semi-arid regions in close proximity to washes or intermittent streams. Their habitats encompass a range of environments, including valley-foothill and desert riparian areas, as well as various arid landscapes including desert washes, palm oases, Joshua tree woodlands, mixed chaparral and sagebrush. Adult and subadult arroyo toads seek shelter during the day and periods of inactivity by burrowing into upland terraces, along old flood channels, and often in the soils below the canopy edge of willows or cottonwoods (USFWS 2014).

The arroyo toad is Federally-listed threatened and its historical range was believed to have extended eastward into the deserts of Riverside, San Diego, and Imperial counties at the time of listing. The

closest CNDDB occurrence is approximately 11 miles southeast of Study Area (Occurrence No. 127, 2007). The Study Area does not, however, contain suitable habitat and therefore the arroyo toad is not expected to occur within the Study Area.

Mohave Tui Chub

The Mohave tui chub is a large-scaled fish with a small, terminal, slightly oblique mouth. The average size for adults is four to six inches. This species was formerly found in deep pools and slough-like areas of the Mojave River, but now only occurs in highly modified refuge sites in San Bernardino County (USFWS 2023).

The Mohave tui chub is Federally and State-listed as endangered. Therefore, potential impacts to the species require incidental take permits from both the USFWS and CDFW. The closest CNDDB occurrence of this species is approximately 13 miles to the southeast of the Study Area (Occurrence No. 15, 1937).

The Study Area does not contain aquatic features to provide habitat for the Mohave tui chub. Therefore, the Mohave tui chub is not expected to occur within the Study Area.

Southwestern Willow Flycatcher

The migratory southwestern willow flycatcher inhabits riparian zones and wetlands within the arid Southwest. Although its present range mirrors its historical range, the population has dwindled due to habitat reduction caused by surface water diversion, groundwater extraction, alterations in flood and fire patterns, and the proliferation of non-native invasive plant species. This particular species typically nests in native trees and shrubs, yet may also resort to nesting in dense thickets dominated by invasive non-native species like tamarisk and Russian olive (USDA 2022).

The southwestern willow flycatcher is Federally and State-listed as endangered. The CNDDB does not contain occurrence records of the southwestern willow flycatcher within 5 miles of the Study Area. However, the nearest occurrences are approximately 13 miles to the southeast of the Study Area (Occurrence No. 61, 2007; No. 62, 2007; and No. 63, 2007). Vegetation present within the Study Area does not include aquatic features, including riparian areas and wetlands, and therefore, the southwestern willow flycatcher is not expected to occur within the Study Area.

California Condor

The California condor relies on expansive regions of open savannah, grasslands, and foothill environments characterized by rock formations and substantial trees suitable for nesting and perching. Specifically, this species maintains permanent residence in the semi-arid, rugged mountainous areas encircling the southern San Joaquin Valley. These encompass the coastal ranges spanning from Santa Clara County southward to Los Angeles County, the Transverse Ranges, Tehachapi Mountains, and the southern Sierra Nevada.

For foraging, the California condor covers extensive areas of open rangelands, which it seeks roosting spots on cliffs and within sizable trees and snags. Its habitat range typically spans from sea level to about 9000 feet in elevation, with nesting occurring between 2000 to 6500 feet above sea level. During non-breeding periods, these birds migrate northward to Kern and Tulare Counties around April,

frequently returning southward in September to spend winter in the Tehachapi Mountains, Mount Pinos, and Ventura and Santa Barbara Counties (Polite 2023).

The California condor is Federally-listed as endangered. The CNDDB does not contain occurrences within the 9 quadrats that were queried surrounding the Study Area. There are no recent occurrences within or surrounding the Study Area and based on the distance from the Study Area to Mount San Antonia, the California condor is not expected to occur within the Study Area.

Least Bell's Vireo

The least Bell's vireo previously a prevalent and widely distributed summer dweller, typically found below an elevation of around 200 feet. Its habitat spanned across the western Sierra Nevada, throughout the Sacramento and San Joaquin valleys, and in the coastal valleys and foothills extending from Santa Clara County southward. Additionally, this species thrived in coastal southern California, existing below approximately 4000 feet in elevation to the east of the Sierra Nevada, encompassing areas of Owens and Benton valleys, along the Mojave River, and alongside various streams at the western periphery of the southeastern deserts, extending along the entire stretch of the Colorado River (Gaines 1988).

However, the least Bell's vireo has experienced a severe decline or complete disappearance across its California range in recent decades. This decline appears to be accountable to cowbird parasitism as well as habitat destruction and degradation (Goldwasser et al. 1980). *Vireo bellii pusillus* is presently a scarce, localized summer resident, usually found below 2000 feet in elevation. This species predominantly occupies willow thickets and other low, densely vegetated riparian habitats in the lower regions of canyons, primarily situated in San Benito and Monterey Counties, coastal southern California from Santa Barbara Country southward, and along the western border of deserts in riparian habitats (Gaines 1988). This species relies on dense thickets of willow and other low shrubs for nesting and roosting cover, favoring areas near water sources but also inhabiting thickets along dry, intermittent streams.

The least Bell's vireo is Federally and State-listed as endangered. The nearest CNDDB occurrence is approximately 13 miles to the southeast of the Study Area (Occurrence No. 147, 1990). The Study Area does not contain riparian vegetation and no aquatic features are within the vicinity. Therefore, the least Bell's vireo is not expected to occur within the Study Area.

Santa Ana Sucker

The Santa Ana sucker is native to the Los Angeles and Santa Ana basins in southern California. Today, it is restricted to three geographically separate populations in three different stream systems: the lower and middle Santa Ana River; east, west, and north forks of the San Gabriel River; and the lower big Tujunga Creek (CBD 2023).

The Santa Ana sucker lives in shallow portions of rivers and streams. This species exists in flashy systems where currents range from swift in the canyons to sluggish in the bottomlands. During times of deluge and flooding, these fish seek refuge in backwater eddies and other less turbulent areas.

The Santa Ana sucker is Federally-listed as threatened. The nearest CNDDB occurrence of this species is approximately 16 miles to the southwest of the Study Area (Occurrence No. 2, 2006). The Study Area does not contain aquatic features to provide habitat for the Santa Ana sucker, and therefore, this species is not expected to occur within the Study Area.

Southern Mountain Yellow-legged Frog

The southern mountain yellow-legged frog is endemic to the southern Sierra Nevada and Transverse Ranges (CDFW 2023). This particular species inhabits high-altitude mountain lakes, ponds, tarns, and streams. Adults are commonly found perched on rocks along the edges of water bodies, particularly in areas with sparse or no vegetation. Moreover, these frogs utilize stream environments, particularly in the northern extent of their range. Their breeding habitat consists of ponds, lakes, and streams that maintain a constant water level throughout the summer, possess a sufficient depth to prevent freezing to the bottom during winter, and crucially, lack fish populations (CDFW 2023).

The southern mountain yellow-legged frog is Federally and State-listed as endangered. The closest CNDDB occurrences of this species are approximately 9 miles to the southwest of the Study Area (Occurrence No. 55, 2011 and No. 60, 1998). No aquatic features were observed within or surrounding the study area, and therefore, the southern mountain yellow-legged frog is not expected to occur within the Study Area.

Quino Checkerspot Butterfly

The Quino checkerspot butterfly demonstrates adaptability by inhabiting diverse habitat types, such as grasslands, coastal sage scrub, red shank chaparral, juniper woodland, and semi-desert scrub. Its main larval host plants consist of native species of plantain (*Plantago* sp.) (CBD 2023b).

This species is Federally-listed as endangered. The nearest CNDDB occurrence of this species is approximately 12.5 miles to the southwest of the Study Area (Occurrence No. 110, 1968). The Study Area contains native and non-native grass species, which may support flowering species that may provide suitable foraging habitat, albeit of low quality. However, no *Plantago* species were observed within the Study Area. Therefore, the Quino checkerspot butterfly is not expected to occur within the Study Area.

Nelson's Antelope Squirrel

The Nelson's antelope squirrel is a permanent resident of the western San Joaquin Valley from 200 to 1,200 feet in elevation on dry, sparsely vegetated, loam soils. This species also occurs in portions of eastern San Luis Obispo and Santa Barbara Counties (Ahlborn 2005). In 1979, only about 20% of the original range was occupied (CDFG 1980). Loss of habitat to cultivation and overgrazing, and the effects of rodenticides have contributed to the decline of this species (CDFG 1980). This species digs burrows or use kangaroo rat burrows. They also use cover provided by rocks and other topographic features (Grinnell and Dixon 1919). Burrows are constructed in association with shrubs such as *Atriplex* and *Ephedra*.

The Nelson's Antelope Squirrel is State-listed as threatened. The nearest CNDDB occurrence of this species is approximately 9 miles to the northwest of the Study Area (Occurrence No. 312, 1954). Based on available information, the Nelson's antelope squirrel is not expected to occur in the Study Area. The Study Area is located outside of the known range of the species and there are no recent occurrences in the vicinity of the Study Area.

Crotch's Bumble Bee

Crotch's bumble bee is found between San Diego and Redding in habitats that include open grassland, shrublands, chaparral, desert margins, Joshua tree woodland, creosote scrub and semi-urban settings.

Crotch's bumble bee has been reported through the CNDDB and there are multiple recorded occurrences one within 0.5 miles to the southeast (Occurrence No. 172, 1952) and 5.5 miles (Occurrence No. 277, 1952) to the southwest. Typical food-plant species for Crotch's bumblebee include species of *Asclepias, Chaenactis, Medicago, Phacelia, Salvia, Clarkia, Eriogonum, Lupinus, Papaver,* etc. (IUCN 2024 & LPF 2013). One of these species, *Eriogonum* sp. was observed within the Study Area. Joshua tree woodland habitat was present in Study Area and may provide suitable habitat however, only one of the typical food plant species were observed within Study Area in low density therefore, Crotch's bumble bee is not expected to occur within the Study Area.

Monarch Butterfly

The monarch butterfly thrives across diverse landscapes and habitats, including rangelands, farms, riparian zones, deserts, prairies, meadows, open forests, woodlands, urban areas, gardens, and roadsides (Jepsen et al. 2015). To sustain its life cycle, this species relies on a variety of nectar-producing flowers as a food source and specifically requires milkweed species (*Asclepias* sp.) for breeding (Nail et al. 2015).

The Study Area consists of western Joshua tree woodland and no *Asclepias* sp. were observed during the site visit. While situated within the migratory route of the monarch butterfly, the Study Area appears to lack adequate support in terms of nectar-producing flower and milkweed, essential for this species. Therefore, the monarch butterfly is not expected to occur within the Study Area.

Le Conte's Thrasher

Le Conte's thrasher's is a local resident in southern California deserts from Mono County south to the Mexican border and in the western and southern San Joaquin Valley. The preferred habitat is open desert wash, desert scrub, alkali desert scrub, and desert succulent habitats. It can also occur in Joshua Tree habitat with scattered shrubs. Tends to prefer desert washes and flats with scattered shrubs and large areas of open, sandy, or alkaline terrain.

Le Conte's thrasher is a State Candidate species. There are multiple recorded CNDDB occurrences of Le Conte's thrasher within a 5-mile buffer of the Study Area approximately 0.5 miles to the southeast (Occurrence No. 16, 1921) and two occurrences approximately 5 miles to the northwest (Occurrence No. 147, 1968 and No. 148, 1968). These occurrences are not recent, however, there is a more recent occurrence approximately 0.5 miles to the northwest dated July 2, 2022 (eBird 2025). The Study Area does not contain the typically preferred large shrubs and bare open ground. However, the Study Area contains sparsely vegetated Joshua tree woodland and has potential to support this species and there is a recent nearby recorded occurrence of this species. Therefore, Le Conte's thrasher has a low potential to occur within the Study Area.

Coast Horned Lizard

Coast horned lizards inhabit open areas of sandy soil and low vegetation in valleys, foothills and semiarid mountains. They are typically found in grasslands, coniferous forests, woodlands, and chaparral, with open areas and patches of loose soil. Often found in lowlands along sandy washes with scattered shrubs and along dirt roads. Although they can be present in Joshua tree woodland habitat, within this habitat they are typically found at higher elevations from 1230-1670 m.

Coast horned lizard is a State Candidate species. There are multiple recorded occurrences of coast horned lizard within a 5-mile buffer of the Study Area approximately 4 miles to the northeast (Occurrence No. 238, 1949), 5 miles to the east (Occurrence No. 224, 1992), and 3.4 miles to the southwest (Occurrence No. 251, 1968). The Study Area does contain some aspects of the typically preferred habitat, in Joshua tree woodland they are typically found at higher elevations. Based on these findings, the coast horned lizard has a low potential to occur within the Study Area.

Migratory Birds

The Study Area contains suitable nesting habitat for a variety of native avian species common to the desert. No nests were observed at the time of the site visit. Nesting native bird species are protected by the MBTA. The nesting season generally extends from January through August in the Mojave Desert for the migratory birds of conservation concern listed in **Table 2**.

4.3.2 Sensitive Plant Communities and Critical Habitats

Terracon evaluated two (2) special-status wildlife species for their potential to occur within the Study Area. Species are considered to have special status based on a State and/or Federal listing, or because they are considered a California Species of Special Concern (SSC) or are included in the California Native Plant Society (CNPS) 1B list as plants that are rare, threatened, or endangered in California or elsewhere. These species are:

- Short-joint beavertail (*Opuntia basilaris var. brachyclada*), 1B.2
- Western Joshua tree *(Yucca brevifolia)*, Species of Special Concern, 1B.1

One species has been assessed as being present within the Study Area: western Joshua tree *(Yucca brevifolia)* and one species has been assessed as not expected to occur within the Study Area: short-joint beavertail (*Opuntia basilaris var. brachyclada*).

Joshua tree woodland is present within the Study Area and is designated with a California State ranking of S3 (vulnerable). This plant community is vulnerable in the state due to a restricted range, relatively few populations, recent and widespread declines, or other factors making it vulnerable to extirpation from the state.

Additionally, no Federally designated critical habitats occur within the Study Area or within a 5-mile buffer of the Study Area. The nearest Federally designated critical habitats include mountain yellow-legged frog and Arroyo toad, approximately 8 miles to the southwest and 9.5 miles southeast of the Study Area, respectively (**Exhibit 6**).

4.3.3 Jurisditctional Waters and Wetlands

Within the arid and semi-arid western United States limited precipitation restricts wetland and riparian resources to 1-5% of the land surface, a relatively low proportion compared to other systems globally; the proportion of wetland resources is approximately <1% in extremely arid areas such as the Mojave Desert and the Great Basin (USACE 2008).

During the survey, a plant species list (provided in **Section 4.1**) was compiled to determine the wetland plant indicator status of the species present within the Study Area. The majority of the dominant species present throughout the Study Area have an indicator status of either *Facultative Upland* or *Upland*. Additionally, no observations of hydrology indicators within the Study Area were made.

The NWI database does not contain wetland features within the Study Area. The closest feature consists of two riverine features approximately 0.4 miles west and 0.5 miles southeast of the Study Area. Additionally, two freshwater pond features were identified approximately one (1) mile southeast of the Study Area.

5. Regulatory Setting

Special-status habitats and vegetation types, associations, or sub-associations that support concentrations of special-status plant or animal species, are of relatively limited distribution, or are of particular value to wildlife.

Listed species are those that are formally listed as threatened or endangered by the federal government (USFWS) under the Federal Endangered Species Act (FESA) or as threatened, endangered, or rare by the State of California under the California Endangered Species Act or California Native Plant Protection Act. Some species are considered rare (but not formally listed) by resource agencies, organizations with biological interests/expertise (e.g., Audubon Society, CNPS, The Wildlife Society), and the scientific community.

The following is a brief summary of the regulatory context under which biological resources are managed at the federal, state, and local levels. A number of federal and state statuses provide a regulatory structure that guides the protection of biological resources. Agencies with the responsibility for protection of biological resources within the Study Area include:

- U.S. Army Corps of Engineers (wetlands and other waters of the United States)
- Lahontan Regional Water Quality Control Board (waters of the State)
- U.S. Fish and Wildlife Service (federally listed species and migratory birds)
- California Department of Fish and Wildlife (riparian areas, streambeds and lakes; state-listed species; Species of Special Concern; nesting birds)
- San Bernardino County Resource Management and Conservation (Chapter 88.01)

U.S. Army Corps of Engineers

Under Section 404 of the Clean Water Act, the U.S. Army Corps of Engineers (USACE) has authority to regulated activities that could discharge fill of material into wetlands or other "waters of the United States." Perennial and intermittent creeks are considered waters of the United States (WOTUS) if they are hydrologically connected to other jurisdictional waters (typically a navigable water). The USACE also implements the federal policy embodied in Executive Order 11990, which is intended to result in no net loss of wetland value or acres. In achieving the goals of the Clean Water Act, the USACE seeks to avoid adverse impacts and offset unavoidable adverse impacts on existing aquatic resources. Fill of wetlands that are hydrologically connected to jurisdictional waters would require a permit from the USACE prior to the start of work. Typically, when a project involves impacts to waters of the United States, the goal of no net loss of wetland acres or values is met through avoidance and minimization to the extent practicable, followed by compensatory mitigation involving creation or enhancement of similar habitats.

Regional Water Quality Board

The State Water Resources Control Board (SWRCB) and the local Regional Water Quality Control Board (RWQCB) have jurisdiction over "waters of the State," pursuant to the Porter-Cologne Water Quality Control Act, which are defined as any surface water or groundwater, including saline waters, within the boundaries of the State. The SWRCB has issued general Waste Discharge Requirements (WDRs) regarding discharges to "isolated" waters of the State (Water Quality Order No. 2004-0004-DWQ, Statewide General Waste Discharge Requirements for Dredged or Fill Discharges to Waters Deemed by the U.S. Army Corps of Engineers to be Outside of Federal Jurisdiction). The RWQCB administers actions under this general order for isolated waters not subject to federal jurisdiction, and is also responsible for the issuance of water quality certifications pursuant to Section 401 of the Clean Water Act for waters subject to federal jurisdiction.

United States Fish and Wildlife Service

The USFWS and National Marine Fisheries Service (NMFS) share responsibility for implementing the Federal Endangered Species Act (FESA) (16 United States Code [USC] § 153 et seq.). Generally, the USFWS implements the FESA for terrestrial and freshwater species, while the NMFS implements the FESA for marine and anadromous species. Projects that would result in "take" of any federally threatened or endangered species are required to obtain permits from the USFWS or NMFS through either Section 7 (interagency consultation with a federal nexus) or Section 10 (Habitat Conservation Plan) of the FESA, depending on the involvement by the federal government in permitting and/or funding of the project. The permitting process is used to determine if a project would jeopardize the continued existence of a listed species and what measures would be required to avoid jeopardizing the species. "Take" under federal definition means to harass, harm (which includes habitat modification), pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. Proposed or candidate species do not have the full protection of the FESA; however, the USFWS and NMFS advise project applicants that they could be elevated to listed status at any time. Additionally, the USFWS implements the Migratory Bird Treaty Act (16 USC Section 703-711) and the Bald and Golden Eagle Protection Act (16 USC Section 668).

California Department of Fish and Wildlife

The California Department of Fish and Wildlife (CDFW) derives its authority from the Fish and Game Code of California. The California Endangered Species Act (CESA) (Fish and Game Code Section 2050

et. seq.) prohibits take of state listed threatened or endangered species. Take under CESA is restricted to direct mortality of a listed species and the law does not prohibit indirect harm by way of habitat modification. Where incidental take would occur during construction or other lawful activities, CESA allows the CDFW to issue and Incidental Take Permit upon finding, among other requirements, that impacts to the species have been minimized and fully mitigated.

The CDFW also enforces Sections 3511, 4700, 5050 and 5515 of the Fish and Game Code, which prohibits take of species designated as Fully Protected. The CDFW is not allowed to issue an Incidental Take Permit for Fully Protected Species; therefore, impacts to these species must be avoided.

California Fish and Game Code sections 3503, 3503.5, and 3513 describe unlawful take, possession or destruction of native birds, nests and eggs. Section 3503.5 of the Code protects all birds-of-prey and their eggs and nests against take, possession, or destruction of nests or eggs. Section 3513 makes it a state-level office to take any bird in violation of the federal Migratory Bird Treaty Act. CDFW administers these requirements.

Species of Special Concern (SSC) is a category used by the CDFW for those species which are considered to be indicators of regional habitat changes or are considered to be potential future protected species. SSC do not have any special legal status except that which may be afforded by the Fish and Game Code as noted above. The SSC category is indented by the CDFW for use as a management tool to include these species in special consideration when decisions are made concerning the development of natural lands. The CDFW also has authority to administer the Native Plant Protection Act (NPPA) (Fish and Game Code Section 1900 et. seq.). The NPPA requires the CDFW to establish criteria for determining if a species, subspecies, or variety of native plant is endangered or rate. Effective in 2015, CDFW promulgated regulations (14 CCR 786.9) under the authority of the NPPA, establishing that the CESA's permitting procedures would be applied to plants listed under the NPPA as "Rare." With this change, there is little practicable difference for the regulated public between plants listed under CESA and those listed under the NPPA.

Perennial, intermittent, and ephemeral streams and associated riparian vegetation, when present, also fall under the jurisdiction of CDFW. Section 1600 et. seq. of the Fish and Game Code (Lake and Streambed Alteration Agreements) gives the CDFW regulatory authority over activities that divert, obstruct, or alter the channel, bed or bank of any river, stream, or lake.

San Bernardino Countywide General Plan

The San Bernardino County General Plan (General Plan) identifies the Federal, State, and local statutes, ordinances, or policies that govern the conservation of biological resources that must be considered by San Bernardino County during the decision-making process for a project that could impact biological resources. The San Bernardino County Resource Management Division 8, Chapter 88.01, provides regulations and guidelines for the management of plant resources in the unincorporated areas of the County on property or combinations of property under private or public ownership. Applicable County codes are as follows:

§ 88.01.050 Native Tree or Plant Removal Permits

- (a) *When Tree or Plant Removal Permit Required*. A Tree or Plant Removal Permit shall be required for the removal of a regulated tree or plant as identified in this chapter.

- (f)(3)(A) Joshua trees that are proposed to be removed will be transplanted or stockpiled for future use wherever possible.

