

# Biological Resources Assessment

## Behavioral Health Comprehensive Treatment Campus

County of San Bernardino

Victorville, CA

July 28, 2025



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July 28, 2025

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**RE:** Biological Resources Assessment Report

San Bernardino County Behavioral Health Comprehensive Treatment Campus

13333 Palmdale Road

Victorville, San Bernardino County, California

Terracon Project No. CB247011

Dear Mr. Rios:

Terracon Consultants, Inc. (Terracon) is pleased to submit the enclosed Biological Resources Assessment Report for the above referenced project. The following report details our findings and presents an opinion regarding the potential impact on biological resources on the site. Please feel free to contact us at 925-285-9740 or at [cailan.patel@terracon.com](mailto:cailan.patel@terracon.com) if you have any questions or concerns.

Sincerely,

**Terracon**

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## Executive Summary

This document provides the findings of a Biological Resources Assessment (BRA) prepared by Terracon Consultants, Inc. (Terracon) for the proposed development of the San Bernardino County Behavioral Health Comprehensive Treatment Campus on a 31.9-acre tract of land. The Study Area is located at 13333 Palmdale Road in the city of Victorville, California on parcels owned by San Bernardino County. The Study Area was identified as San Bernardino County Assessor No. (APN): 3105-191-11. We understand the Study Area currently consists of an existing drug and alcohol treatment center and undeveloped land. The proposed project (Project) is for the construction of a substance use disorder residential treatment building, adult withdrawal management building, adolescent substance use disorder residential treatment building, adolescent psychiatric residential treatment facility, wellness center, outpatient and intensive outpatient facility, three recovery residence buildings, and five additional recovery residents buildings on the undeveloped portions of the Study Area.

Suitable habitat was identified within the Study Area for special-status species. These species include Federally-listed and State-listed special status species as well as migratory birds. Terracon's resulting recommendations include an environmental training program, conducting pre-construction nesting bird surveys, and a biological monitor as applicable. Additionally, the Project would be required to obtain an Incidental Take Permit and pay mitigation fees for Joshua trees requiring removal as a result of Project activities.

By implementing the recommendations, requirements, and guidelines outlined in this BRA, impacts to special-status species and Joshua trees are expected to be mitigated to levels considered less than significant.

## 1. Introduction

The Study Area is proposed for the development of the San Bernardino County Behavioral Health Comprehensive Treatment Campus on a 31.9-acre tract of land. The Study Area is located at 13333 Palmdale Road in the city of Victorville, California on parcels owned by San Bernardino County/ The Study Area was identified as San Bernardino County Assessor No. (APN): 3105-191-11. We understand the Study Area currently consists of an existing withdrawal management and residential facility and undeveloped land. The proposed project (Project) is for the construction of a substance use disorder residential treatment building, adult withdrawal management building, adolescent substance use disorder residential treatment building, adolescent psychiatric residential treatment facility, wellness center, outpatient and intensive outpatient facility, three recovery residence buildings, and five additional recovery residence buildings on the undeveloped portions of the Study Area. 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 Victorville, California, USGS 7.5-minute series topographic map (2021) and can be viewed in **Exhibit 2**. Terracon performed the field reconnaissance survey of the subject property on October 16, 2024.

## 2. Report Objectives

Land development can have adverse effects on the habitats and individuals of sensitive plant and wildlife species. In such instances, regulatory bodies at the state and federal levels, in accordance with the California Environmental Quality Act (CEQA), as well as local policies and ordinances in the County of San Bernardino may oversee and regulate site development. This report focuses on several key aspects:

1. **Sensitive Biological Resources:** It examines the presence of sensitive biological resources within the proposed San Bernardino County Behavioral Health Comprehensive Treatment Campus.
2. **Regulatory Framework:** It discusses the federal, state, and local laws that govern these resources.
3. **Mitigation Measures:** It explores potential mitigation measures necessary to minimize anticipated impacts and comply with state and federal permit requirements, as well as CEQA mandates.

The specific objectives of this report are to:

- Compile and summarize site-specific information related to existing biological resources, utilizing literature reviews, species databases, and field surveys conducted by Terracon across the entire Study Area.
- Infer the potential presence of other biological resources on-site based on habitat suitability and proximity to known species ranges.
- Outline relevant state and federal natural resources protection laws pertinent to the Project's development within the Study Area.

- Assess and discuss project impacts on biological resources within the Study Area, aligning with CEQA and other relevant laws.
- Recommend avoidance and mitigation measures to minimize impacts to a level deemed insignificant under CEQA standards, consistent with resources agency guidelines for affected biological resources.