§ 88.01.060 Desert Native Plant Protection

- (c) *Regulated Desert Native Plants*. The following desert native plants or any part of them, except the fruit, shall not be removed except under a Tree or Plant Removal permit in compliance with *§ 88.01.050* (Tree or Plant Removal Permits). In all cases the botanical names shall govern the interpretation of this Section.
- (1) The following desert native plants with stems two inches or greater in diameter or six feet or greater in height:
    - (A) *Dalea spinosa* (smoketree)
    - (B) All species of the genus *Prosopis* (mesquites)
- (2) All species of the family Agavaceae (century plants, Nolinas, Yuccas)
- (3) Creosote Rings, ten feet or greater in diameter
- (4) All Joshua trees
- (5) Any part of any of the following species, whether living or dead:
    - (A) *Olneya tesota* (desert ironwood).
    - (B) All species of *Prosopis* (mesquites).
    - (C) All species of the genus *Cercidium* (palos verdes)

Additionally, the San Bernardino County Biotic Resource Map delineates habitats crucial for special-status species. This map was reviewed and considered during the assessment of potential for occurrence of the species outlined in this assessment.

Western Joshua Tree Conservation Act

In July 2023, CDFW passed its Western Joshua Tree Conservation Act (WJTCA) to conserve Joshua trees and their habitat. The act authorizes CDFW to issue permits for the incidental take of one or more western Joshua trees if the permittee meets certain conditions. Permittees may pay specified fees in lieu of conduction mitigation activities. The WJTCA mitigation fees are split up into two zones which are demonstrated in an interactive map on the CDFW's website (CDFW 2023a).

6. Limitations, Assumptions, and Use Reliance

This Biological Assessment has been performed in accordance with professionally accepted biological investigation practices conducted at this time in the geographic area. The biological investigation is limited by the scope of work performed. Reconnaissance biological surveys for certain taxa may have been conducted as part of this assessment but were not performed during a particular blooming

period, nesting period, or particular part of the season or day when positive identification would be expected if present, and therefore cannot be considered definitive. The biological surveys are limited also by the environmental conditions present at the time of the surveys. In general, biological surveys do not guarantee that the organisms are not present and will not be discovered in the future within the Study Area. No other guarantees or warranties, expressed or implied, are provided. The findings and opinions conveyed in this report are based on findings derived from site surveys, jurisdictional area, review of CNDDB, and specified historical and literature sources. Although Terracon believes the data sources are reasonably reliable, Terracon cannot and does not guarantee the authenticity or reliability of the data sources it has used. Additionally, pursuant to our contract, aquatic resources were not delineated as part of this assessment.

7. Impacts and Recommendations

Implementation of the proposed Project in the Joshua tree woodland habitat of the Study Area has the potential to affect various special-status species. The following sections provide an analysis of potential Project effects to these resources and recommendations for additional analysis that may be necessary. The final determination of effects of significance and required mitigation measures for the Project will be made by the San Bernardino County in coordination with USFWS and CDFW.

7.1 Impacts to Plants and Wildlife

Criterion: Impacts would be significant if the Project would have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service

As described above, the Study Area is composed of one vegetation community; *Yucca brevifolia* Woodland Alliance. During the site reconnaissance surveys, this vegetation community was observed to provide suitable habitat for special-status species and migratory birds. Direct and indirect impacts to these species from Project activities would be considered ***potentially significant, absent mitigation***. However, through implementation of additional recommended surveys and mitigation measures approved by CDFW and/or USFWS, would reduce potential impacts to a ***less than significant*** level.

7.1.1 Special-Status Plant Species

Multiple Joshua trees were observed within the Study Area during the field surveys. The Project activities may impact these individuals, and as such, Joshua Tree Census data was collected and included as **Appendix E**.

7.1.2 Special-Status Wildlife Species

No special-status species were observed within the Study Area during the field surveys. However, portions of the Study Area contain suitable habitat for Swainson's hawk *(Buteo swainsoni),* burrowing

owl (*Athene cunicularia*), Le Conte's thrasher (*Toxostoma lecontei*), and coast horned lizard (*Phyrnosoma blainvillii*).

Pre-construction surveys for biological resources should be conducted prior to project activities. These surveys should be conducted throughout the entire Study Area.

Additionally, no USFWS-designated critical habitat for Federally listed wildlife species is mapped within the Study Area. No critical habitat would be affected by the proposed Project; however, some of the special-status species outlined above, if present on-site during Project activities, could be affected directly or indirectly.

Le Conte's Thrasher Impacts

The Study Area has the potential to support Le Conte's thrasher. Pre-construction clearance surveys within the Study Area are recommended to avoid impacts to Le Conte's thrasher.

Burrowing Owl Impacts

The majority of the Study Area contains Joshua tree woodland vegetation communities with areas of low vegetation cover, therefore providing suitable burrowing and foraging habitat for burrowing owl. Although protocol level surveys were completed with negative findings for the species, pre-construction surveys are recommended for burrowing owls within the Study Area.

Coast Horned Lizard Impacts

The majority of the Study Area contains Joshua tree woodland vegetation communities with areas of low vegetation cover, therefore providing suitable habitat for coast horned lizard. Pre-construction clearance surveys are recommended within the Study Area.

Migratory Bird Impacts

The Study Area contains suitable nesting and foraging habitat for avian species protected under the BGEPA and MBTA. Nesting bird surveys are recommended for migratory birds prior to Project activities. In the event of an observation of an active nest, an appropriate buffer should be established, and a biological monitor may be required by CDFW and/or USFWS.

7.1.3 Avian Impacts

Common bird species were observed within the Study Area and vicinity and potential suitable nesting habitat was observed within the Study Area. These species, during their nesting period, are protected by the MBTA and may nest on site. The Study Area also contains suitable foraging habitat for avian species protected under the MBTA. Project activities have the potential to directly or indirectly impact nesting birds, therefore nesting bird surveys and protective nest buffers are recommended prior to Project activities.

7.2 Impacts to Existing On-Site Vegetation Communities and Land Covers

Criterion: Impacts would be significant if the Project would have substantial adverse effect on any riparian habitat or sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Wildlife or U.S Fish and Wildlife Service.

As described above, vegetation within the Study Area is characterized as Joshua tree woodland. This plant community is considered a sensitive natural community. The Project's impacts to existing vegetation would be **less than significant with mitigation**.

7.3 Impacts to Jurisdictional Waters and Streambeds

Criterion: Impacts would be significant if the Project would have a substantial adverse effect on federally protected wetland as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

As described above, the majority of the plant species present within the Study Area have an indicator status of *Facultative Upland* or *Upland* and no hydrology indicators were observed within the Study Area. Additionally, the NWI database does not contain wetland feature within or near the Study Area. Therefore, the Project would have ***no impact*** on jurisdictional waters and streambeds.

7.4 Impacts to Wildlife Movement

Criterion: Impacts would be significant if the Project would 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.

The Study Area is not located in a California Essential Habitat Connectivity (CEHC) area. The nearest CEHC area to the Study Area is approximately 1.6 miles to the south. Additionally, the Study Area is surrounded by commercial development, and therefore the Project would result in ***no impact*** to wildlife movement.

7.5 Consistency With Local Policies and Ordinances

Criterion: Impacts would be significant if the Project would conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

The proposed Project has been designed with consideration for the policies and ordinances of San Bernardino County, and the proposed Project is consistent with these policies and ordinances. However, in some instances, these ordinances may impose additional requirements on the Project. Sections 88.01.050 and 88.01.060 of the San Bernardino County Development Code require that where removal of Joshua trees or cacti is proposed, all individuals to be removed shall be transplanted

or stockpiled for future transplanting where possible. The Project may require Joshua trees or cacti to be removed. Therefore, the Project would have a ***less than significant impact with mitigation.***

7.6 Consistency With Habitat Conservation Plans

Criterion: Impacts would be significant if the Project would conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

The Study Area is not enrolled in a formal Habitat Conservation Plan or Natural Community Conservation Plan. The Study Area occurs on private land and is not located within other local, regional, or State conservation planning areas. Therefore, the proposed Project would not conflict with an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or State habitat conservation plans and the Project would have ***no impact***.

7.7 Avoidance and Minimization Measures

Avoidance and minimization measures described below may offset potentially significant impacts on biological resources. The lead agency, San Bernardino County in coordination with USFWS and CDFW will ultimately determine the level of minimization measures required for the Project. Below are some recommendations for consideration in consultation with the appropriate agencies.

Environmental Awareness Training

Prior to Project activities within the Study Area, a qualified biologist will initiate an Environmental Awareness Training (EAT) program designed to educate on-site workers about critical environmental concerns associated with the Project. This training will be mandatory for all on-site personnel. It will be administered on the first day of work, before Project activities commence. This training will place particular emphasis on educating participants about the protected species that may potentially be present within the Study Area, including but not limited to the desert tortoise, burrowing owl, and nesting birds.

The program will include the following elements:

- A presentation, either developed by a qualified biologist or in consultation with one, which will address the sensitive biological resources that may be present within the Study Area. It will also elucidate the rationale behind safeguarding these resources and the consequences of non-compliance.
- Brochures or booklets that contain written descriptions, photographs of protected species, and a comprehensive list of site rules related to the protection of biological resources. These materials will be distributed to all participants in the EAT.
- Contact information for the project's biological monitor, along with clear instructions for participants to contact the monitor with inquiries concerning the EAT presentation or booklets.

- An acknowledgement form that each worker is required to sign, confirming their receipt of EAT training and their commitment to adherer to the rules aimed at preserving biological resources.

The client will bear the responsibility for ensuring all on-site personnel receive the EAT training throughout the entire Project. A training log will be maintained within the Study Area and signed by all on-site personnel immediately after EAT training to document compliance with this requirement.

Pre-construction Burrowing Owl Surveys

Within 14 days preceding vegetation clearing or ground disturbing activities, a qualified biologist will conduct pre-construction surveys for signs of occupancy by the burrowing owl. These surveys must encompass the entire area designated for disturbance and should involve the biologist walking along parallel transects. The focus of these surveys is to identify evidence of live owls or indications of their presence, which may include feathers, burrows, pellets, tracks, and scat.

If signs suggesting the presence of the burrowing are detected, vegetation clearing and ground disturbing activities will be prohibited in the area where the signs were found. Instead, CDFW shall be contacted to formulate a strategy for avoidance.

The results of these surveys, including graphical representations pinpointing the locations of burrowing owl sign, along with documentation detailing avoidance measures implemented, must be submitted to CDFW within 14 days following the conclusion of the pre-construction surveys or construction monitoring. This submission serves as evidence of compliance with pertinent state regulations pertaining to the protection of the burrowing owl.

Biological Monitor

In the event of an observation of burrowing owl, desert tortoise, or recent signs of occupancy by these species within the Study Area, a qualified biologist will be designated as the biological monitor. This monitor will be required to be on-site at all times during activities involving vegetation clearance or ground disturbance. Their primary responsibility is to observe and educate construction teams so that potential impacts to biological resources are either avoided or minimized to the greatest extent possible.

Once the Project approaches a phase where it is determined by the biological monitor that biological resources are no longer present, as determined by their expertise, they may request a reduction or discontinuation of biological monitoring in that specific area.

The biological monitor is vested with the authority to halt specific Project activities if they suspect violations of avoidance or minimization measures or if there are concerns about compliance with local, state, or federal laws. This authority is essential for the protection of biological resources and adherence to regulatory requirements.

Pre-construction Special-status Species Clearance Surveys

Prior to commencement of vegetation clearing or ground disturbing activities, a qualified biologist will conduct a general pre-construction clearance survey for the special-status species addressed in this Biological Assessment including but not limited to Le Conte's thrasher, coast horned lizard, desert

tortoise, Swainson's hawk Mohave ground squirrel and Nelson's antelope squirrel. If a special-status species is observed within the Project area, the applicable agency (CDFW and/or USFWS) shall be contacted to formulate a strategy for avoidance.

Pre-construction Nesting Bird Surveys and Avoidance

Within 30 days prior to the commencement of vegetation clearing or ground disturbing activities during the nesting season (typically February through August, unless otherwise determined by a qualified biologist based on local observations), a qualified biologist will determine the presence of active nests belonging to species protected under the MBTA and BGEPA within or in proximity to the planned disturbance area, extending 100 feet (or 300 feet for raptors) from the disturbance zone.

These nest surveys must be carried out no more than three days before the initiation of disturbance work. In cases where ground disturbance activities are delayed, additional pre-disturbance must be conducted to ensure that no more than three days have passed between the survey and the onset of ground disturbance activities.

If active nests are identified, disturbance activities within 100 feet of the nest (or lesser distance if approved by USFWS) must be postponed or halted until the nest is vacated and the juveniles have successfully fledged, as determined by the biologist. To establish avoidance buffers in the field, highly visible construction fencing, or flagging must be used, and on-site personnel must be educated about the sensitivity of these nest areas. During periods when Project activities are scheduled to occur near active nests, a qualified biologist must be present as a biological monitor to ensure that inadvertent impacts on these nests are prevented.

7.8 Mitigation Measures

Western Joshua Tree

Western Joshua trees are present within the Study Area and would require removal as a result of the Project. Removal of this species will require mitigation and CDFW and USFWS should be contacted to discuss specific mitigation measures.

Regarding the WJTCA, the Project is located in an area that is subject to standard western Joshua tree removal fees. The WJTCA mitigation fees for the Project are classified into three categories based upon the height of the western Joshua tree as follows:

- Trees 5 meters (16.4 feet) or greater - $2,500
- Trees 1 meter (3.28 feet) or greater but less than 5 meters - $500
- Trees less than 1 meter - $340

General

If additional sensitive species are observed during pre-construction surveys, CDFW and USFWS (as applicable) should be contacted to discuss specific mitigation measures which may be required for the individual species. CDFW and USFWS are the only agencies which can grant authorization for the "take" of a sensitive species and can approve the implementation of applicable mitigation measures.

8. Closing

Terracon appreciates the opportunity to submit this report to O'Reilly Auto Enterprises, LLC. If you have questions or concerns regarding this assessment, please contact Cailan Patel by phone at 925-285-9740, or via email, at cailan.patel@terracon.com.

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Appendix A – Exhibits

Exhibit 1 – Site Diagram

Exhibit 2 – Topographic Map

Exhibit 3 – National Wetlands Inventory Map

Exhibit 4 – NRCS Soil Survey Map

Exhibit 5 – FEMA Floodplain Map

Exhibit 6 – USFWS Critical Habitat and Occurrence Map

Exhibit 7 – Biological Resource Map

Exhibit 8 – California Essential Habitat Connectivity Map

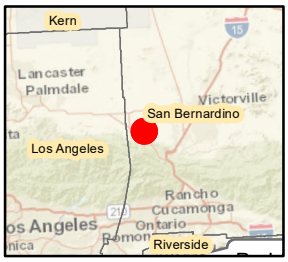
Exhibit 9 – CNDDB Occurrence Map

Exhibit 10 – Western Joshua Tree Census Map

Exhibit 11 – Photo Reference Map

Legend

Study Area (1.94 ac)



0 100 200 400 Feet

1:2,400 1 inch equals 200 feet

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Project No.:	LA237864
Date:	Jan 2024
Drawn By:	CNP
Reviewed By:	JHW

Terracon
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SITE DIAGRAM

Biological Assessment Report

Phelan O'Reilly Auto
Phelan, CA

Exhibit

1

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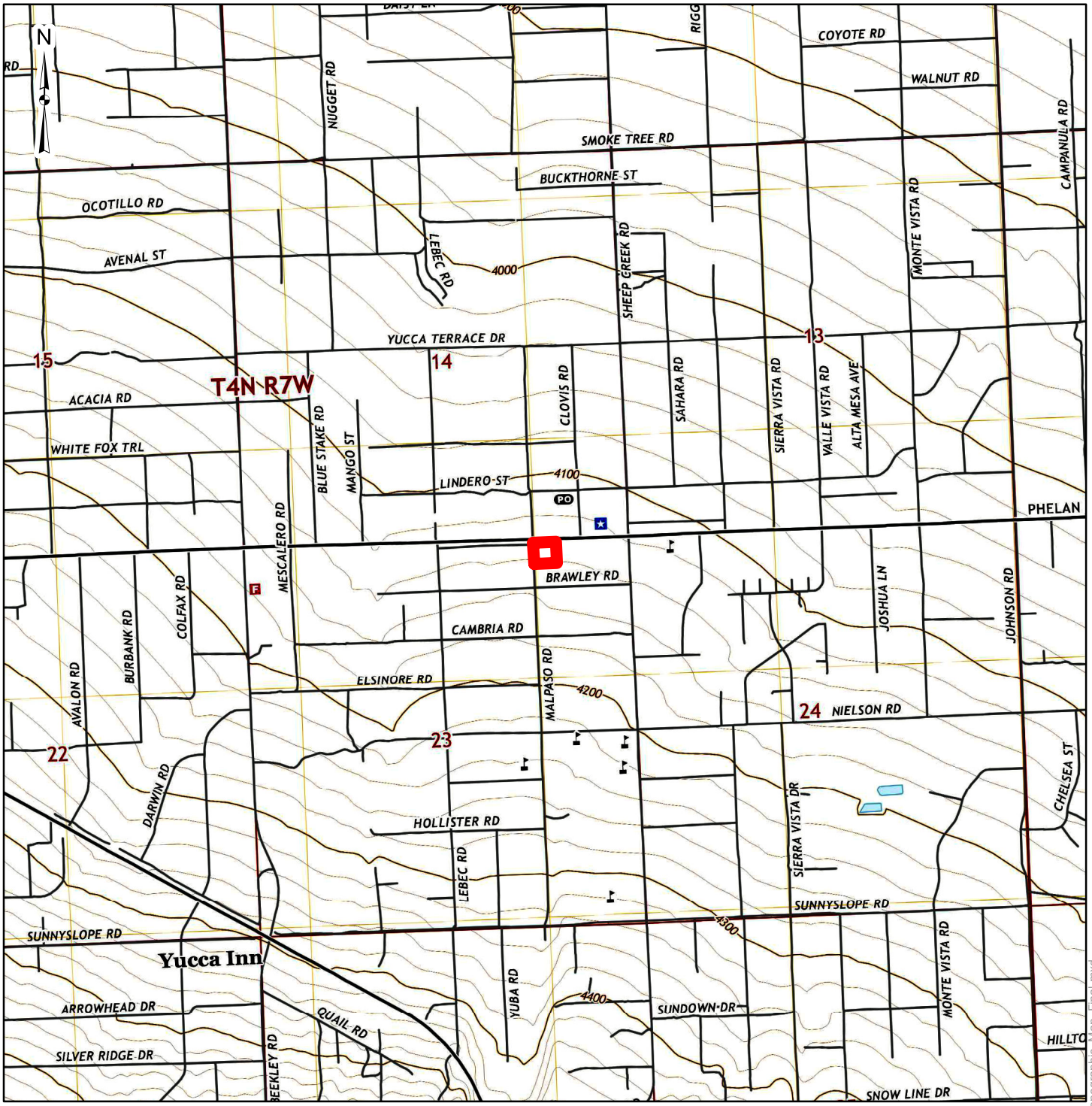

Legend

Study Area (1.94 ac)

0 1,000 2,000 4,000 Feet

1:24,000 1 inch equals 2,000 feet

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap
Phelan, CA, 7.5-minute Series Quadrangle Map (2021)

Project No.:	LA237864
Date:	Jan 2024
Drawn By:	CNP
Reviewed By:	JHW

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TOPOGRAPHIC MAP

Biological Assessment Report

Phelan O'Reilly Auto
Phelan, CA

Exhibit

2

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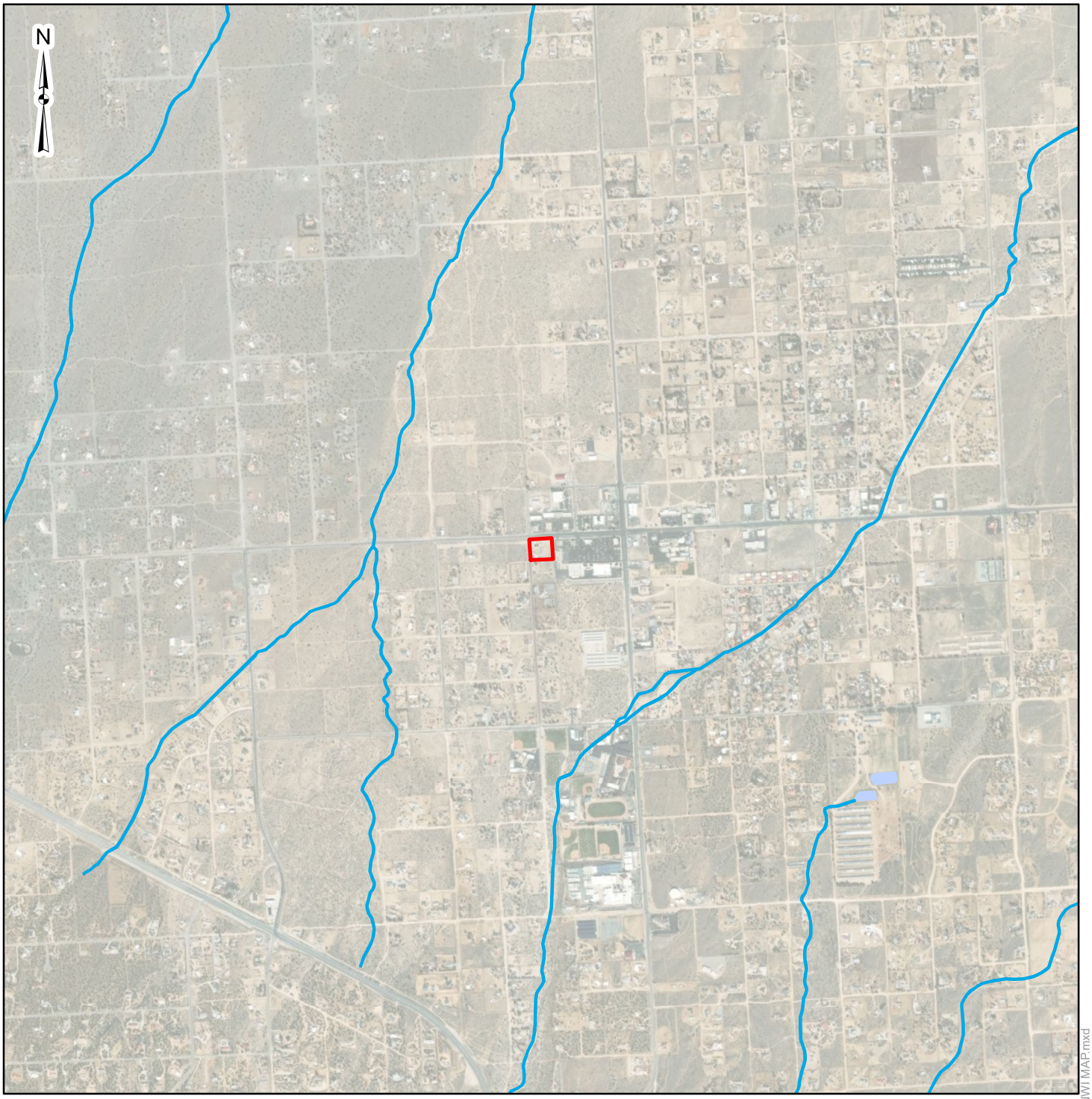

Legend

Study Area (1.94 ac)

Wetland Units (NWI 2023)

Freshwater Pond

Riverine

0 2,000 4,000 Feet

1:24,000 1 inch equals 2,000 feet

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap
National Wetlands Inventory (USFWS, 2023)

Project No.:	LA237864
Date:	Dec 2023
Drawn By:	CNP
Reviewed By:	JHW

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NATIONAL WETLANDS INVENTORY MAP

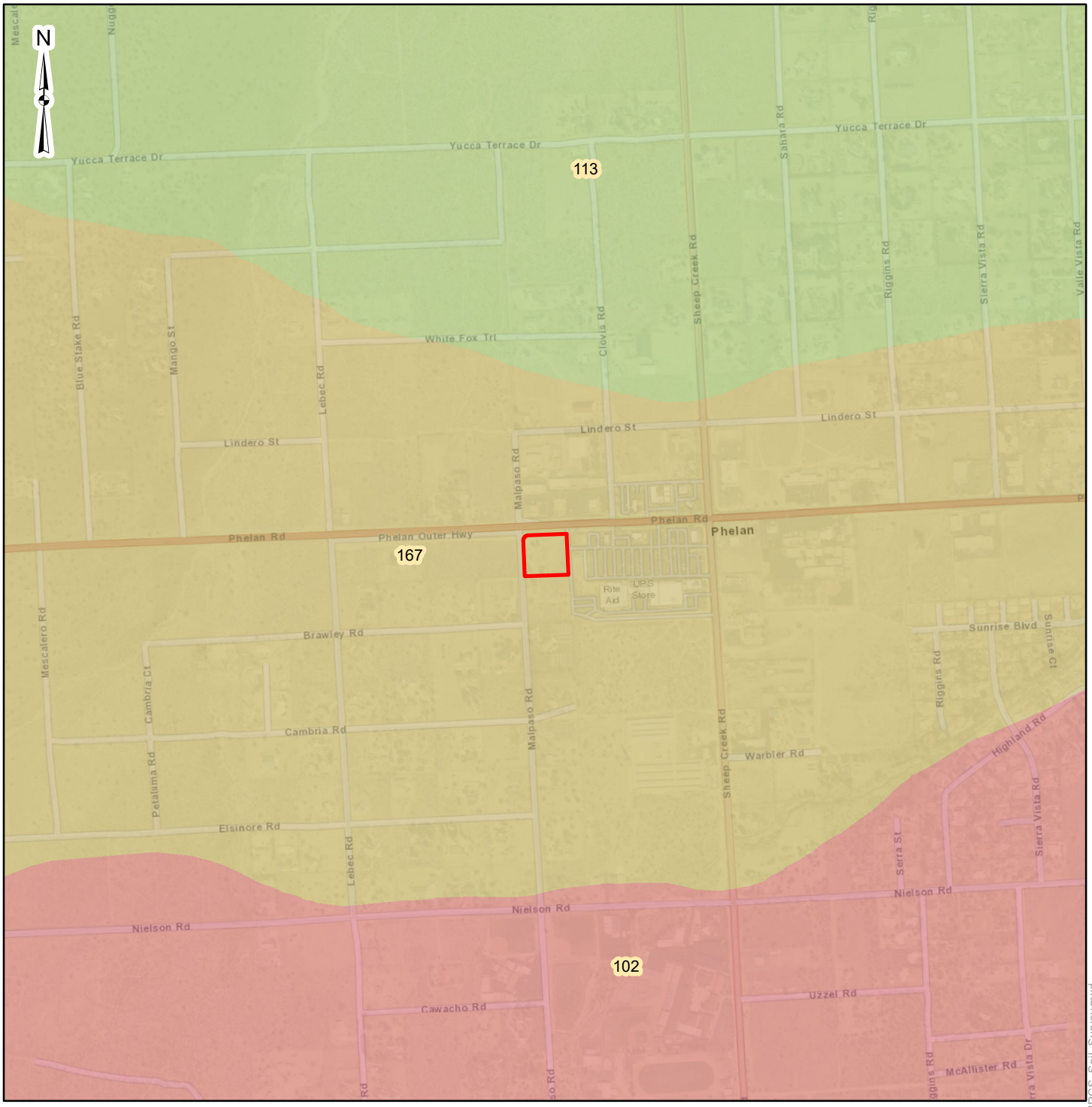
Biological Assessment Report

Phelan O'Reilly Auto
Phelan, CA

Exhibit

3

N:\GIS\LA237684_Phelan_Biological_Assessment\Maps\Exhibit_3_NWI MAP.mxd



Legend

- Study Area (1.94 ac)

Soil Map Units (NRCS 2023)

- Avawatz-Oak Glen association, gently sloping (102)
- Cajon Sand, 2 to 9 percent slopes (113)
- Tujunga sand, cool, 2 to 9 percent slopes (167)

0 500 1,000 2,000 Feet

1:12,000 1 inch equals 1,000 feet

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap
NRCS Soil Survey (USDA, 2022)

Project No.:	LA237864
Date:	Jan 2024
Drawn By:	CNP
Reviewed By:	JHW

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NRCS SOIL SURVEY MAP

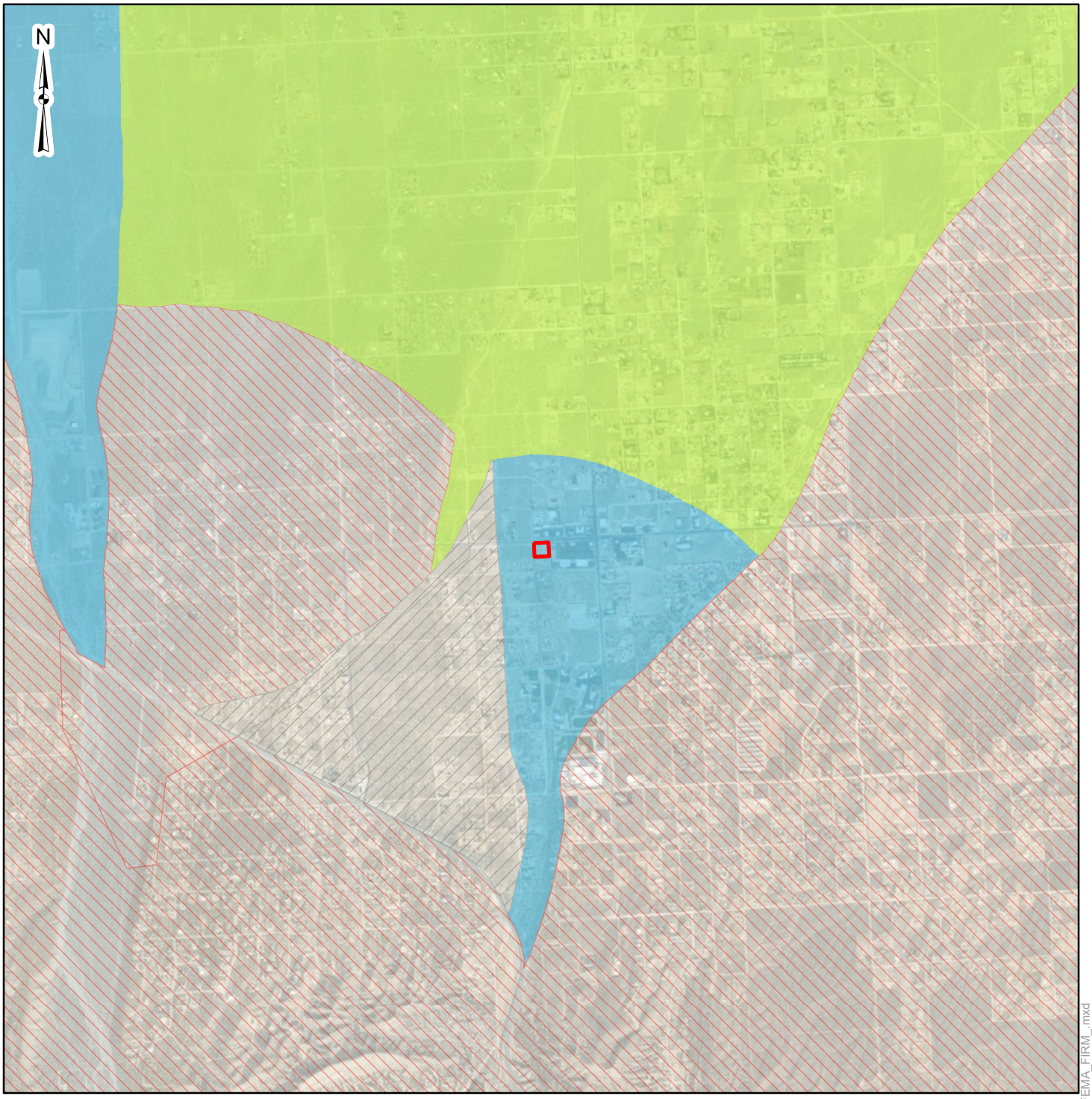
Biological Assessment Report

Phelan O'Reilly Auto
Phelan, CA

Exhibit

4

F:\GIS\LA237684_Phelan_Biological_Assessment\Maps\Exhibit 4_NRCS_Soil_Survey.mxd



Legend

- Study Area (1.94 ac)
- Area of Minimal Flood Hazard

Floodplain Units (FEMA 2023)

- 100-year Floodplain
- Area of Unknown Flood Hazard
- 500-year floodplain

0 1,500 3,000 6,000 Feet

1:36,000 1 inch equals 3,000 feet

DATA SOURCES:
ESRI WMS - World Aerial Imagery, World Topographic Map
FEMA FIRM - (FEMA, 2023)

Project No.:	LA237523
Date:	Dec 2023
Drawn By:	CNP
Reviewed By:	JHW

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FEMA FLOODPLAIN MAP

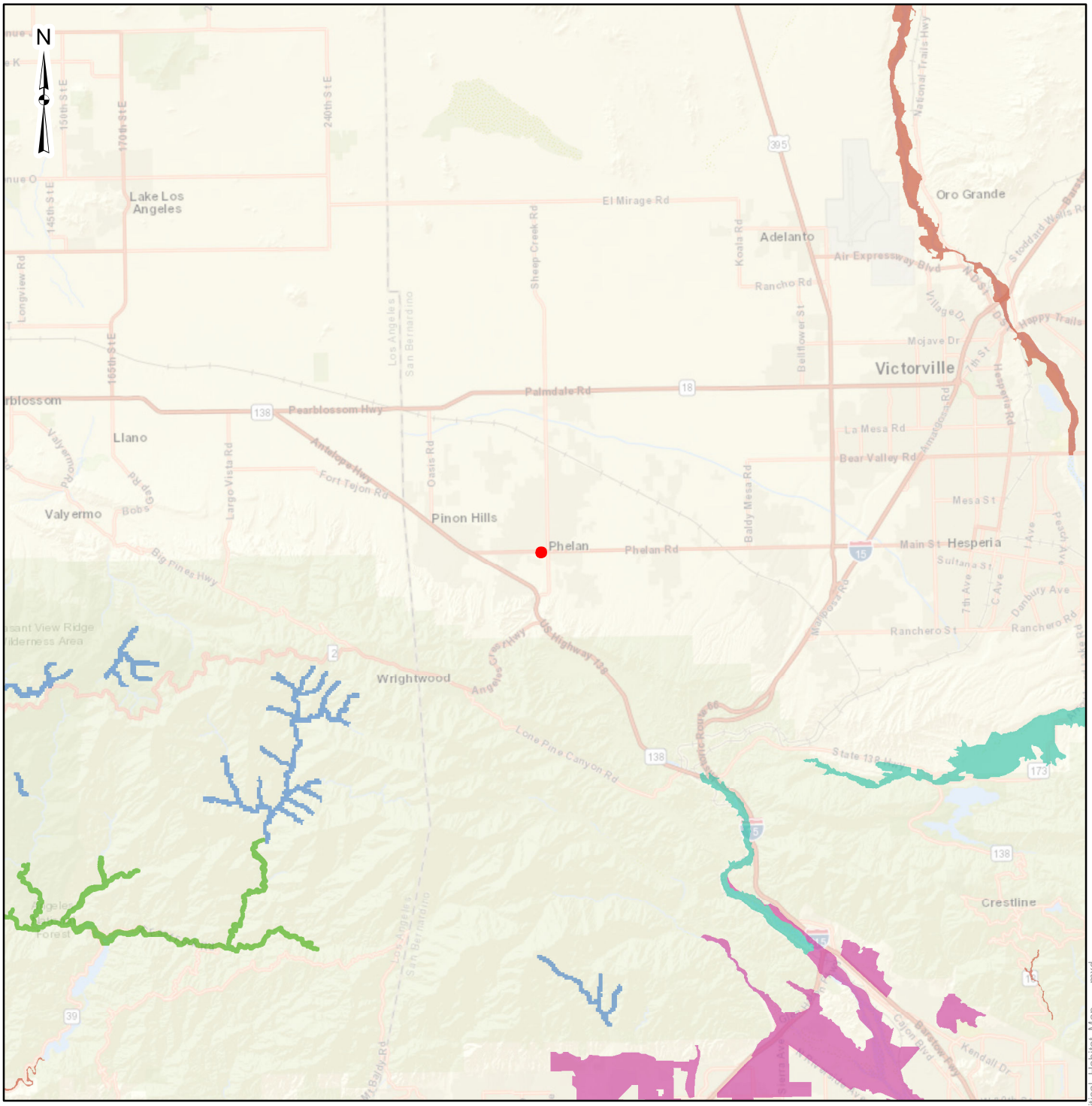
Biological Assessment Report

Phelan O'Reilly Auto
Phelan, CA

Exhibit

5

N:\GIS\LA237684_Phelan_Biological_Assessment\Maps\Exhibit_5_FEMA_FIRM_.mxd



Legend

- Study Area (Approximately 1.94 ac)

Critical Habitat (USFWS 2023)

- Arroyo toad
- Mountain yellow-legged frog
- San Bernardino Merriam's kangaroo rat
- Santa Ana sucker
- Southwestern willow flycatcher

0 2.5 5 10 Miles

1:316,800 1 inch equals 5 miles

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap
U.S. Fish and Wildlife Service (USFWS 2023)

Project No.:	LA237864
Date:	Dec 2023
Drawn By:	CNP
Reviewed By:	JHW

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USFWS CRITICAL HABITAT MAP

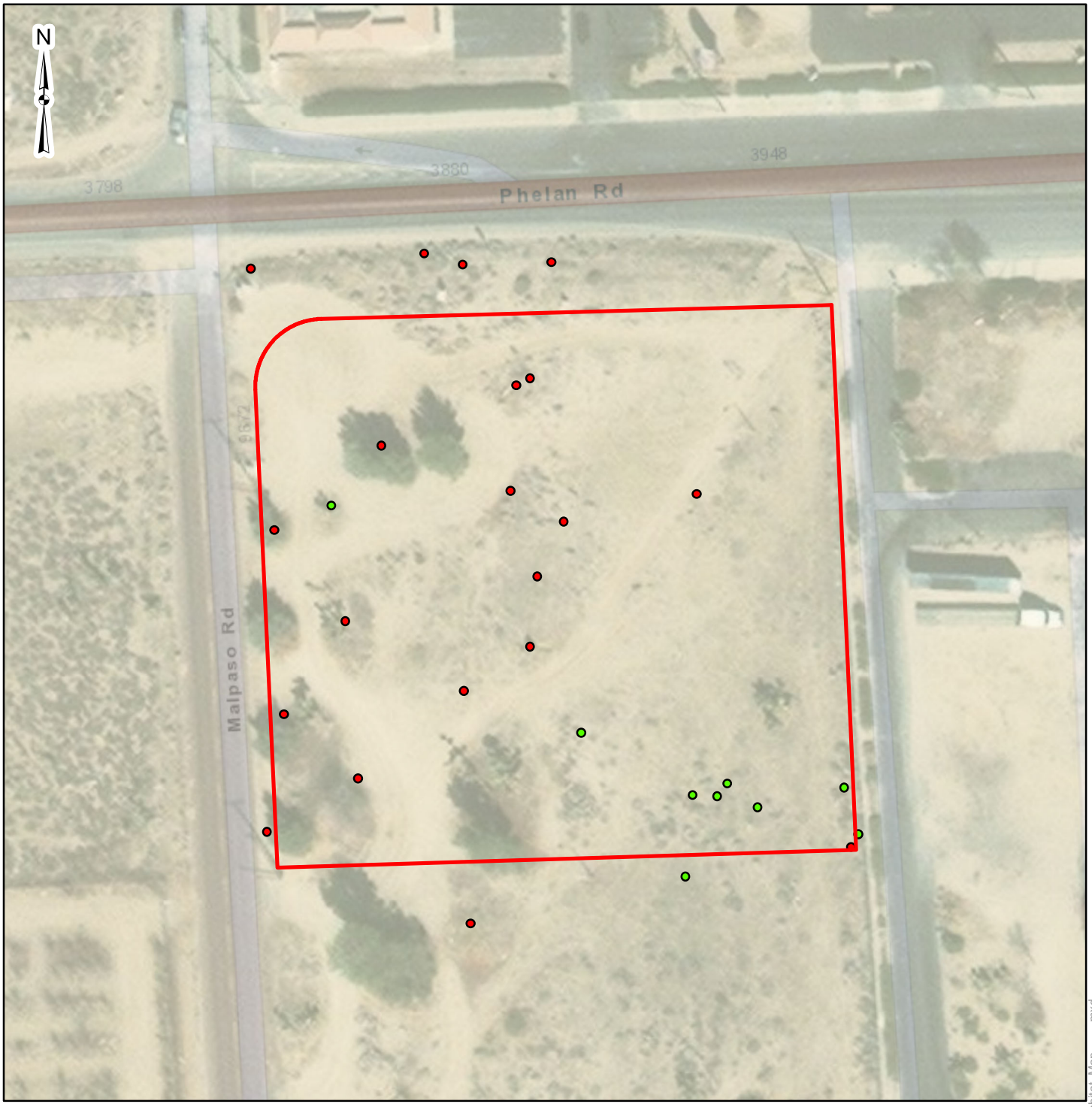
Biological Assessment Report

Phelan O'Reilly Auto
Phelan, CA

Exhibit

6

N:\GIS\LA237684_Phelan_Biological_Assessment\Maps\Exhibit_6_Critical_Habitat_Map___.mxd



Legend

- Study Area (1.94 ac)
- Small mammal burrow complex; mammal burrow
- Cylindropuntia

0 75 150 Feet

1:900 1 inch equals 75 feet

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Project No.:	LA237864
Date:	Jan 2024
Drawn By:	CNP
Reviewed By:	JHW

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BIOLOGICAL RESOURCES MAP

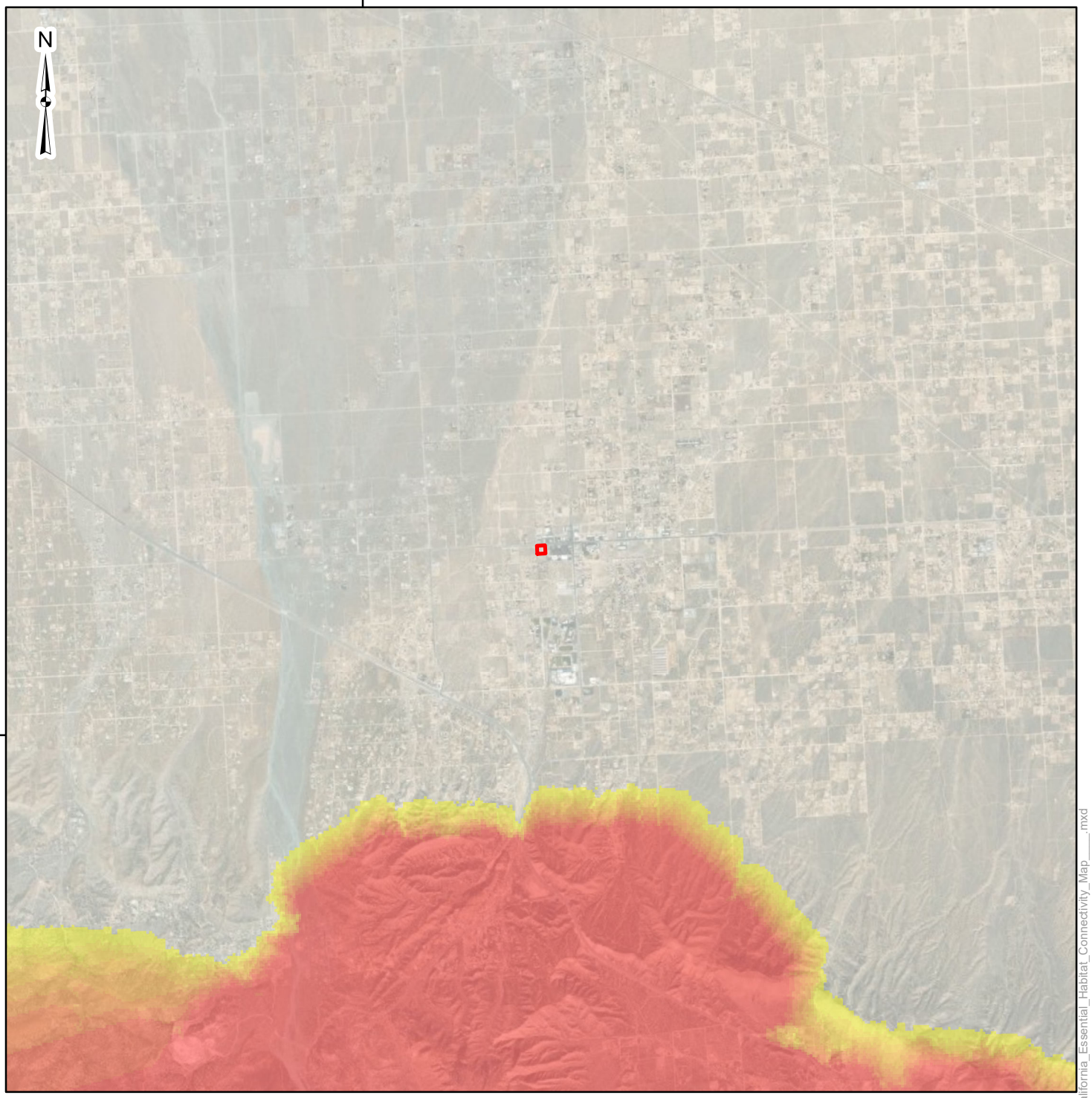
Biological Assessment Report

Phelan O'Reilly Auto
Phelan, CA

Exhibit

7

F:\GIS\LA237684_Phelan_Biological_Assessment\Maps\Exibit_7_Habitat_Map_____.mxd



Legend

Study Area (1.94 ac)