## 3. 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 (9 topographic quadrangles for CDFW's CNDDDB and CNPS Inventory of Rare and Endangered Plants); and conducting a reconnaissance-level biological field survey of the Study Area. This assessment provides existing biological conditions of the Study Area at the time of the literature review and reconnaissance survey. The methods employed are described in detail below. The findings and opinions conveyed in this report are based on this methodology.

### 3.1 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 (CNDDDB) 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 applicable Habitat Conservation Plans (HCPs), Natural Community Conservation Plans (NCCPs), or other approved local, regional, or state habitat conservation plan that the site may be subject to jurisdiction under. The West Mojave Plan (WMP) was identified to be applicable to the Study Area. The Study Area is located within the boundaries of the WMP; a large-scale habitat conservation and land management plan developed to protect sensitive species and their habitats across the western Mojave Desert Region in California. The plan covers 9.4 million acres of desert lands in San Bernardino, Los Angeles, Inyo, and Kern Counties. It was developed primarily by the Bureau of Land Management (BLM) in coordination with federal, state, and local agencies, including counties, cities, and conservation organizations. Through the WMP, the County of San Bernardino has integrated conservation measures into its land-use planning and permitting processes for projects within the plan area. This partnership allows the county to streamline environmental compliance for projects in accordance with the plan's goals, ensuring both habitat conservation and responsible development.

Therefore, this assessment is informed by the County of San Bernardino land-use planning, permitting, and General Plan processes.

### 3.2 Field Reconnaissance Survey

A field reconnaissance survey was conducted by Terracon biologists, Cailan Patel and Chelsea Robbins on October 16, 2024. These surveys involved observations regarding suitability of habitat or other visual evidence of the federally or state-listed species during a pedestrian survey. Note that this task is to identify if habitat preferred by a threatened and endangered species is present within the Study Area; it is not substitute for a protocol-level survey for specific species, which may be necessary if suitable habitat is determined to be present. GPS data was collected using a Trimble Juno T41, capable of sub-meter accuracy. GPS positions were processed and corrected to analyze data using ArcGIS.

The reconnaissance surveys 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 *Preparing for any Action That May Occur Within the Range of the Mojave Desert Tortoise (Gopherus agassizii)* (USFWS 2018) and burrowing owl survey protocol described in *Staff Report on Burrowing Owl Mitigation* (State of California Natural Resources Agency, Department of Fish and Game, 2012).

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 reference map are provided in **Appendix B** and **Exhibit 10**, respectively.

### 3.3 Western Joshua Tree Census

A western Joshua tree (WJT) census was conducted by Terracon biologists, Cailan Patel and Chelsea Robbins on October 15, 2024. The census was conducted according to the *Census Instructions* in Fish and Game Code section 1927.3, subdivision (a)(1). The entire Study Area and a 50-foot buffer were systematically searched using 10-meter-wide parallel survey transects. This area was searched for visible trees and sprouts that may be underneath shrubs or other existing vegetation. Each WJT (including dead trees) observed within this area was measured using a tape measure. GPS locations of each tree were collected using a Trimble Juno T41, capable of sub-meter accuracy. Photographs of each tree were taken, and trees were flagged in each photo. Mature trees were identified as trees which have produced flowers/fruits in the past. A WJT Census Data Sheet was also filled out with unique identifiers, GPS locations, size classes, actual height, and maturity of each tree as well as whether the tree is dead or alive and how the tree will be impacted by the project. A map was created using GIS showing each tree included in the census and is provided in **Exhibit 11**.

### 3.4 Protocol Level Surveys

Protocol level surveys were conducted to determine the presence or absence of three special-status species: burrowing owl (*Athene cunicularia*), desert tortoise (*Gopherus agassizii*), and Mohave ground squirrel (*Xerospermophilus mohavensis*). These surveys were carried out in accordance with standardized methodologies approved by relevant wildlife agencies. The following subsections summarize the survey methods for each species.

### 3.4.1 Burrowing Owl

Protocol level surveys for burrowing owl were conducted by Terracon biologists, Sarah Winfrey and Ryan Russell. With no historical record of burrowing owl on or within 150 meters of the project site, breeding season surveys were determined to be acceptable for assessing presence or absence of the species (eBirds). Four survey visits were conducted during the 2025 breeding season (April 10, May 1, May 22, and June 16, 2025) within the parameters of highest detection probability for date, time of day, and weather conditions (Conway et al. 2008). The surveys were conducted as outlined in Appendix D of CDFW's *Staff Report on Burrowing Owl Mitigation* (State of California Natural Resources Agency, Department of Fish and Game, 2012). All portions of the site (100% coverage) were surveyed by walking straight-line transects spaced 10 meters apart. At the start of each transect, and at least, every 100 meters, surveyors scanned the entire visible project area for burrowing owls. Private property surrounding the project site was scanned with binoculars to a distance of 150 meters. Surveyors also listened for burrowing owls while conducting the survey. During the survey, each newly detected burrow was recorded.