Habitat Connectivity (CDFW 2023)

Low Connectivity

High Connectivity

0 0.5 1 2 Miles

1:63,360 1 inch equals 1 miles

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap
California Department of Fish and Wildlife 2023

Project No.:	LA237864
Date:	Jan 2024
Drawn By:	CNP
Reviewed By:	JHW

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CALIFORNIA ESSENTIAL HABITAT CONNECTIVITY MAP

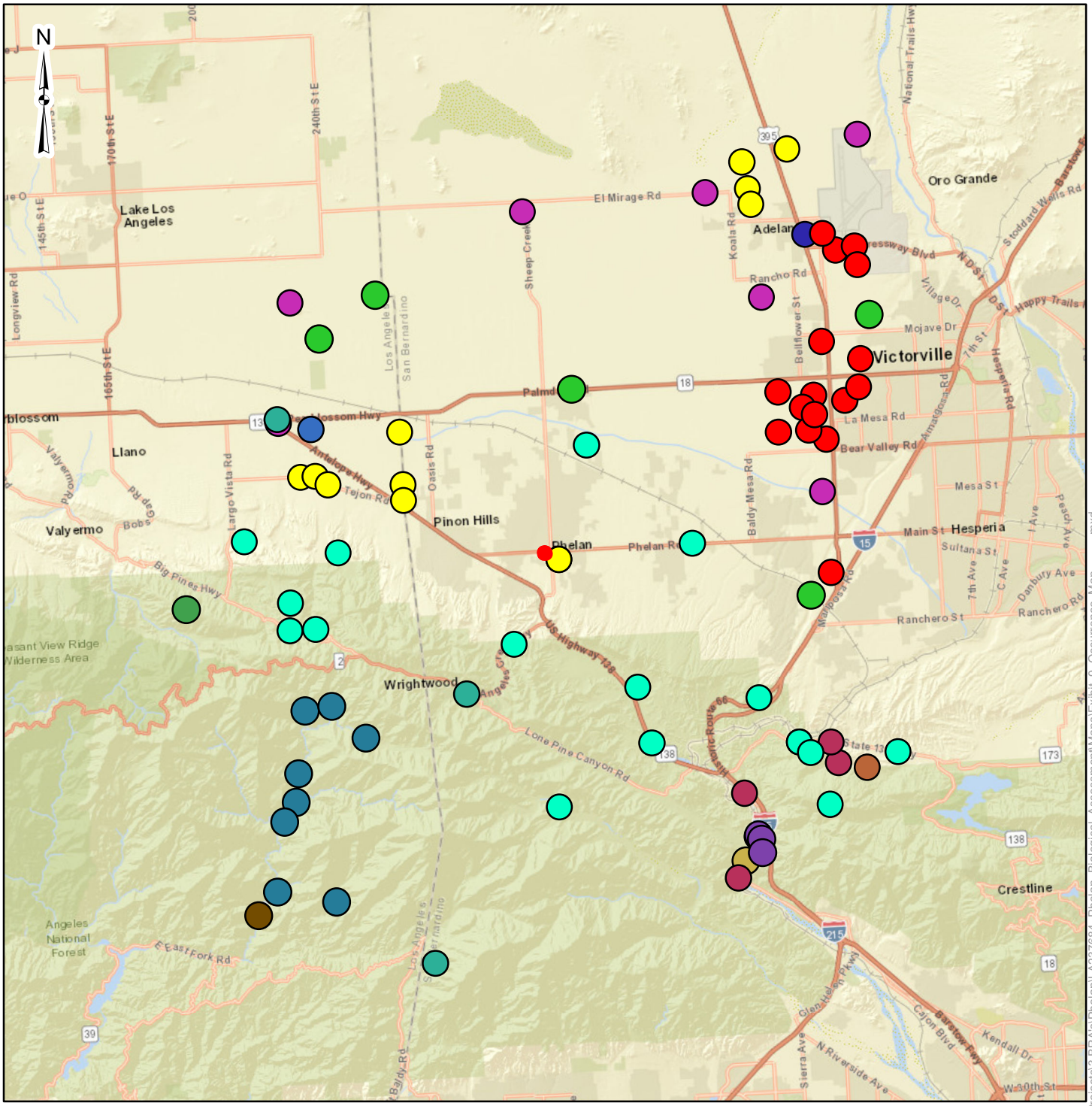
Biological Assessment Report

Phelan O'Reilly Auto
Phelan, CA

Exhibit

8

F:\GIS\LA237684_Phelan_Biological_Assessment\Maps\Exibit_8_California_Essential_Habitat_Connectivity_Map_____.mxd



Legend

- Study Area (1.94 ac)
- Le Conte's thrasher
- burrowing owl
- coast horned lizard
- Crotch bumble bee
- Mohave ground squirrel
- Mohave tui chub
- Nelson's antelope squirrel
- Santa Ana sucker
- Swainson's hawk
- Arroyo toad
- Desert tortoise
- Least Bell's vireo
- Quino checkerspot butterfly
- Southern mountain yellow-legged frog
- Southwestern willow flycatcher

0 2.5 5 10 Miles

1:316,800 1 inch equals 5 miles

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap
CNDDB (CDFW 2023)

Project No.:	LA237864
Date:	Nov 2024
Drawn By:	CNP
Reviewed By:	JHW

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CNDDB OCCURRENCE MAP

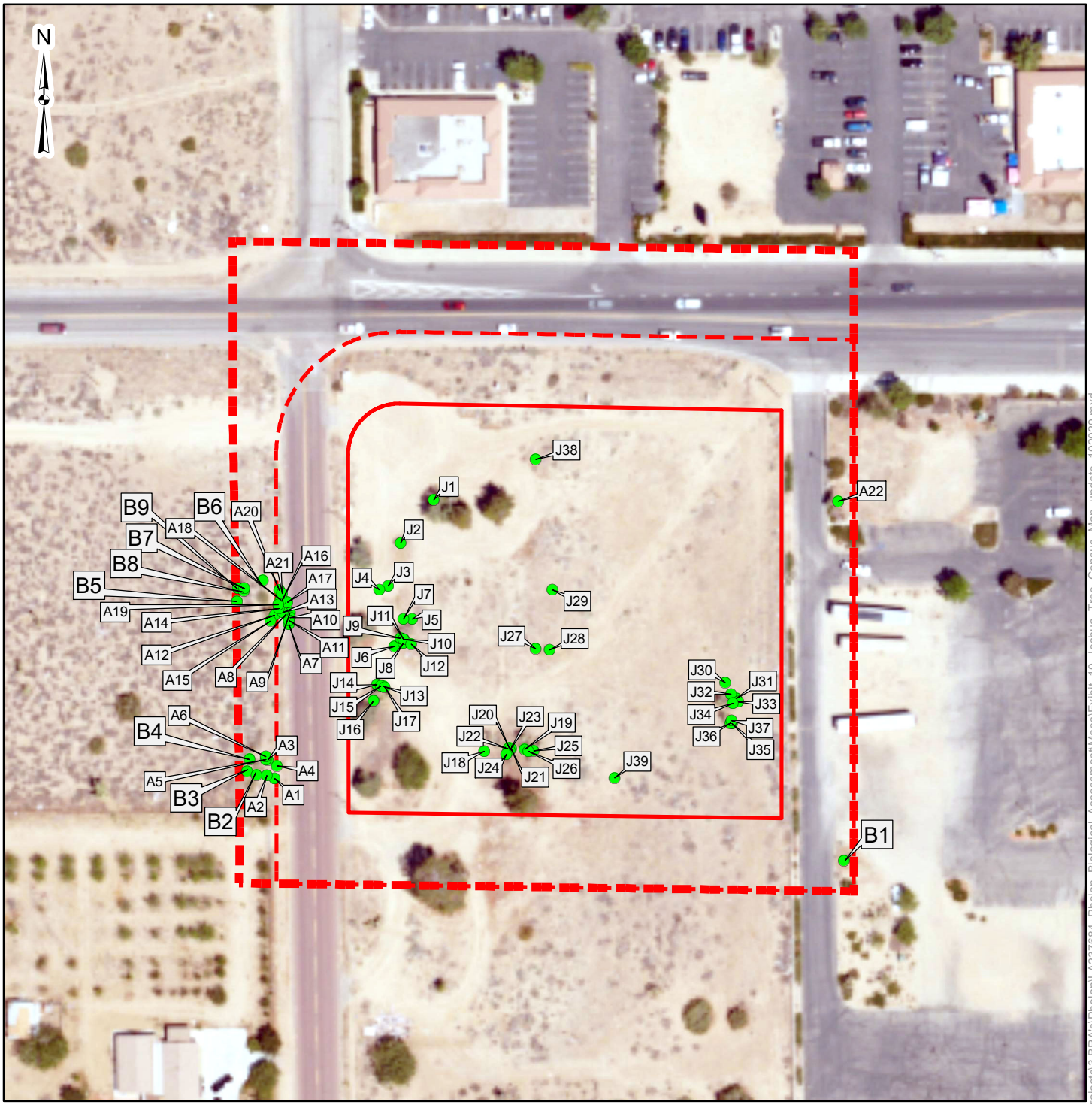
Biological Assessment Report

Phelan O'Reilly Auto
Phelan, CA

Exhibit

9

C:\Users\cnpatel2\OneDrive - Terracon Consultants Inc\Documents\Projects\3 BRA's\Phelan\LA237684_Phelan_Biological_Assessment\Maps\Exhibit_9_Occurrence_Map_____.mxd



Legend

- Study Area (1.94
- 50-foot buffer
- Additional 50-foot buffer for road work
- Joshua Tree

0 50 100 200 Feet

1:1,200 1 inch equals 100 feet

DATA SOURCES:
NAIP (USDA, 2022)

Project No.:	LA237864
Date:	Oct 2024
Drawn By:	CNP
Reviewed By:	JHW

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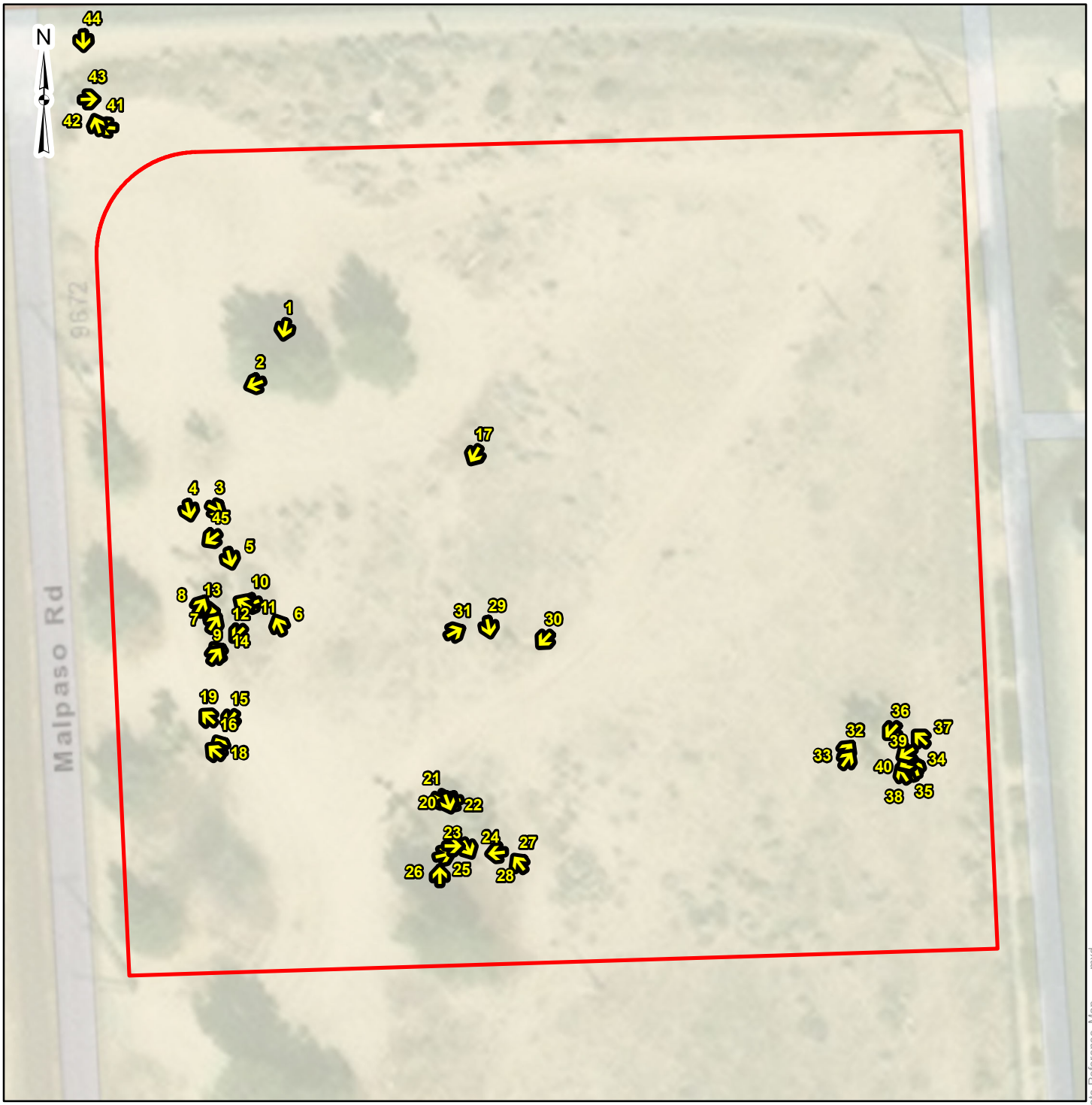
JOSHUA TREE CENSUS MAP

Phelan O'Reilly Auto
Phelan, CA

Exhibit

1

C:\Users\cnpatel2\OneDrive - Terracon Consultants Inc\Documents\Projects\3 BRA's\Phelan\LA237684_Phelan_Biological_Assessment\Maps\Exibit_10_Joshua_Tree_Census_Map_update_102029.mxd



Legend

Study Area (1.94 ac)

Photo Location

0 25 50 100 Feet

1:600 1 inch equals 50 feet

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Project No.:	LA237864
Date:	Jan 2024
Drawn By:	CNP
Reviewed By:	JHW

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PHOTO REFERENCE MAP

Biological Assessment Report

Phelan O'Reilly Auto
Phelan, CA

Exhibit

11

F:\GIS\LA237684_Phelan_Biological_Assessment\Maps\Exibit_9_Photo Reference_Map____.mxd

Appendix B – Photo Log

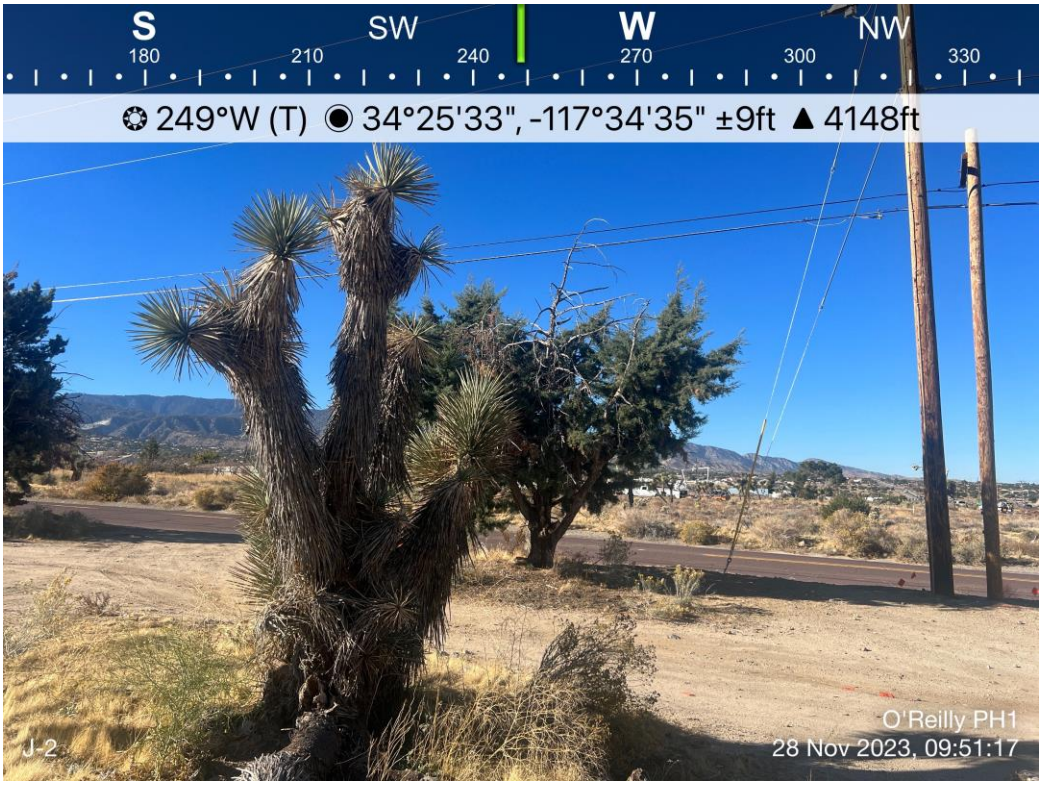
Photo 1	
Date: 11/28/2023	
Description: Joshua Tree #1, located in the northern portion of the Study Area.	
Photo 2	
Date: 11/28/2023	
Description: Joshua Tree #2, located in the northwestern portion of the Study Area.	

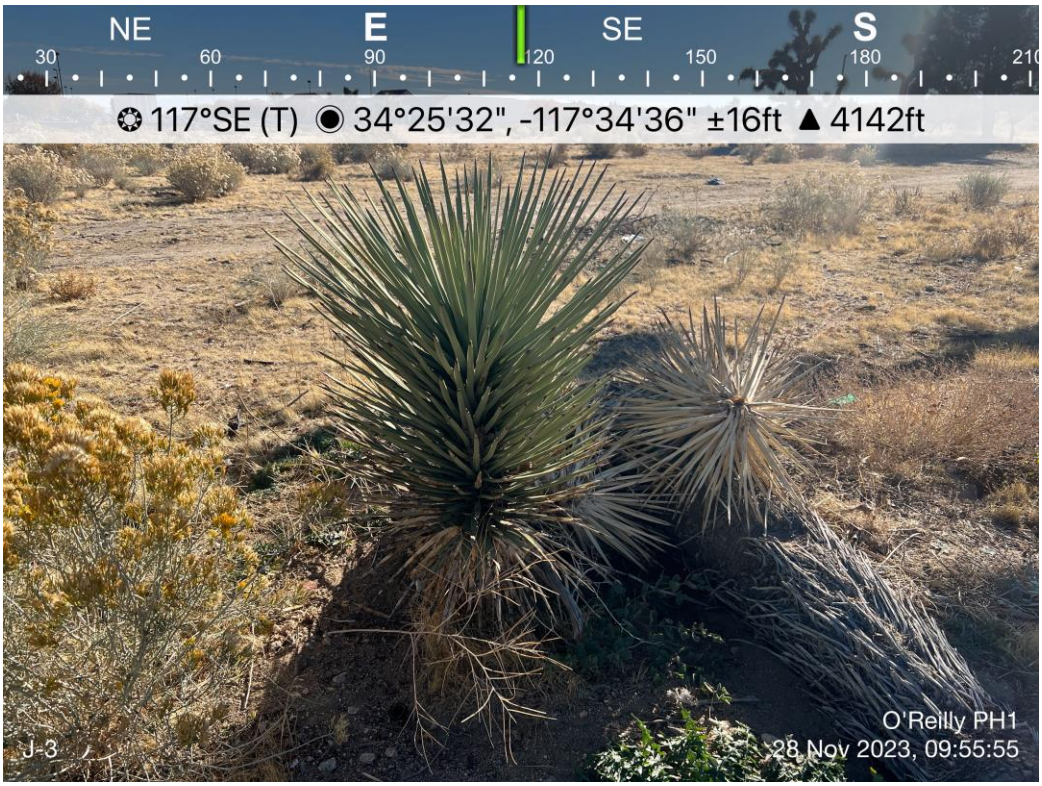
Photo 3 Date: 11/28/2023 Description: Joshua Tree #4.	
Photo 4 Date: 11/28/2023 Description: Joshua Tree #4 consists of a dead individual.	

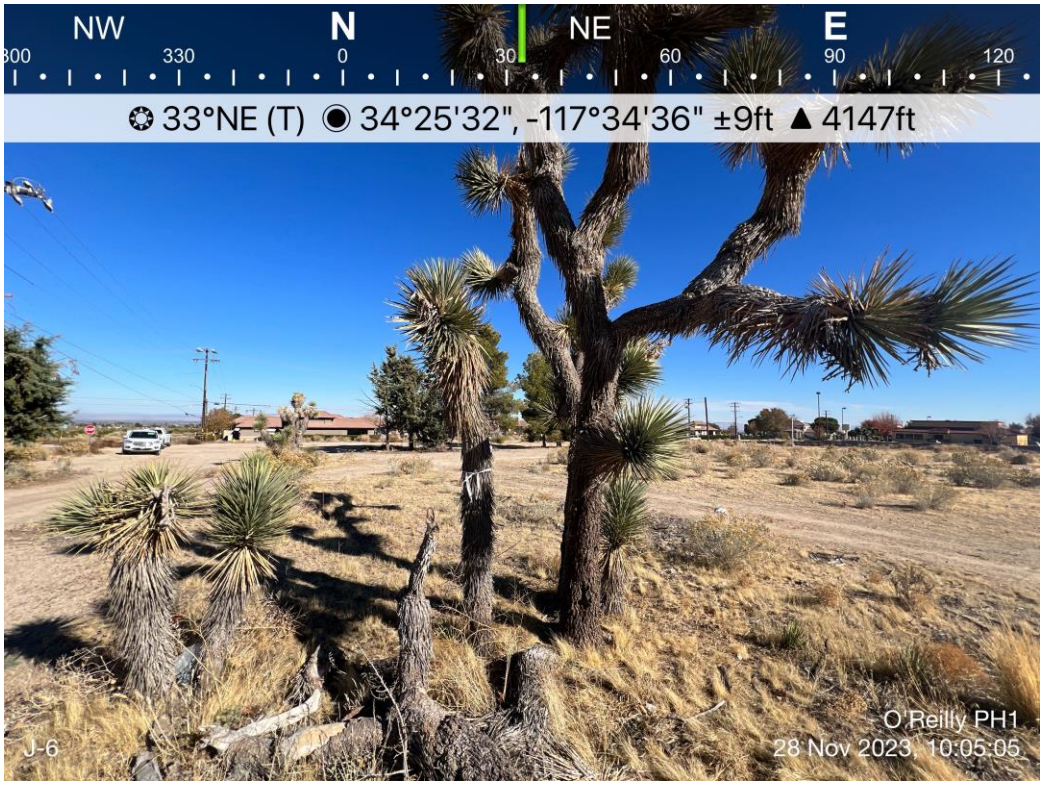
Photo 5	
Date: 11/28/2023	
Description: Joshua Tree #5, located in the northwestern portion of the Study Area.	
Photo 6	
Date: 11/28/2023	
Description: Joshua Tree #6, located in the northwestern portion of the Study Area.	

Photo 7	
Date: 11/28/2023	
Description: Joshua Tree #7, located in the northwestern portion of the Study Area.	
Photo 8	
Date: 11/28/2023	
Description: Joshua Tree #8, consists of a dead individual.	

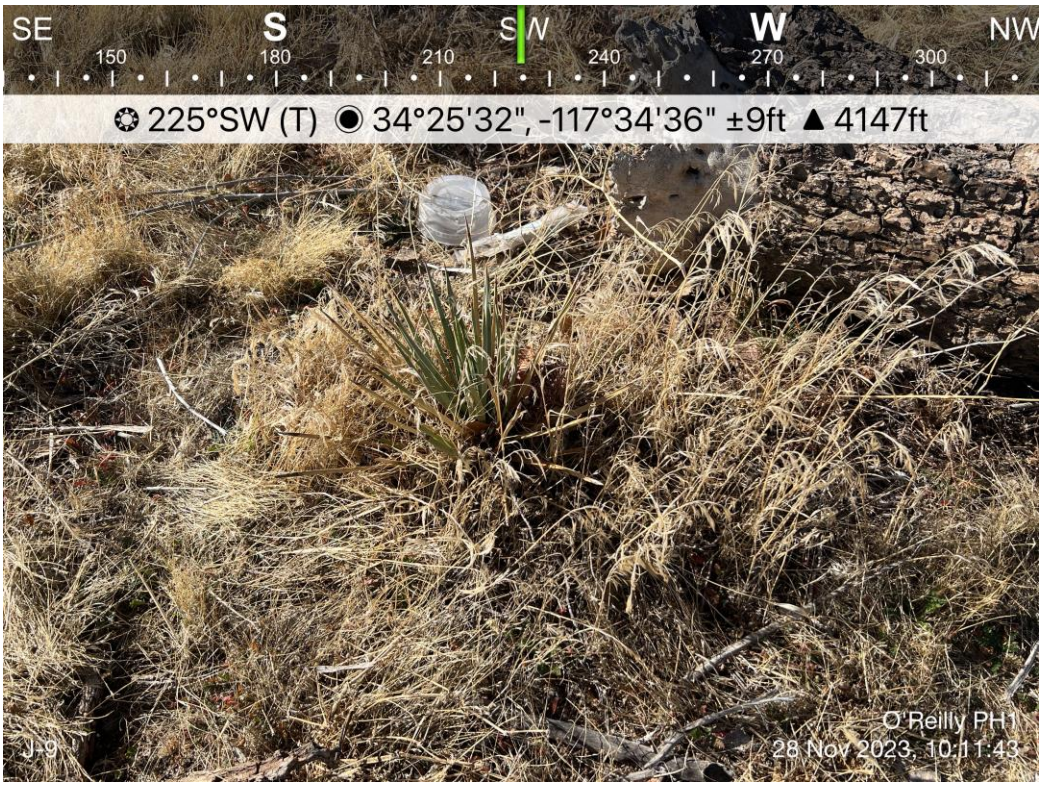
Photo 9	
Date: 11/28/2023	
Description: Joshua Tree #9, located in the northwestern portion of the Study Area.	
Photo 10	
Date: 11/28/2023	
Description: Joshua Tree #10, located in the northwestern portion of the Study Area.	

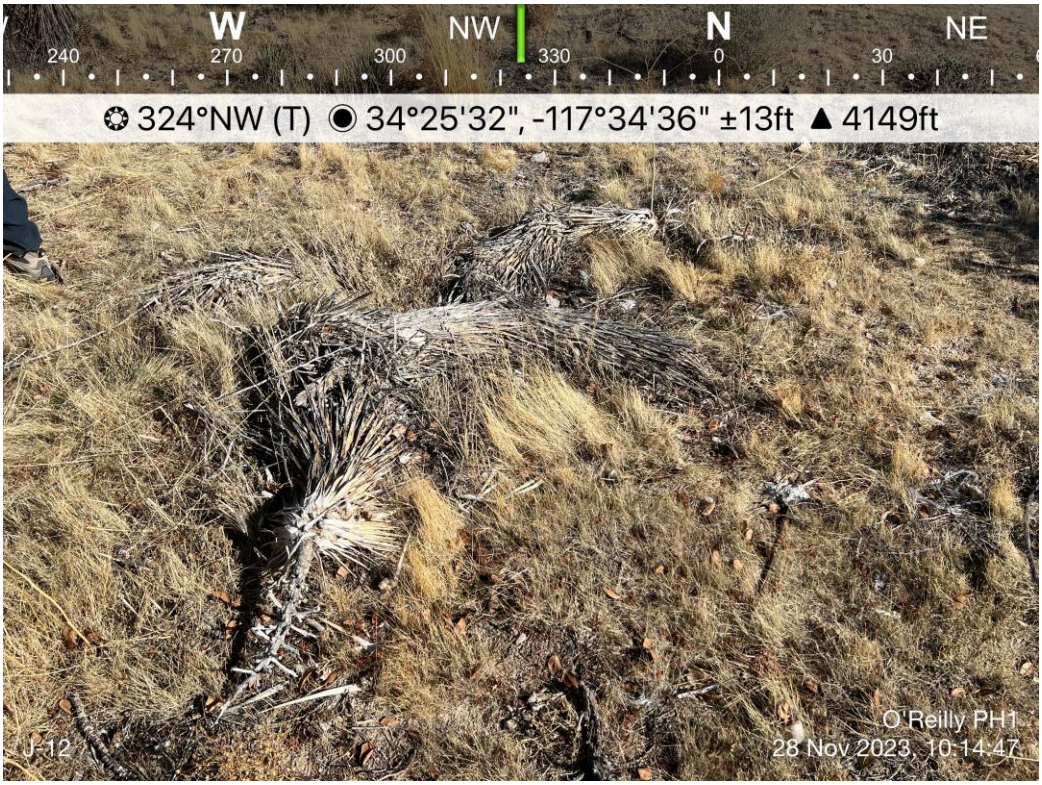
Photo 11	
Date: 11/28/2023	
Description: Joshua Tree #11, located in the northwestern portion of the Study Area.	
Photo 12	
Date: 11/28/2023	
Description: Joshua Tree #12, consists of a dead individual.	

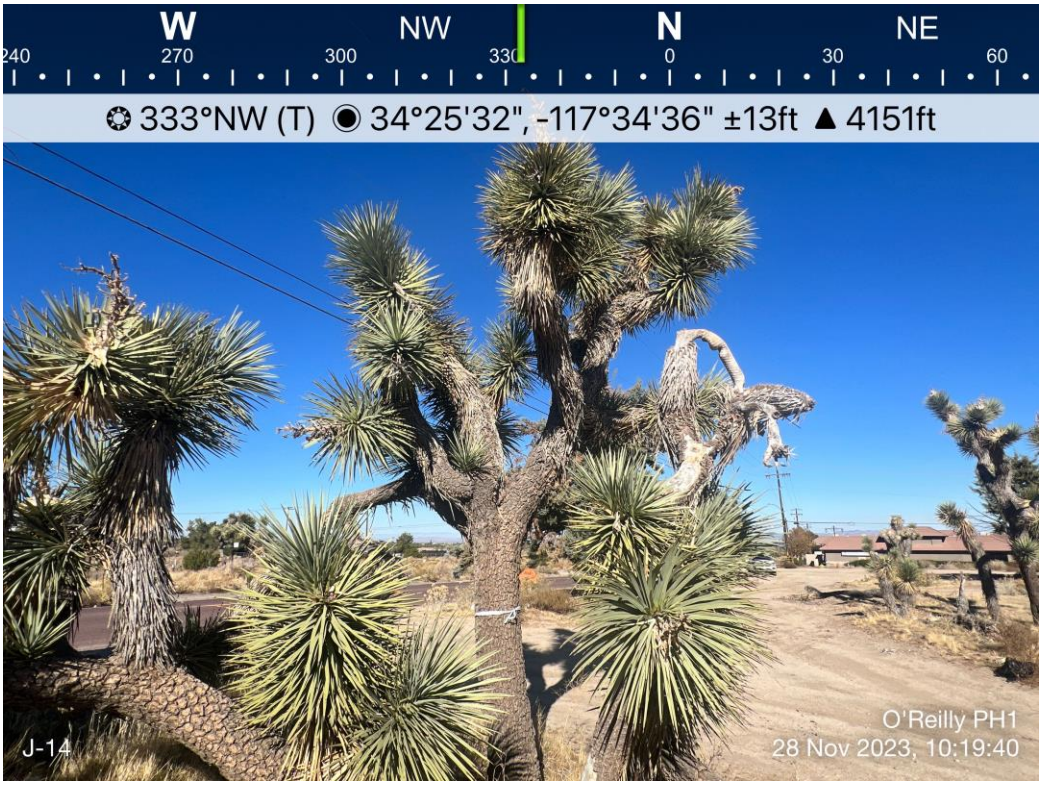
Photo 13 Date: 11/28/2023 Description: Joshua Tree #13, located in the western portion of the Study Area.	
Photo 14 Date: 11/28/2023 Description: Joshua Tree #14, located in the western portion of the Study Area.	

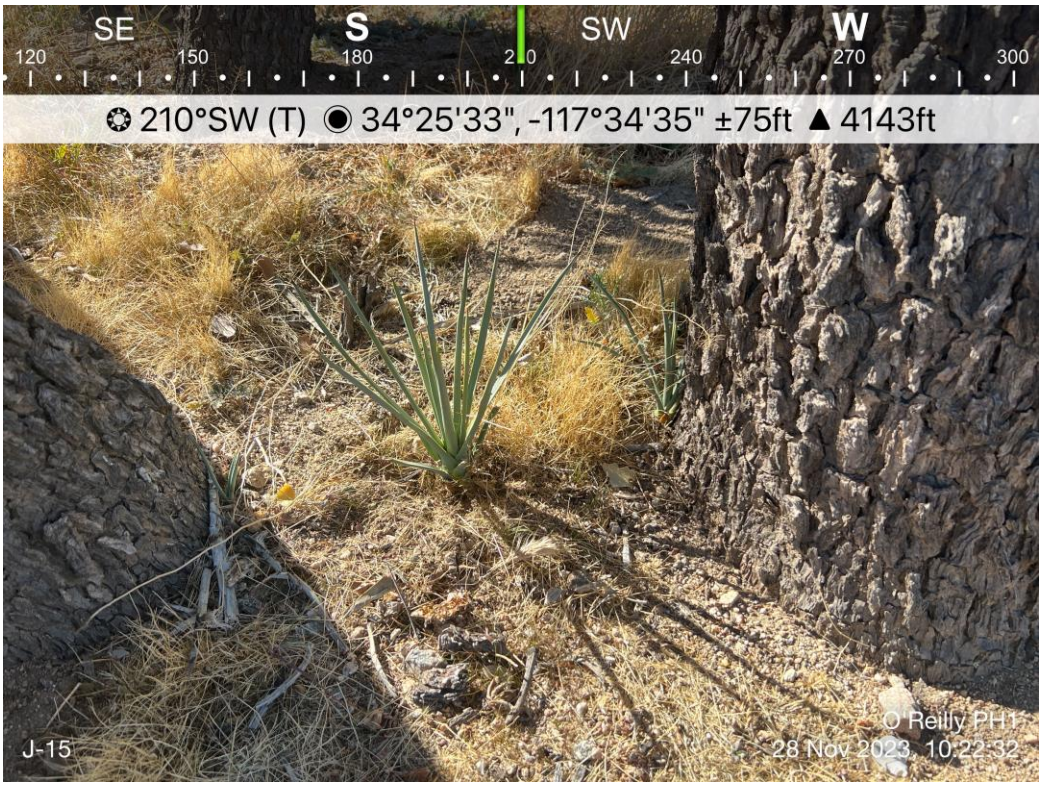
Photo 15	
Date: 11/28/2023	
Description: Joshua Tree #15, located in the western portion of the Study Area.	
Photo 16	
Date: 11/28/2023	
Description: Joshua Tree #16, located in the western portion of the Study Area.	

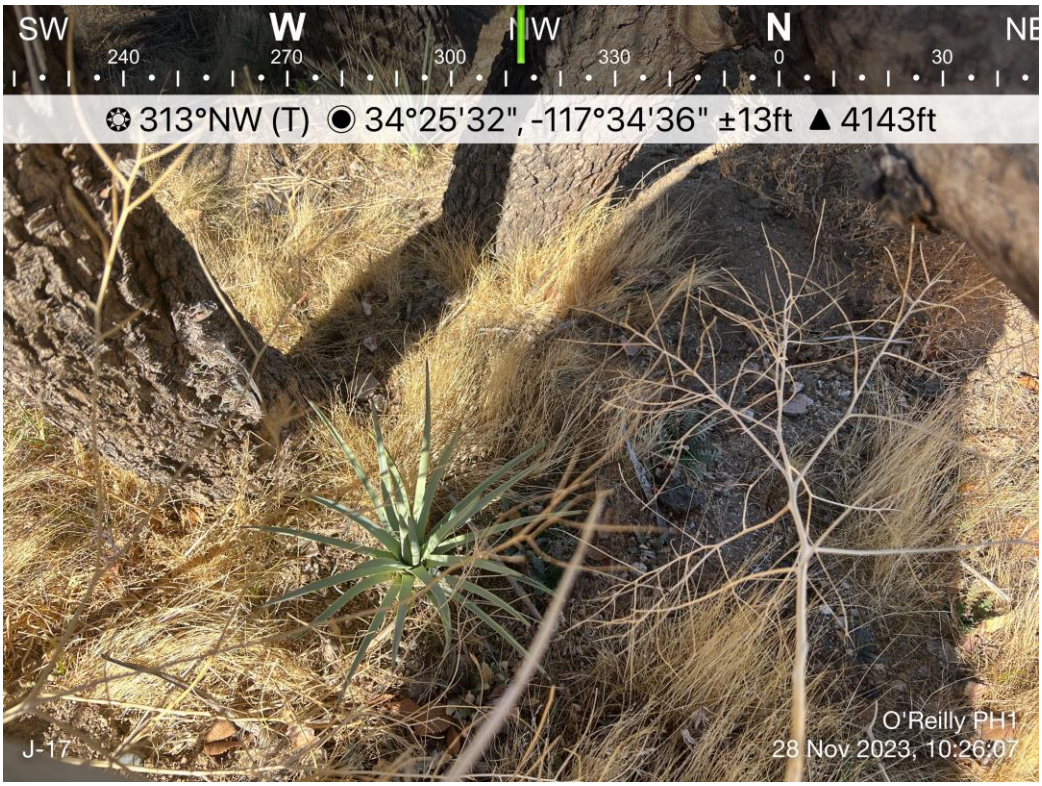
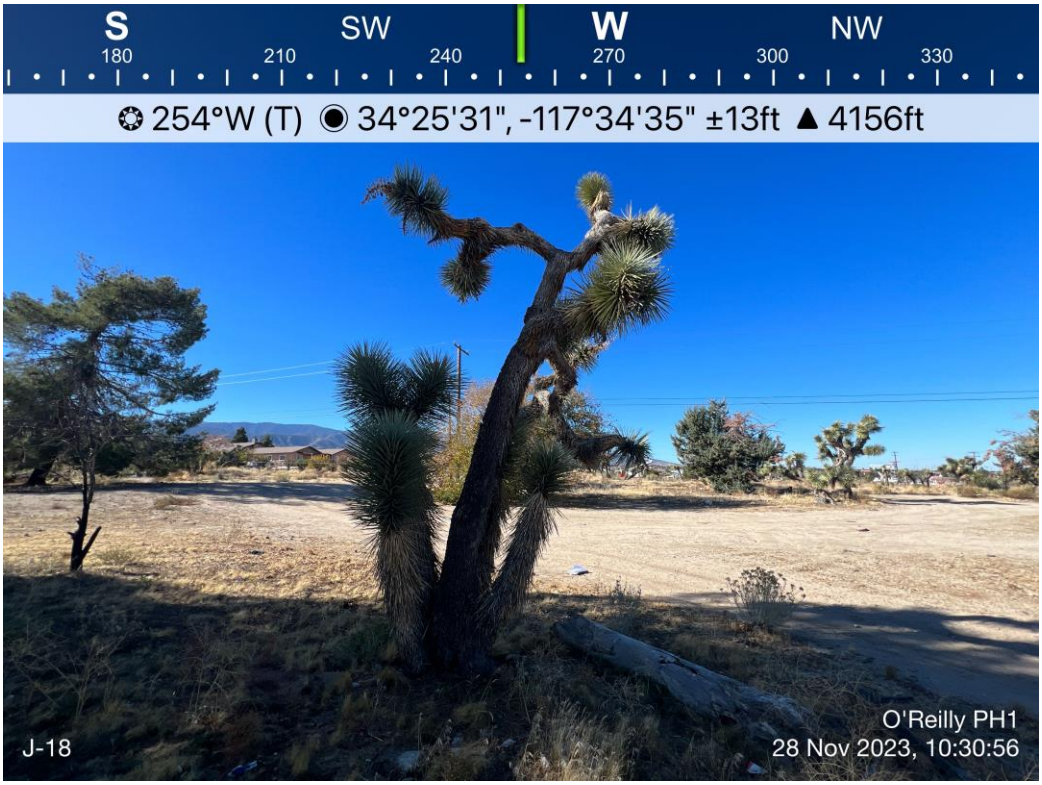
Photo 17	
Date: 11/28/2023	
Description: Joshua Tree #17, located in the western portion of the Study Area.	
Photo 18	
Date: 11/28/2023	
Description: Joshua Tree #18, located in the center portion of the Study Area.	

Photo 19	
Date: 11/28/2023	
Description: Joshua Tree #19, located in the center portion of the Study Area.	
Photo 20	
Date: 11/28/2023	
Description: Joshua Tree #20, located in the center portion of the Study Area.	

Photo 21	
Date: 11/28/2023	
Description: Joshua Tree #21, located in the center portion of the Study Area.	
Photo 22	
Date: 11/28/2023	
Description: Joshua Tree #22, located in the center portion of the Study Area.	

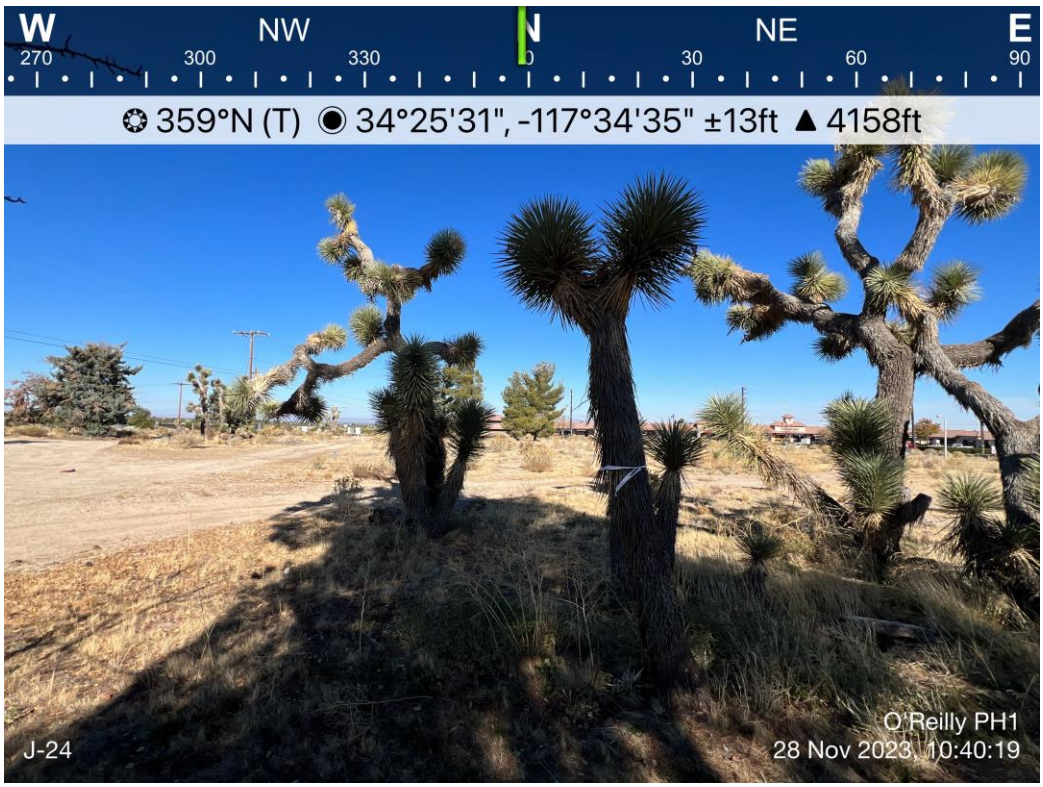
Photo 23	
Date: 11/28/2023	
Description: Joshua Tree #23, consists of a dead individual.	
Photo 24	
Date: 11/28/2023	
Description: Joshua Tree #24, located in the center portion of the Study Area.	

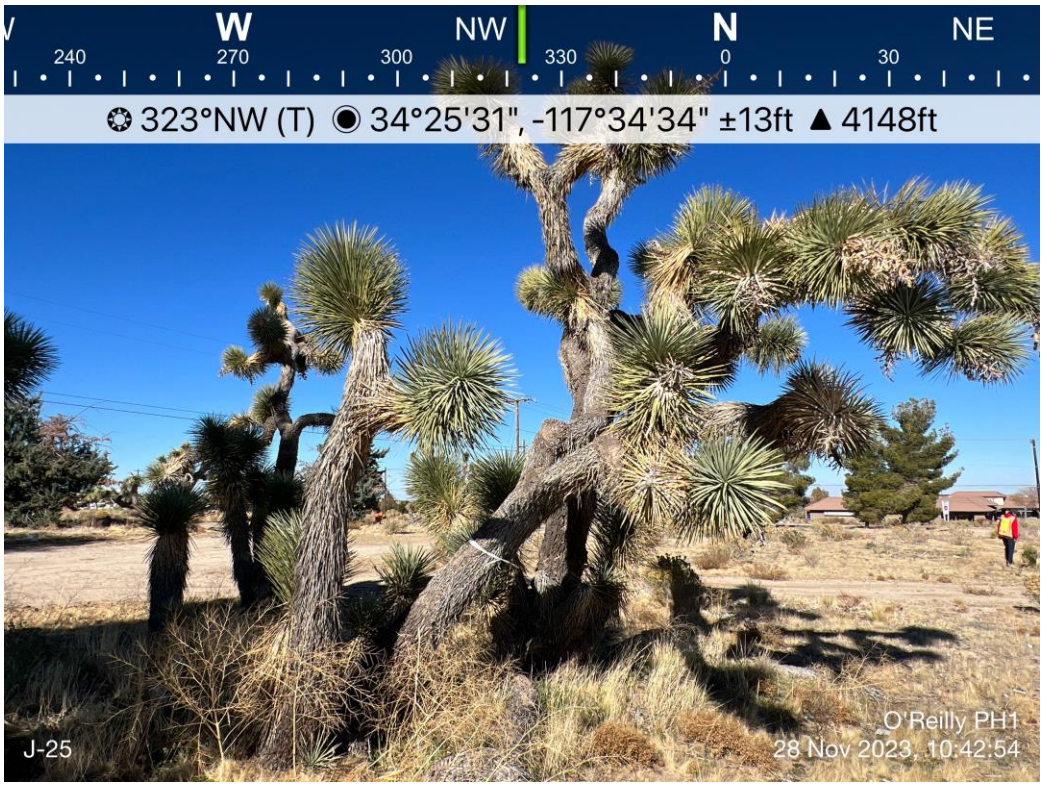
Photo 25	
Date: 11/28/2023	
Description: Joshua Tree #25, located in the center portion of the Study Area.	
Photo 26	
Date: 11/28/2023	
Description: Joshua Tree #26, consists of a dead individual.	

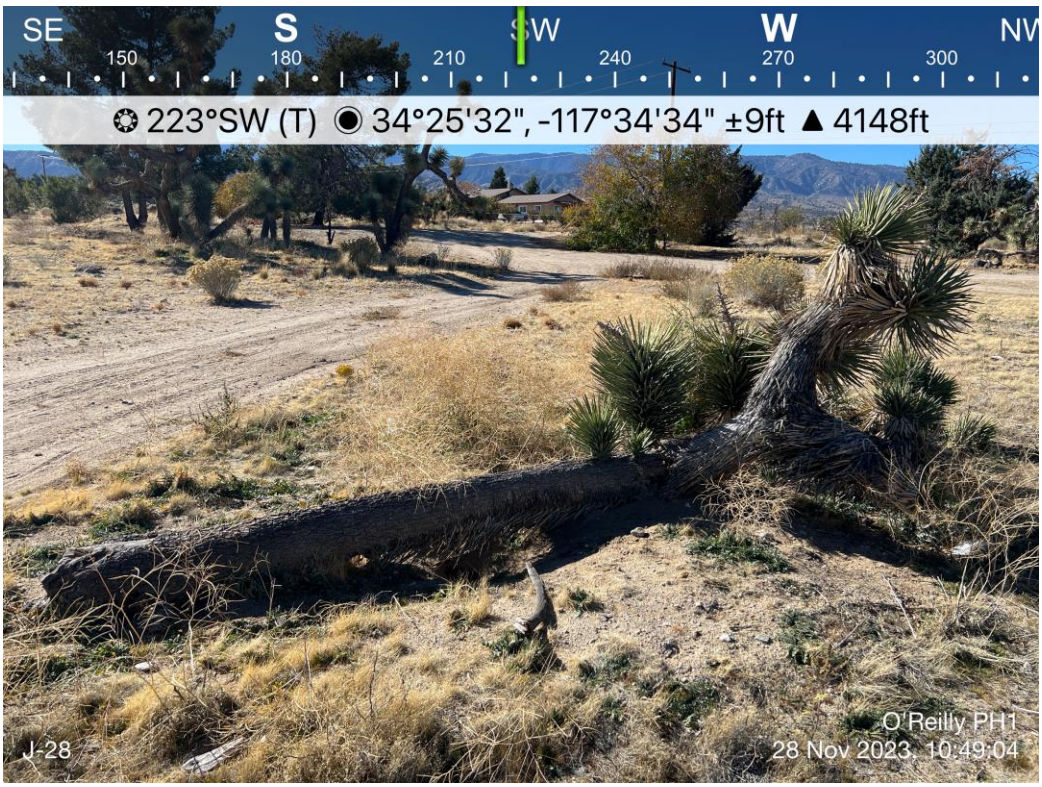
Photo 27 Date: 11/28/2023 Description: Joshua Tree #27, located in the center portion of the Study Area.	
Photo 28 Date: 11/28/2023 Description: Joshua Tree #28, located in the center portion of the Study Area.	

Photo 29	
Date: 11/28/2023	
Description: Joshua Tree #29, consists of a dead individual.	
Photo 30	
Date: 11/28/2023	
Description: Joshua Tree #30, located in the southeastern portion of the Study Area.	

Photo 31	
Date: 11/28/2023	
Description: Joshua Tree #31, located in the southeastern portion of the Study Area.	
Photo 32	
Date: 11/28/2023	
Description: Joshua Tree #32, located in the southeastern portion of the Study Area.	

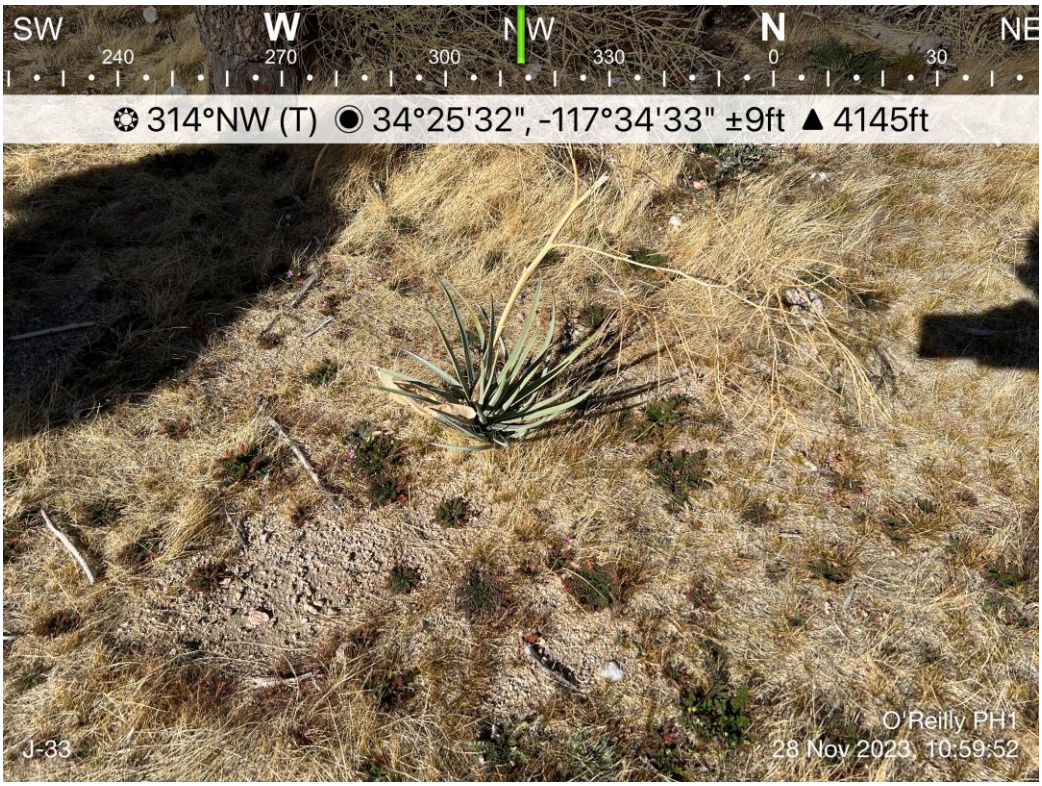
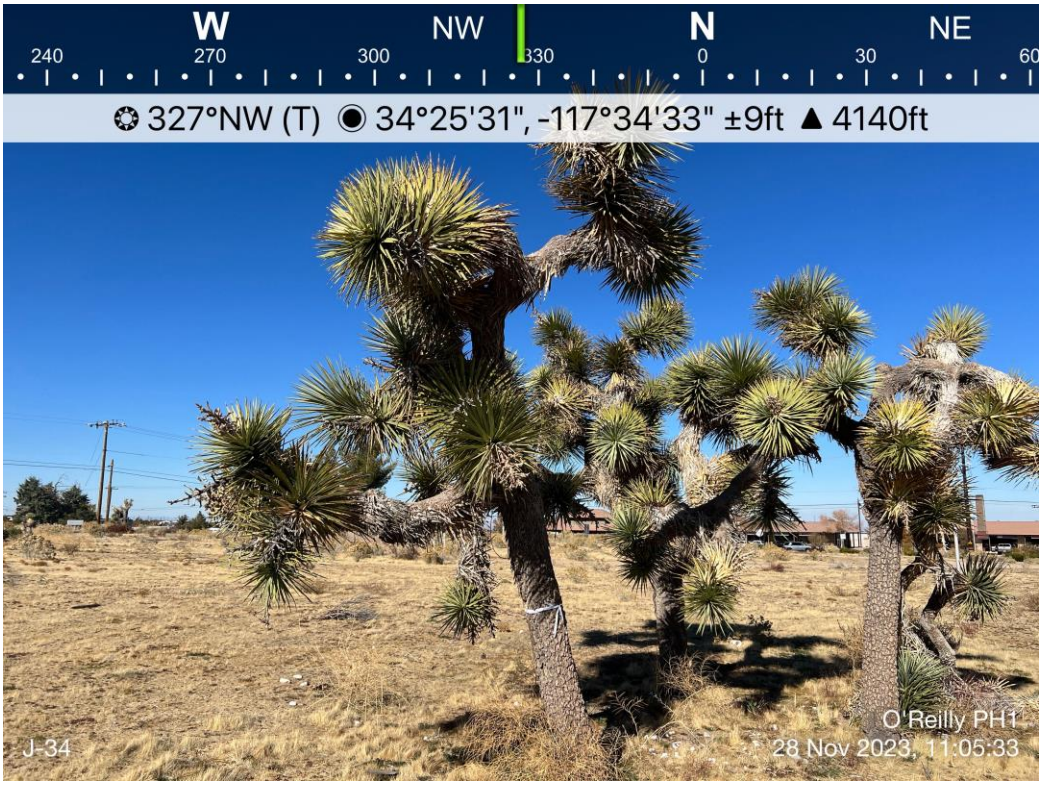
Photo 33 Date: 11/28/2023 Description: Joshua Tree #33, located in the southeastern portion of the Study Area.	
Photo 34 Date: 11/28/2023 Description: Joshua Tree #34, located in the southeastern portion of the Study Area.	

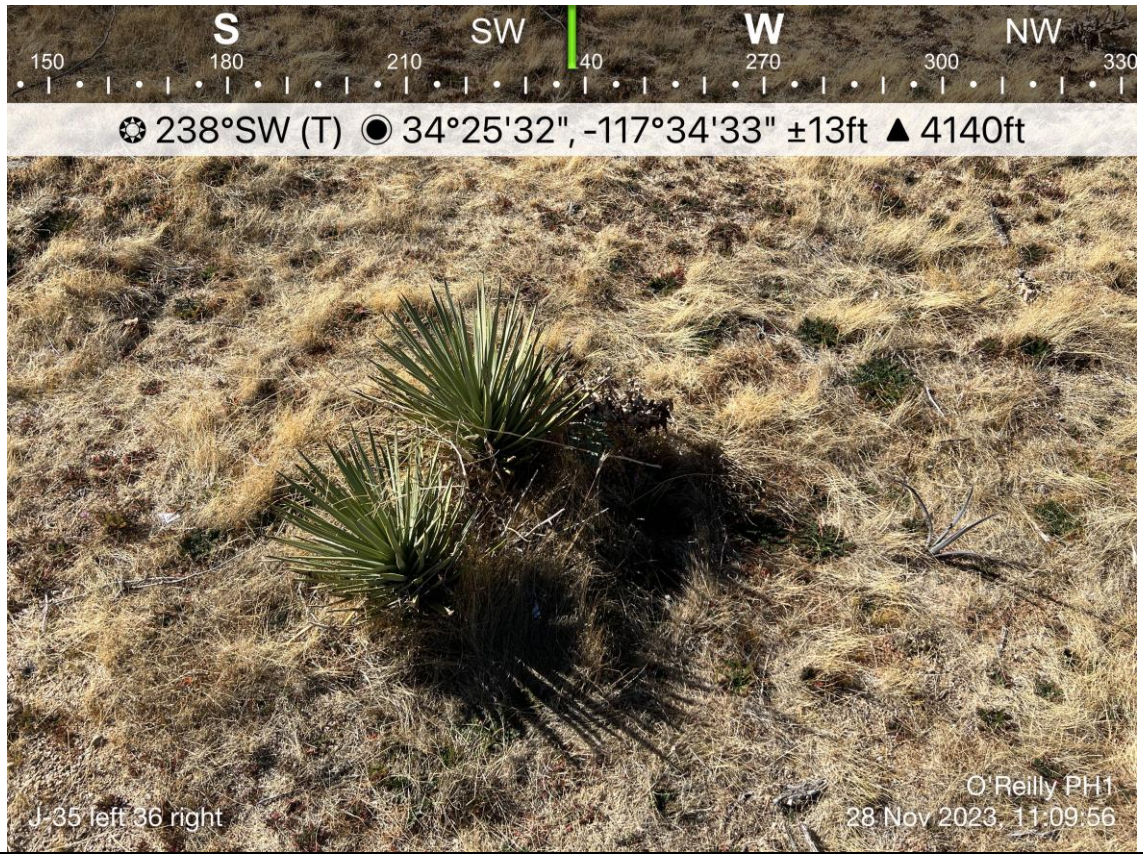
Photo 35	
Date: 11/28/2023	
Description: Joshua Trees #35 (left) and #36 (right), located in the southeastern portion of the Study Area.	
Photo 36	
Date: 11/28/2023	
Description: Joshua Tree #37, located in the southeastern portion of the Study Area.	

Photo 37	
Date: 11/28/2023	
Description: Joshua Tree #38, located in the center of the Study Area.	
Photo 38	
Date: 11/28/2023	
Description: Joshua Tree #39, located in the center of the Study Area.	

Photo 39	
Date: 11/28/2023	
Description: Northwest corner of the Study Area, looking west.	
Photo 40	
Date: 11/28/2023	
Description: Northwest corner of the Study Area, looking northwest.	

Photo 41	
Date: 11/28/2023	
Description: Northwest corner of the Study Area, looking east along Phelan Road.	
Photo 42	
Date: 11/28/2023	
Description: Cluster of burrows located in the northern portion of the Study Area.	

Photo 43	
Date: 11/28/2023	
Description: Additional view of a larger burrow located in the northern portion of the Study Area.	

Photo 1 Joshua Tree #A1.

Photo 2 Joshua Tree #A2.

Photo 3 Joshua Tree #A3.

Photo 4 Joshua Tree #A4.

Photo 5 Joshua Tree #A5.

Photo 6 Joshua Tree #A6.

Photo 7 Joshua Tree #A7.

Photo 8 Joshua Tree #A8.

Photo 9 Joshua Tree #A9.

Photo 10 Joshua Tree #A10.

Photo 11 Joshua Tree #A11.

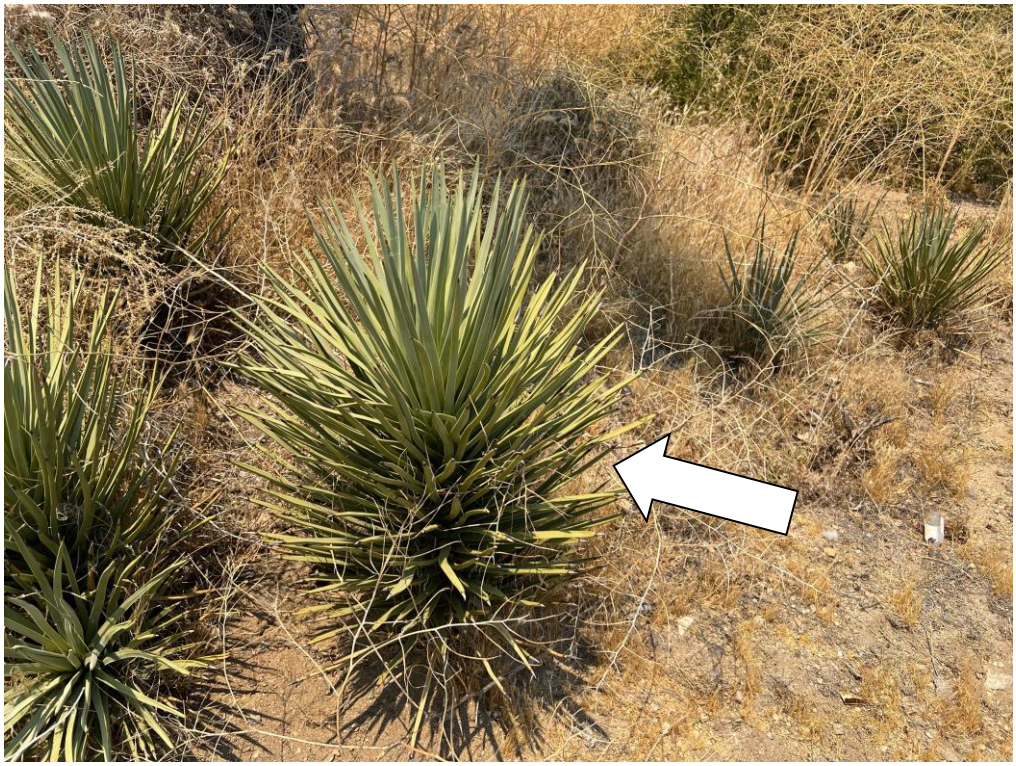


Photo 12 Joshua Tree #A12.

Photo 13 Joshua Tree #A13.

Photo 14 Joshua Tree #A14.

Photo 15 Joshua Tree #A15.

Photo 16 Joshua Tree #A16.

Photo 17 Joshua Tree #A17.

Photo 18 Joshua Tree #A18.

Photo 19 Joshua Tree #A19.

Photo 20 Joshua Tree #A20.

Photo 21 Joshua Tree #A21.

Photo 22 Joshua Tree #A22.

Photo 1 Joshua Tree #B1.

Photo 2 Joshua Tree #B2.

Photo 3 Joshua Tree #B3.

Photo 4 Joshua Tree #B4.

Photo 5 Joshua Tree #B5.

Photo 6 Joshua Tree #B6.

Photo 7 Joshua Tree #B7.

Photo 8 Joshua Tree #B8.

Photo 9 Joshua Tree #B9.

Appendix C – IpaC Letter Report

IPaC **U.S. Fish & Wildlife Service**

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

San Bernardino County, California

Local office

Carlsbad Fish And Wildlife Office

(760) 431-9440
(760) 431-5901

2177 Salk Avenue - Suite 250

Carlsbad, CA 92008-7385

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Birds

NAME	STATUS
California Condor Gymnogyps californianus There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/8193	Endangered

Reptiles

NAME	STATUS
Desert Tortoise Gopherus agassizii There is **final** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/4481	Threatened

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and golden eagles are protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

Any person or organization who plans or conducts activities that may result in impacts to bald or golden eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

Additional information can be found using the following links:

- Eagle Managment https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

There are bald and/or golden eagles in your project area.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list,click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Golden Eagle Aquila chrysaetos This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1680	Breeds Dec 1 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

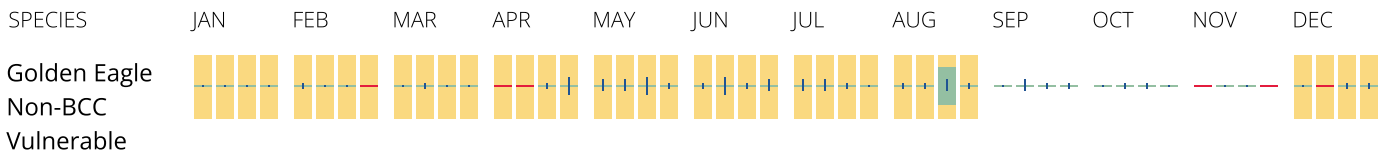
Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

▪ probability of presence ▪ breeding season | survey effort – no data



What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply). To see a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act[1] and the Bald and Golden Eagle Protection Act[2].

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described below.

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern https://www.fws.gov/program/migratory-birds/species
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide conservation measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf

The birds listed below are birds of particular concern either because they occur on the USFWS Birds of Conservation Concern (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ below. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the E-bird data mapping tool (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
Black-chinned Sparrow Spizella atrogularis This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9447	Breeds Apr 15 to Jul 31
California Thrasher Toxostoma redivivum This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Jan 1 to Jul 31
Costa's Hummingbird Calypte costae This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/9470	Breeds Jan 15 to Jun 10

Golden Eagle Aquila chrysaetos — Breeds Dec 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Lawrence's Goldfinch Carduelis lawrencei — Breeds Mar 20 to Sep 20

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9464

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

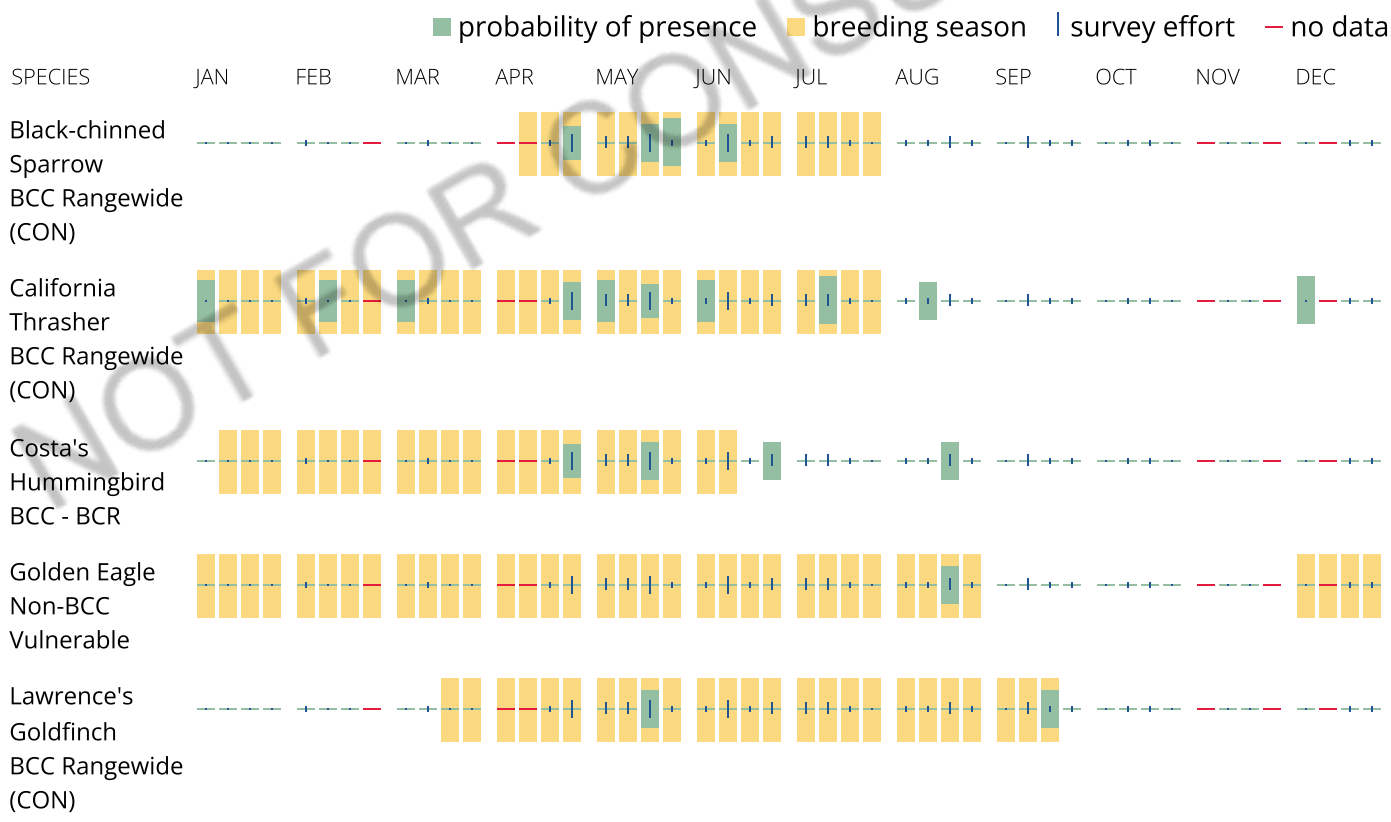
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of USFWS Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (Eagle Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the Rapid Avian Information Locator (RAIL) Tool.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the RAIL Tool and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);

2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Eagle Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the Diving Bird Study and the nanotag studies or contact Caleb Spiegel or Pam Loring.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

This location did not intersect any wetlands mapped by NWI.

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

Appendix D – CNDDB Query

CALIFORNIA DEPARTMENT OF FISH and WILDLIFE **RareFind**

Query Summary:
Quad IS (Phelan (3411745) OR El Mirage (3411756) OR Shadow Mountains SE (3411755) OR Adelanto (3411754) OR Baldy Mesa (3411744) OR Cajon (3411734) OR Telegraph Peak (3411735) OR Mount San Antonio (3411736) OR Mescal Creek (3411746))
AND Federal Listing Status IS (Endangered OR Threatened OR Proposed Endangered OR Proposed Threatened OR Candidate) OR State Listing Status IS (Endangered OR Threatened OR Rare OR Candidate Endangered OR Candidate Threatened)

Print Close

CNDDB Element Query Results

Scientific Name	Common Name	Taxonomic Group	Element Code	Total Occs	Returned Occs	Federal Status	State Status	Global Rank	State Rank	CA Rare Plant Rank	Other Status	Habitats
Ammospermophilus nelsoni	Nelson's (=San Joaquin) antelope squirrel	Mammals	AMAFB04040	287	1	None	Threatened	G2G3	S3	null	BLM_S-Sensitive, IUCN_EN-Endangered	Chenopod scrub
Anaxyrus californicus	arroyo toad	Amphibians	AAABB01230	139	5	Endangered	None	G2G3	S2	null	CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered	Desert wash, Riparian scrub, Riparian woodland, South coast flowing waters, South coast standing waters
Bombus crotchii	Crotch bumble bee	Insects	IIHYM24480	437	5	None	Candidate Endangered	G2	S2	null	IUCN_EN-Endangered	null
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2561	1	None	Threatened	G5	S4	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
Catostomus santaanae	Santa Ana sucker	Fish	AFCJC02190	28	1	Threatened	None	G1	S1	null	AFS_TH-Threatened, IUCN_EN-Endangered	Aquatic, South coast flowing waters
Empidonax traillii extimus	southwestern willow flycatcher	Birds	ABPAE33043	70	3	Endangered	Endangered	G5T2	S3	null	null	Riparian woodland
Euphydryas editha quino	quino checkerspot butterfly	Insects	IILEPK405L	186	1	Endangered	None	G5T1T2	S1S2	null	null	Chaparral, Coastal scrub
Gopherus agassizii	desert tortoise	Reptiles	ARAAF01012	985	6	Threatened	Threatened	G3	S2S3	null	IUCN_CR-Critically Endangered	Joshua tree woodland, Mojavean desert scrub, Sonoran desert scrub
Rana muscosa	southern mountain yellow-legged frog	Amphibians	AAABH01330	186	8	Endangered	Endangered	G1	S2	null	CDFW_WL-Watch List, IUCN_EN-Endangered, USFS_S-Sensitive	Aquatic
Siphateles bicolor mohavensis	Mohave tui chub	Fish	AFCJB1303H	24	1	Endangered	Endangered	G4T1	S1	null	AFS_EN-Endangered, CDFW_FP-Fully Protected	Aquatic, Artificial flowing waters, Artificial standing waters
Vireo bellii pusillus	least Bell's vireo	Birds	ABPBW01114	505	1	Endangered	Endangered	G5T2	S3	null	null	Riparian forest, Riparian scrub, Riparian woodland
Xerospermophilus mohavensis	Mohave ground squirrel	Mammals	AMAFB05150	432	7	None	Threatened	G3	S2	null	BLM_S-Sensitive, IUCN_NT-Near Threatened	Chenopod scrub, Joshua tree woodland, Mojavean desert scrub

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Query Criteria: Quad IS (Phelan (3411745) OR El Mirage (3411756) OR Shadow Mountains SE (3411755) OR Adelanto (3411754) OR Baldy Mesa (3411744) OR Cajon (3411734) OR Telegraph Peak (3411735) OR Mount San Antonio (3411736) OR Mescal Creek (3411746))

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Ammospermophilus nelsoni Nelson's (=San Joaquin) antelope squirrel	G2G3 S3	None Threatened	BLM_S-Sensitive IUCN_EN-Endangered	3,450 3,450	287 S:1	0	0	0	0	0	1	1	0	1	0	0
Anaxyrus californicus arroyo toad	G2G3 S2	Endangered None	CDFW_SSC-Species of Special Concern IUCN_EN-Endangered	2,530 3,590	139 S:5	2	0	0	0	0	3	2	3	5	0	0
Aphyllon validum ssp. validum Rock Creek broomrape	G4T2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	5,700 6,300	12 S:2	0	1	0	0	0	1	1	1	2	0	0
Arctostaphylos glandulosa ssp. gabrielensis San Gabriel manzanita	G5T3 S3	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	6,030 6,030	35 S:1	0	0	0	0	0	1	1	0	1	0	0
Arizona elegans occidentalis California glossy snake	G5T2 S2	None None	CDFW_SSC-Species of Special Concern	5,163 5,163	260 S:1	0	0	0	0	0	1	1	0	1	0	0
Artemisiospiza belli belli Bell's sparrow	G5T2T3 S3	None None	CDFW_WL-Watch List	2,782 2,782	61 S:1	0	0	0	0	0	1	0	1	1	0	0
Asclepias nyctaginifolia Mojave milkweed	G4? S2	None None	Rare Plant Rank - 2B.1		67 S:1	0	0	0	0	0	1	1	0	1	0	0
Asio otus long-eared owl	G5 S3?	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	3,880 3,880	56 S:1	0	0	0	0	0	1	1	0	1	0	0
Aspidoscelis tigris stejnegeri coastal whiptail	G5T5 S3	None None	CDFW_SSC-Species of Special Concern	2,767 2,767	148 S:1	0	0	1	0	0	0	0	1	1	0	0

Summary Table Report

California Department of Fish and Wildlife

California Natural Diversity Database

Name (Scientific/Common)	CNDDB Ranks	Listing Status (Fed/State)	Other Lists	Elev. Range (ft.)	Total EO's	Element Occ. Ranks						Population Status		Presence		
						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Astragalus lentiginosus var. antonius San Antonio milk-vetch	G5T2 S2	None None	Rare Plant Rank - 1B.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture USFS_S-Sensitive	5,000 8,450	12 S:11	0	1	1	0	0	9	7	4	11	0	0
Astragalus leucolobus Big Bear Valley woollypod	G2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive IUCN_VU-Vulnerable SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	5,700 7,200	118 S:10	1	4	1	0	0	4	3	7	10	0	0
Athene cunicularia burrowing owl	G4 S2	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	2,300 3,700	2011 S:16	0	9	2	4	0	1	1	15	16	0	0
Batrachoseps gabrieli San Gabriel slender salamander	G2G3 S2S3	None None	IUCN_DD-Data Deficient USFS_S-Sensitive	3,600 4,760	8 S:3	0	0	0	0	0	3	3	0	3	0	0
Bombus crotchii Crotch bumble bee	G2 S2	None Candidate Endangered	IUCN_EN-Endangered	3,400 6,000	437 S:5	0	0	0	0	0	5	5	0	5	0	0
Bombus pensylvanicus American bumble bee	G3G4 S2	None None	IUCN_VU-Vulnerable	7,000 7,000	285 S:1	0	0	0	0	0	1	1	0	1	0	0
Botrychium ascendens upswept moonwort	G4 S2	None None	Rare Plant Rank - 2B.3 USFS_S-Sensitive	7,000 7,000	53 S:1	0	0	0	0	0	1	1	0	1	0	0
Botrychium crenulatum scalloped moonwort	G4 S3	None None	Rare Plant Rank - 2B.2 USFS_S-Sensitive	7,000 8,900	155 S:2	0	0	0	0	0	2	2	0	2	0	0
Buteo swainsoni Swainson's hawk	G5 S4	None Threatened	BLM_S-Sensitive IUCN_LC-Least Concern	880 880	2561 S:1	0	0	0	0	1	0	1	0	0	1	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Calochortus clavatus var. gracilis slender mariposa-lily	G4T2T3 S2S3	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	5,950 5,950	143 S:1	0	0	0	0	0	1	1	0	1	0	0
Calochortus palmeri var. palmeri Palmer's mariposa-lily	G3T2 S2	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_SBBG-Santa Barbara Botanic Garden USFS_S-Sensitive	3,300 3,800	111 S:3	0	0	0	0	0	3	1	2	3	0	0
Calochortus plummerae Plummer's mariposa-lily	G4 S4	None None	Rare Plant Rank - 4.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	2,780 7,420	230 S:17	0	3	3	1	0	10	7	10	17	0	0
Canbya candida white pygmy-poppy	G3G4 S3S4	None None	Rare Plant Rank - 4.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	3,000 3,900	30 S:3	0	0	0	0	0	3	3	0	3	0	0
Canyon Live Oak Ravine Forest Canyon Live Oak Ravine Forest	G3 S3.3	None None		1,720 5,200	50 S:5	0	0	0	0	0	5	5	0	5	0	0
Carex occidentalis western sedge	G4 S3	None None	Rare Plant Rank - 2B.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	6,800 6,800	8 S:1	0	0	0	0	0	1	1	0	1	0	0
Catostomus santaanae Santa Ana sucker	G1 S1	Threatened None	AFS_TH-Threatened IUCN_EN-Endangered	2,000 2,000	28 S:1	0	1	0	0	0	0	0	1	1	0	0
Chaetodipus fallax pallidus pallid San Diego pocket mouse	G5T3T4 S3S4	None None		4,400 5,900	79 S:3	0	0	0	0	0	3	3	0	3	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Chorizanthe xanti var. leucotheca white-bracted spineflower	G4T3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_USDA-US Dept of Agriculture USFS_S-Sensitive	2,435 5,500	59 S:5	2	0	0	0	0	3	2	3	5	0	0
Claytonia peirsonii ssp. peirsonii Peirson's spring beauty	G2G3T2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	8,000 8,380	9 S:3	0	3	0	0	0	0	1	2	3	0	0
Empidonax traillii extimus southwestern willow flycatcher	G5T2 S3	Endangered Endangered		2,680 2,770	70 S:3	3	0	0	0	0	0	0	3	3	0	0
Eriogonum microthecum var. johnstonii Johnston's buckwheat	G5T2 S2	None None	Rare Plant Rank - 1B.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	9,340 9,400	7 S:2	0	0	0	0	0	2	2	0	2	0	0
Eumops perotis californicus western mastiff bat	G4G5T4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern		296 S:1	0	0	0	0	0	1	1	0	1	0	0
Euphydryas editha quino quino checkerspot butterfly	G4G5T1T2 S1S2	Endangered None		6,155 6,155	186 S:1	0	0	0	0	1	0	1	0	0	0	1
Gila orcuttii arroyo chub	G2 S2	None None	AFS_VU-Vulnerable CDFW_SSC-Species of Special Concern IUCN_VU-Vulnerable USFS_S-Sensitive	2,000 2,000	49 S:1	0	1	0	0	0	0	1	0	1	0	0
Gopherus agassizii desert tortoise	G3 S2S3	Threatened Threatened	IUCN_CR-Critically Endangered	2,968 3,700	985 S:6	0	3	1	0	1	1	3	3	5	1	0
Helianthus nuttallii ssp. parishii Los Angeles sunflower	G5TX SX	None None	Rare Plant Rank - 1A	5,000 5,000	7 S:1	0	0	0	0	0	1	1	0	1	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Heuchera parishii Parish's alumroot	G3 S3	None None	Rare Plant Rank - 1B.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	5,100 5,100	70 S:1	0	1	0	0	0	0	0	1	1	0	0
Icaricia saepiolus aureolus San Gabriel Mountains blue butterfly	G5T1 S1	None None	USFS_S-Sensitive	6,000 6,860	2 S:2	0	0	0	0	0	2	2	0	2	0	0
Juncus nodosus knotted rush	G5 S3	None None	Rare Plant Rank - 2B.3 IUCN_LC-Least Concern	6,000 6,000	12 S:1	0	0	0	0	0	1	1	0	1	0	0
Juniperella mirabilis juniper metallic wood-boring beetle	G1 S1	None None		4,300 4,300	2 S:1	0	0	0	0	0	1	1	0	1	0	0
Lanius ludovicianus loggerhead shrike	G4 S4	None None	CDFW_SSC-Species of Special Concern IUCN_NT-Near Threatened	3,424 3,424	110 S:1	0	0	1	0	0	0	0	1	1	0	0
Lewisia brachycalyx short-sepaled lewisia	G4 S2	None None	Rare Plant Rank - 2B.2 USFS_S-Sensitive		15 S:1	0	0	0	0	0	1	1	0	1	0	0
Lilium parryi lemon lily	G3 S3	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_CRES-San Diego Zoo CRES Native Gene Seed Bank USFS_S-Sensitive	5,500 8,030	160 S:13	0	2	0	0	0	11	10	3	13	0	0
Linanthus concinnus San Gabriel linanthus	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	5,600 8,400	43 S:12	2	1	1	0	1	7	8	4	11	1	0
Loeflingia squarrosa var. artemisiarum sagebrush loeflingia	G5T3 S2	None None	Rare Plant Rank - 2B.2 BLM_S-Sensitive	3,300 3,300	26 S:1	0	0	1	0	0	0	0	1	1	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Lupinus peirsonii Peirson's lupine	G3 S3	None None	Rare Plant Rank - 1B.3 IUCN_NT-Near Threatened SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	6,920 6,920	12 S:2	0	0	0	0	0	2	2	0	2	0	0
Microtus californicus stephensi south coast marsh vole	G5T2T3 S2	None None	CDFW_SSC-Species of Special Concern	6,600 6,600	7 S:1	0	0	0	0	0	1	1	0	1	0	0
Monardella australis ssp. jokerstii Jokerst's monardella	G4T1? S1?	None None	Rare Plant Rank - 1B.1 USFS_S-Sensitive	4,450 4,450	3 S:1	0	0	0	0	0	1	1	0	1	0	0
Muhlenbergia californica California muhly	G4 S4	None None	Rare Plant Rank - 4.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	6,500 7,000	5 S:2	0	0	0	0	0	2	2	0	2	0	0
Myotis ciliolabrum western small-footed myotis	G5 S3	None None	BLM_S-Sensitive IUCN_LC-Least Concern	5,420 5,420	82 S:1	0	0	0	0	0	1	1	0	1	0	0
Nemacladus secundiflorus var. robbinsii Robbins' nemacladus	G3T2 S2	None None	Rare Plant Rank - 1B.2 USFS_S-Sensitive		9 S:1	0	0	0	0	0	1	1	0	1	0	0
Neotamias speciosus speciosus lodgepole chipmunk	G4T3T4 S2	None None		4,920 6,900	24 S:2	0	0	0	0	0	2	2	0	2	0	0
Opuntia basilaris var. brachyclada short-joint beavertail	G5T3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	2,500 6,600	199 S:72	2	11	8	1	0	50	21	51	72	0	0
Oreonana vestita woolly mountain-parsley	G3 S3	None None	Rare Plant Rank - 1B.3 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	6,400 10,000	55 S:14	1	2	0	0	0	11	8	6	14	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Ovis canadensis nelsoni desert bighorn sheep	G4T4 S3	None None	BLM_S-Sensitive CDFW_FP-Fully Protected USFS_S-Sensitive	6,000 6,000	46 S:2	0	0	0	0	0	2	2	0	2	0	0
Oxytropis oreophila var. oreophila rock-loving oxytrope	G5T4T5 S2	None None	Rare Plant Rank - 2B.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	10,000 10,000	6 S:1	0	0	0	0	0	1	1	0	1	0	0
Parnassia cirrata var. cirrata San Bernardino grass-of-Parnassus	G5T2 S2	None None	Rare Plant Rank - 1B.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden USFS_S-Sensitive	5,500 6,400	8 S:2	0	0	0	0	0	2	2	0	2	0	0
Phrynosoma blainvillii coast horned lizard	G4 S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	3,000 6,200	784 S:16	0	0	1	0	1	14	15	1	15	0	1
Rana muscosa southern mountain yellow-legged frog	G1 S2	Endangered Endangered	CDFW_WL-Watch List IUCN_EN-Endangered USFS_S-Sensitive	2,300 6,100	186 S:8	1	1	0	0	5	1	6	2	3	5	0
Rhinichthys osculus ssp. 8 Santa Ana speckled dace	G5T1 S1	None None	AFS_TH-Threatened CDFW_SSC-Species of Special Concern USFS_S-Sensitive	2,500 2,500	13 S:1	0	0	1	0	0	0	1	0	1	0	0
Schoenus nigricans black bog-rush	G4 S2	None None	Rare Plant Rank - 2B.2 IUCN_LC-Least Concern USFS_S-Sensitive	3,000 5,000	13 S:5	0	0	0	0	0	5	3	2	5	0	0
Setophaga petechia yellow warbler	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	3,660 3,660	78 S:1	0	0	0	0	0	1	1	0	1	0	0
Siphateles bicolor mohavensis Mohave tui chub	G4T1 S1	Endangered Endangered	AFS_EN-Endangered CDFW_FP-Fully Protected	3,400 3,400	24 S:1	0	0	0	0	1	0	1	0	0	1	0
Southern California Arroyo Chub/Santa Ana Sucker Stream Southern California Arroyo Chub/Santa Ana Sucker Stream	GNR SNR	None None		2,000 2,000	4 S:1	0	1	0	0	0	0	1	0	1	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Southern Sycamore Alder Riparian Woodland Southern Sycamore Alder Riparian Woodland	G4 S4	None None		1,320 3,840	230 S:5	0	0	0	0	0	5	5	0	5	0	0
Symphyotrichum defoliatum San Bernardino aster	G2 S2	None None	Rare Plant Rank - 1B.2 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden SB_CRES-San Diego Zoo CRES Native Gene Seed Bank USFS_S-Sensitive	3,400 5,000	102 S:2	0	0	0	0	0	2	2	0	2	0	0
Symphyotrichum greatae Greata's aster	G2 S2	None None	Rare Plant Rank - 1B.3 SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	2,600 4,500	56 S:4	0	0	0	0	0	4	4	0	4	0	0
Taxidea taxus American badger	G5 S3	None None	CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern	3,301 3,301	645 S:1	0	0	0	0	0	1	1	0	1	0	0
Thamnophis hammondii two-striped gartersnake	G4 S3S4	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFS_S-Sensitive	2,956 5,260	184 S:2	0	0	0	0	0	2	2	0	2	0	0
Toxostoma lecontei Le Conte's thrasher	G4 S3	None None	BLM_S-Sensitive CDFW_SSC-Species of Special Concern IUCN_LC-Least Concern USFWS_BCC-Birds of Conservation Concern	2,790 4,100	238 S:11	0	0	0	0	0	11	11	0	11	0	0
Viola pinetorum ssp. grisea grey-leaved violet	G4G5T3 S3	None None	Rare Plant Rank - 1B.2 BLM_S-Sensitive SB_CalBG/RSABG-California/Rancho Santa Ana Botanic Garden	7,200 7,200	90 S:1	0	0	1	0	0	0	0	1	1	0	0
Vireo bellii pusillus least Bell's vireo	G5T2 S3	Endangered Endangered		2,680 2,680	505 S:1	0	0	1	0	0	0	1	0	1	0	0

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						A	B	C	D	X	U	Historic > 20 yr	Recent <= 20 yr	Extant	Poss. Extirp.	Extirp.
Xerospermophilus mohavensis Mohave ground squirrel	G3 S2	None Threatened	BLM_S-Sensitive IUCN_NT-Near Threatened	2,520 3,600	432 S:7	0	1	1	0	0	5	4	3	7	0	0

Appendix E – Western Joshua Tree Census Data Table

Tree ID	Tree Latitude	Tree Longitude	Size Class	Actual Height of Tree (meters) (Optional)	Live or Dead?	Mature Tree (branched)?	Flowering or Fruiting Stage? (flowers, fruits, or none)	Impact to Tree (removal, trim, relocation, other, or none)	Will project activities be within 15 meters of tree?	Relocation Site	Additional Notes
J1	34.425984	-117.57664	C	6.7	Live	Y	None	Removal	Yes	Not Applicable	
J2	34.425901	-117.576717	B	2.8	Live	Y	None	Removal	Yes	Not Applicable	
J3	34.42582	-117.576746	B	1.5	Live	N	None	Removal	Yes	Not Applicable	
J4	34.425813	-117.576765	B	3.9	Dead	Y	None	Removal	Yes	Not Applicable	
J5	34.425756	-117.576691	B	4.6	Live	Y	None	Removal	Yes	Not Applicable	
J6	34.425705	-117.576732	B	2.4	Live	N	None	Removal	Yes	Not Applicable	
J7	34.425757	-117.576711	B	1.4	Live	Y	None	Removal	Yes	Not Applicable	
J8	34.425711	-117.576711	B	2.7	Dead	N	None	Removal	Yes	Not Applicable	
J9	34.42572	-117.576717	A	0.2	Live	N	None	Removal	Yes	Not Applicable	
J10	34.425718	-117.576709	A	0.3	Live	N	None	Removal	Yes	Not Applicable	
J11	34.425718	-117.576711	A	0.3	Live	N	None	Removal	Yes	Not Applicable	
J12	34.425709	-117.576693	B	1.1	Dead	N	None	Removal	Yes	Not Applicable	
J13	34.425629	-117.576756	B	4.1	Live	Y	None	Removal	Yes	Not Applicable	
J14	34.425632	-117.576772	B	4.5	Live	Y	None	Removal	Yes	Not Applicable	
J15	34.425630	-117.576763	A	0.2	Live	N	None	Removal	Yes	Not Applicable	
J16	34.425601	-117.57678	B	3.6	Live	Y	None	Removal	Yes	Not Applicable	
J17	34.425628	-117.576754	A	0.3	Live	N	None	Removal	Yes	Not Applicable	
J18	34.425504	-117.576526	C	6.1	Live	Y	None	Removal	Yes	Not Applicable	
J19	34.425507	-117.576433	C	6.1	Live	Y	None	Removal	Yes	Not Applicable	
J20	34.425510	-117.576469	B	1.7	Live	N	None	Removal	Yes	Not Applicable	
J21	34.425508	-117.576465	B	1.6	Live	N	None	Removal	Yes	Not Applicable	
J22	34.425509	-117.576471	A	0.6	Live	N	None	Removal	Yes	Not Applicable	
J23	34.425506	-117.576468	B	2.2	Dead	N	None	Removal	Yes	Not Applicable	
J24	34.425499	-117.576475	B	3.0	Live	Y	None	Removal	Yes	Not Applicable	
J25	34.425504	-117.576413	B	4.5	Live	Y	None	Removal	Yes	Not Applicable	
J26	34.425504	-117.576424	B	2.1	Dead	N	None	Removal	Yes	Not Applicable	
J27	34.425699	-117.576406	B	1.3	Live	Y	None	Removal	Yes	Not Applicable	
J28	34.425697	-117.576375	C	5.7	Live	Y	None	Removal	Yes	Not Applicable	
J29	34.425811	-117.576367	B	1.9	Dead	Y	None	Removal	Yes	Not Applicable	
J30	34.425634	-117.575972	C	5.2	Live	Y	None	None	Yes	Not Applicable	
J31	34.425603	-117.575947	C	5.1	LIve	Y	None	None	Yes	Not Applicable	
J32	34.425611	-117.575958	A	0.2	Live	N	None	None	Yes	Not Applicable	
J33	34.425596	-117.575942	A	0.3	Live	N	None	None	Yes	Not Applicable	
J34	34.425594	-117.575954	B	4.8	Live	Y	None	None	Yes	Not Applicable	
J35	34.425555	-117.575957	A	0.3	Live	N	None	None	Yes	Not Applicable	
J36	34.425556	-117.57596	A	0.4	Live	N	None	None	Yes	Not Applicable	
J37	34.425561	-117.575958	A	0.2	Live	N	None	None	Yes	Not Applicable	
J38	34.42606	-117.576405	B	3.4	Dead	Y	None	Removal	Yes	Not Applicable	
J39	34.425453	-117.576227	A	0.7	Live	N	None	None	Yes	Not Applicable	
Additional Census of 50 Foot buffer - Conducted on 7/9/2024											
A1	34.425454	-117.576981	B	3.9	Live	Y	None	None	Yes	Not Applicable	
A2	34.425462	-117.576981	A	1.2	Live	N	None	None	Yes	Not Applicable	

A3	34.42549	-117.576982	B	4.5	Live	Y	None	None	Yes	Not Applicable	
A4	34.425479	-117.576981	A	1.7	Dead	Y	None	None	Yes	Not Applicable	
A5	34.425491	-117.576982	A	0.2	Live	N	None	None	Yes	Not Applicable	
A6	34.425486	-117.576982	A	1.1	Live	N	None	None	Yes	Not Applicable	
A7	34.425748	-117.576988	A	0.6	Live	N	None	None	Yes	Not Applicable	
A8	34.425768	-117.576989	A	0.3	Live	N	None	None	Yes	Not Applicable	
A9	34.425769	-117.576989	A	0.6	Live	N	None	None	Yes	Not Applicable	
A10	34.425761	-117.576989	A	0.5	Live	N	None	None	Yes	Not Applicable	
A11	34.425755	-117.576988	A	0.6	Live	N	None	None	Yes	Not Applicable	
A12	34.425766	-117.576989	A	0.7	Live	N	None	None	Yes	Not Applicable	
A13	34.42577	-117.576989	A	0.6	Live	N	None	None	Yes	Not Applicable	
A14	34.425779	-117.576989	C	5.5	Live	Y	None	None	Yes	Not Applicable	
A15	34.425754	-117.576988	A	0.5	Live	N	None	None	Yes	Not Applicable	
A16	34.425792	-117.576989	A	0.3	Live	N	None	None	Yes	Not Applicable	
A17	34.425789	-117.576989	A	0.6	Live	N	None	None	Yes	Not Applicable	
A18	34.425794	-117.57699	A	0.3	Live	N	None	None	Yes	Not Applicable	
A19	34.425795	-117.57699	A	0.2	Live	N	None	None	Yes	Not Applicable	
A20	34.425785	-117.576989	A	0.2	Live	N	None	None	Yes	Not Applicable	
A21	34.425806	-117.57699	A	0.2	Live	N	None	None	Yes	Not Applicable	
A22	34.426276	-117.575713	C	6.1	Live	N	None	None	Yes	Not Applicable	
Additional Census of Buffer Extended to the Centerline of Malpaso Road and Phelan Road- Conducted on 10/16/2024											
B1	34.4252931	-117.5757006	A	0.9	Live	N	None	None	Yes	Not Applicable	
B2	34.4254617	-117.5770496	B	3.9	Live	Y	None	None	Yes	Not Applicable	
B3	34.4254687	-117.5770709	B	3.3	Dead	Y	None	None	Yes	Not Applicable	
B4	34.4254916	-117.5770662	B	2.0	Live	N	None	None	Yes	Not Applicable	
B5	34.4257919	-117.5770934	B	2.6	Dead	Y	None	None	Yes	Not Applicable	
B6	34.4258318	-117.5770334	A	0.4	Live	N	None	None	Yes	Not Applicable	
B7	34.4258165	-117.5770764	B	3.6	Dead	Y	None	None	Yes	Not Applicable	
B8	34.4258120	-117.5770779	B	3.5	Live	Y	None	None	Yes	Not Applicable	
B9	34.4258171	-117.5770900	B	3.9	Live	Y	Fruiting	None	Yes	Not Applicable	

Appendix F – Desert Tortoise Survey Report

Desert Tortoise Survey Report

Survey Date: October 24, 2024

Survey Start Time: 10:28am Survey End Time: 11:02am

Starting Weather: 22.7C, winds <1mph, 0-10% cloud cover

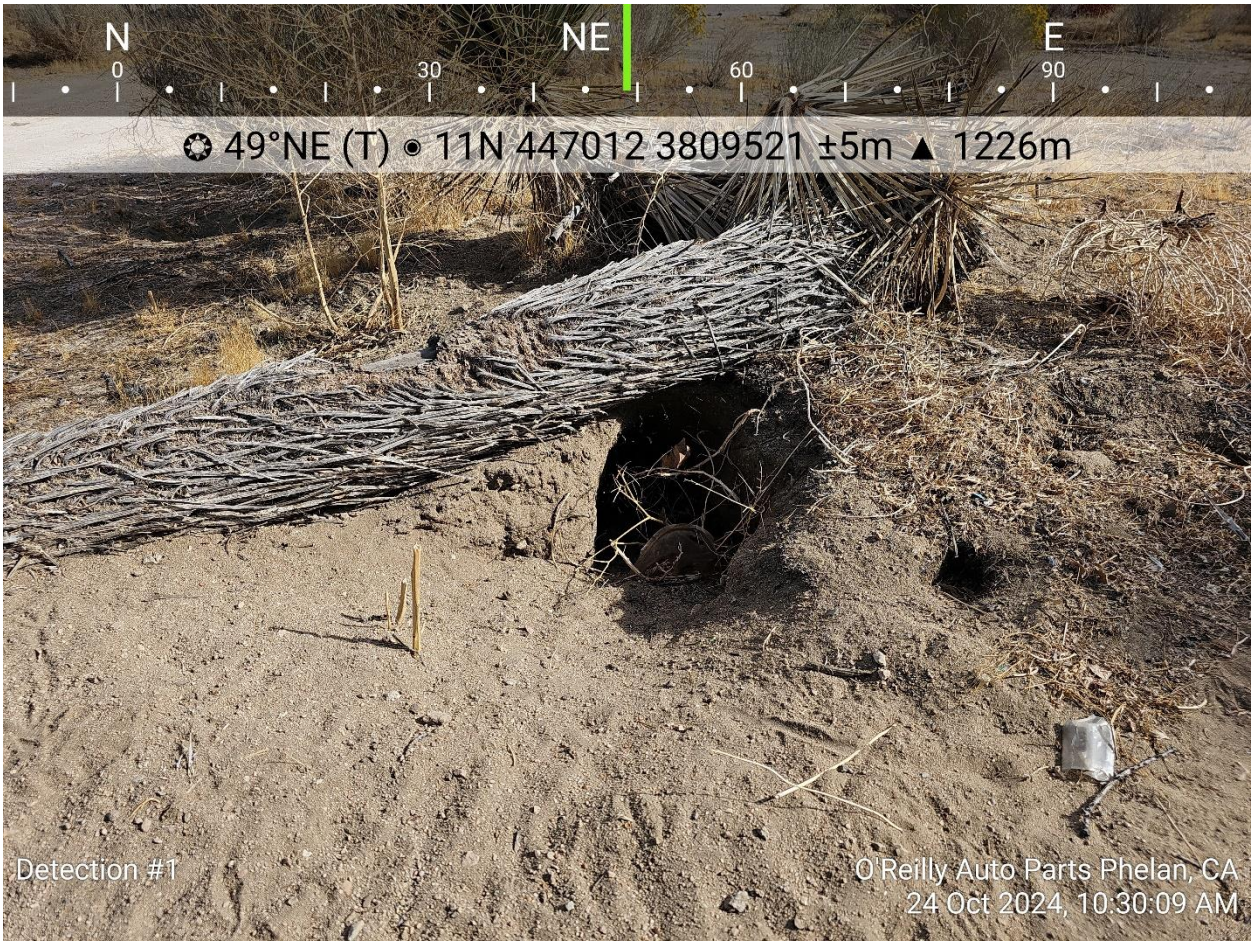
Ending Weather: 24.4C, winds <1mph, 0-10% cloud cover

Surveyors: Sarah Winfrey – Program Manager, Chelsea Robbins – Staff Scientist

Survey Methods: Surveys were conducted following the protocol outline in the USFWS Desert Tortoise Mojave Population Field Manual (2009). All portions of the project site were surveyed (100% coverage) by walking straight-line transects (north-south) spaced 10 m apart for a total of 12 transects. During the survey, all potential burrows were recorded.

Results: No evidence, including live desert tortoise, scat, carcasses, eggshells, or burrows, was observed. Three non-desert tortoise burrows were documented on the site.

Detection #1 – Class 5 Burrow



Burrow Dimensions: 26cm wide x 28cm high x <100 cm depth, azimuth southwest

GPS Location: 34°25'32.911999999996695"N, 117°34'36.0229999999863"W

Detection #2 – Class 4 Burrow

Burrow Dimensions: 11cm wide x 14cm high x 30 cm depth, azimuth north

GPS Location: 34°25'31.0859999999957637"N, 117°34'35.387999999977211"W

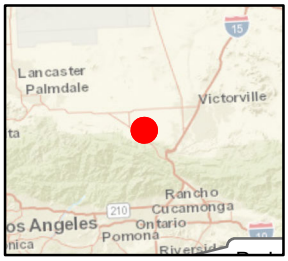
Detection #3 – Class 4 Burrow

Burrow Dimensions: 26cm wide x 28cm high x <100 cm depth, azimuth northeast

GPS Location: 34°25'30.4609999999956926"N, 117°34'35.3150000000025"W

Legend

- Study Area (1.94 ac)
- Burrow Detection



0 50 100 200 Feet

1:1,200 1 inch equals 100 feet

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Project No.:	LA237864
Date:	Oct 2024
Drawn By:	CNP
Reviewed By:	JHW

Terracon
Explore with us
50 Goldenland Ct, Suite 100 Sacramento, CA 95834
PH. (916) 928-4690 terracon.com

Detection Map

Desert Tortoise Survey

Phelan O'Reilly Auto
Phelan, CA

Exhibit

1

C:\Users\cnpatel2\OneDrive - Terracon Consultants Inc\Documents\Projects\3 BRA's\Phelan\LA237684_Phelan_Biological_Assessment\Maps\Exhibit_1_Desert_Tortoise_Survey_Map.mxd

Version: October 26, 2018

3m accuracy

Date of survey: 24/10/24 (day, month, year) Survey biologist(s): S. Winfrey, C. Robbins (name, email, and phone number)

Site description: 3919 Phelan Rd, Phelan CA 92371 (Project # PROJ-2024-00035) (project name and size, general location)

County: San Bernardino Quad: T4N, R7W, Sec 23 Location: 0447008, 3809556 (11S) (UTM coordinates, lat-long, and/or TRS; map datum)

Circle one: 100% coverage or Sampling Area size to be surveyed: 2 acres Transect #: 12 total Transect length: 10m

GPS Start-point: 11S 0446997 3809567 (easting, northing, elevation in meters) Start time: 10:28 am/pm

GPS End-point: 11S 0447086 3809567 (easting, northing, elevation in meters) End time: 11:02 am/pm

Start Temp: 22.7 °C End Temp: 24.4 °C

Live Tortoises

Detection number	GPS location Easting	Northing	Time	Tortoise location (*in burrow*: all of tortoise beneath plane of burrow opening, or *not in burrow*)	Approx MCL ≥180 mm? (*Yes, No or Unknown*)	Existing tag # and color, if present
1						
2						
3						
4						
5						
6						
7						
8						

Tortoise Sign (burrows, scats, carcasses, etc)

Detection number	GPS location Easting	Northing	Type of sign (*burrows, scats, carcass, etc*)	Description and comments - Class, size, depth, azimuth
1	447005	3809518	Burrow	Class 5, 21W x 28H <1m D, under JT
2	447025	3809461	Burrow	Class 4, 11W x 14H x 30cm D
3	447029	3809443	Burrow	Class 4, 8W x 9H x 30D
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

Species Observed: CORA, EUST, ROPI, HOSP, TUVU, NOMO

Coyote Scat
Cottontail Scat

Sarah Winfrey

Appendix G – Burrowing Owl Survey Report

Burrowing Owl Survey Report

Survey Date: October 24, 2024

Survey Start Time: 09:30am Survey End Time: 11:30am

Starting Weather: 22.7C, winds <1mph, 0-10% cloud cover

Ending Weather: 24.4C, winds <1mph, 0-10% cloud cover

Surveyors: Sarah Winfrey, Chelsea Robbins - Staff Scientist

Timing: This survey was conducted during the non-breeding season during the morning hours. Weather conditions were within the parameters of greater detection probability (Conway et al. 2008). With no historical record (CNDDB, eBirds) of Burrowing Owl on or within 150 meters of the project site, non-breeding season surveys were determined to be acceptable for assessing presence or absence of the species.

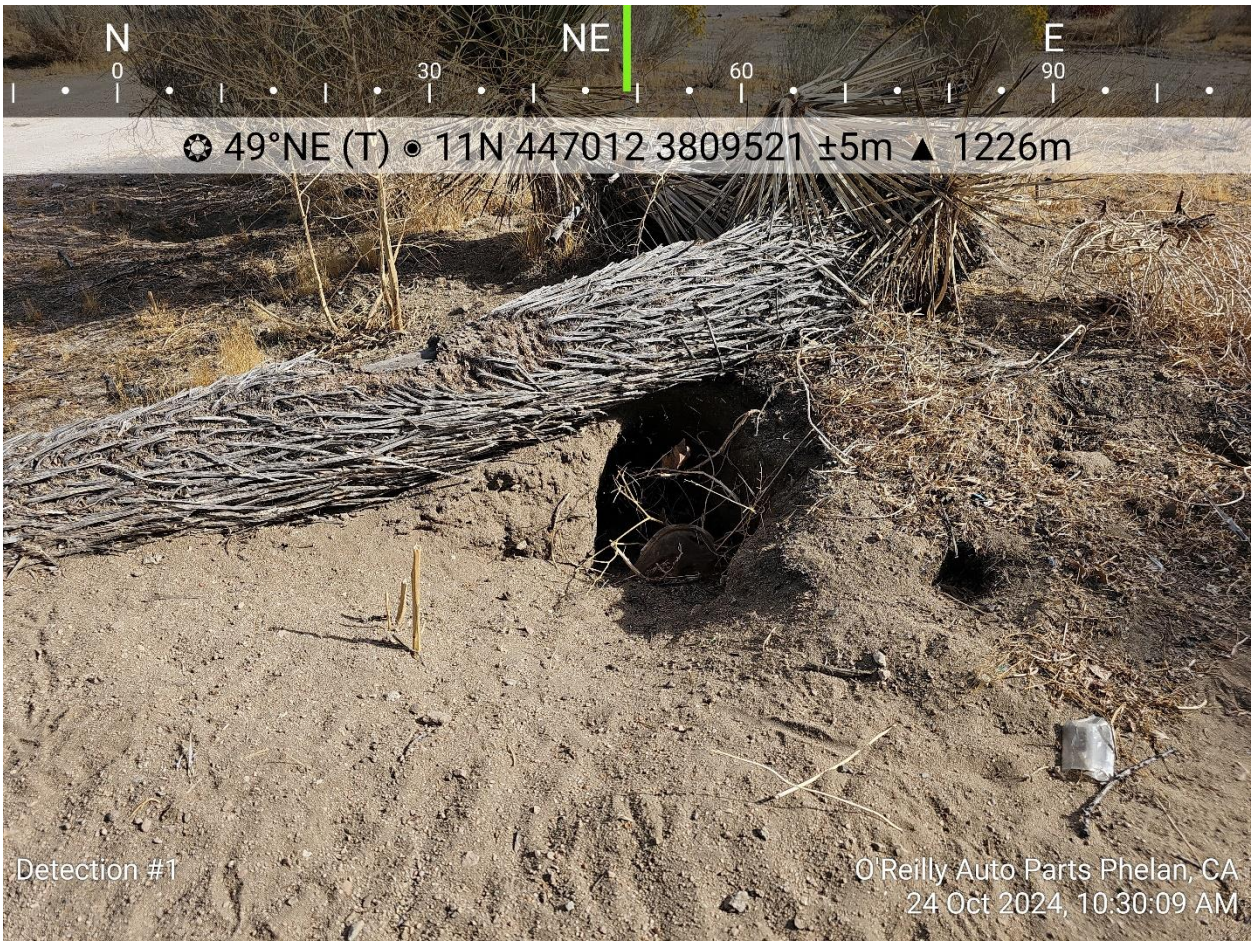
Survey Methods: Following the protocol outlined in Appendices C and D of the CDFW Staff Report on Burrowing Owl Mitigation (2012), full coverage of the project area was surveyed on October 24, 2024. Surveys were conducted in all portions of the project site (100% coverage) by walking straight-line transects (north-south) spaced 10 m apart for a total of 12 transects. At the start of each transect and, at least, every 100 m, surveyors scanned the entire visible project area for burrowing owls using binoculars. During the survey, all potential burrows were recorded. Potential burrows were determined by the presence of one or more burrowing owls, pellets, prey remains, whitewash, or decoration or of a size >11 cm in diameter (height and width) and >150 cm in depth (Johnson et al. 2010). Private property surrounding the project site was scanned with binoculars to a distance of 150 m. Surveyors also listened for burrowing owls while conducting the survey.

Results: No evidence, including burrowing owls, pellets, prey remains, whitewash, or decoration, was observed and only two burrows that met the size minimum for diameter were detected. Neither of these burrows met the depth minimum of 150 cm.

Additional Wildlife Observations:

*Common Raven
*Coyote (scat only)
Desert Cottontail (scat only)
European Starling
House Sparrow
Northern Mockingbird
Rock Pigeon
Turkey Vulture

*Possible Burrowing Owl predator



Burrow 1 – 26 cm wide x 28 cm high x <100 cm deep GPS: 34°25'32.911999999996695"N, 117°34'36.0229999999863"W

Burrow 2 – 11 cm wide x 14 cm high x 30 cm deep GPS: 34°25'31.0859999999957637"N, 117°34'35.387999999977211"W

Legend

- Study Area (1.94 ac)
- Burrow Number

0 50 100 200 Feet

1:1,200 1 inch equals 100 feet

DATA SOURCES:
ESRI WMS - World Aerial Imagery, OpenStreetMap

Project No.:	LA237864
Date:	Oct 2024
Drawn By:	CNP
Reviewed By:	JHW

Terracon
Explore with us
50 Goldenland Ct, Suite 100 Sacramento, CA 95834
PH. (916) 928-4690 terracon.com

Burrow Location Map

Burrowing Owl Survey

Phelan O'Reilly Auto
Phelan, CA

Exhibit

1

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