### 3.4.2 Desert Tortoise

A protocol level desert tortoise survey was conducted by Terracon biologists, Sarah Winfrey and Ryan Russell on April 10, 2025. Surveys were conducted in accordance with the methodology detailed in USFWS *Clearance Survey Protocol for the Mojave Desert Tortoise* (USFWS 2019). Additionally, surveyors looked for signs of desert tortoise when they returned to the site on May 1, May 22, and June 16, 2025, to conduct surveys for another species. Surveys were conducted during the desert tortoise's peak activity season, covering the entire project site (100% coverage). Surveyors walked 40 straight-line transects in a north-south orientation, spaced 10 meters apart. All potential burrows encountered during the survey were recorded.

### 3.4.3 Mohave Ground Squirrel

Protocol level surveys for Mohave ground squirrel were conducted by Meadowlark Ecological Consulting biologist, Dalton Stanfield. Three five-day survey visits were conducted during the 2025 season (March 17–21, May 1–5, and June 16–21, 2025) during daylight hours. The surveys were conducted as described in *California Department of Fish and Wildlife Mohave Ground Squirrel Survey Guidelines* (CDFW 2023).

Survey techniques included visual (camera-trapping) and live-trapping survey visits. Visual surveys covered all potential habitat of the Project area and were done before live-trapping surveys to ensure the best placement of trapping grids. A 100-trap grid (ten by ten trap configuration) spaced 35 meters apart was placed in the survey area.

## 4. Existing Conditions

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.

## 4.1 Topography

The Study Area is in Victorville, California. The United States Geologic Survey (USGS) 7.5-minute Topographic Map of the subject site, Victorville, Hesperia, Baldy Mesa, and Adelanto, 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 3,100 to 3,115 feet. Based on this map, the Study Area does not appear to contain aquatic features. See **Exhibit 2** for the topographic map.

## 4.2 Hydrology

Hydrology of the Study Area and vicinity was evaluated through review of topographic maps, aerial photos, the National Hydrography Dataset (USGS 2024), and the National Wetland Inventory (USFWS 2024), in conjunction with field survey data.

The Study Area is located within the Burkhardt Lake-Mojave River Watershed, Hydrologic Unit Code (HUC) 180902080706 (EPA 2024). Further, it is located within the Upper Mojave River Valley Groundwater Basin (Basin Number 6-042) (CDWR 2024).

Terracon reviewed National Wetland Inventory (NWI) data for the Study Area to identify potential wetland areas. Based on the NWI dataset, the Study Area does not appear to contain wetland features. The nearest features in the vicinity include riverine features approximately 0.35 miles to the east and west, and 0.2 miles to the northwest of the Study Area. 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 an area of minimal flood hazard. The nearest mapped floodplain units are a regulatory floodway approximately 2.3 miles to the north and southeast of the Study Area. The FEMA Floodplain Map for the Study Area is included as **Exhibit 5**.

## 4.3 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 2024).

The Study Area is covered by the *San Bernardino County, California Mojave River Area* (CA671). Within the Study Area, soils are associated with fan remnants. Based on Web Soil Survey data, the Study Area contains one soil map unit, which is briefly described below. The soils map is provided as **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 2024). 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."

The soil map unit identified within the Study Area does not have a hydric soil rating. Additionally, its minor components do not have a hydric soil rating.

### **Bryman loamy fine sand, 2 to 5 percent slopes**

This soil map unit typically occurs in fan remnants. The dominant soil series, Bryman loamy fine sand, is formed from alluvium derived from granite sources. These soils are found at elevations of 3,000 feet to 3,400 feet. This soil series is well drained with a no frequency of flooding or ponding. The depth to the water table is greater than 80 inches and the typical soil profile is loamy fine sand from 0 to 9 inches, sandy clay loam from 9 to 43 inches, and sandy loam from 43 to 60 inches. The minor components within this soil map unit are Cajon, loamy surface; Helendale, Mohave variant, and Bryman, gravelly surface. The dominant soil series and its minor components are not rated as hydric soils.

## 4.4 Climate

The Study Area has an arid climate, characteristic of the California high desert. A nearby weather station in Victorville, California (Victorville, California Weather Station 049325) has recorded weather conditions since 1917 (Western Regional Climate Center (WRCC) 2024). Average high temperatures range from 58.8 degrees Fahrenheit (°F) in January to 98.1°F in July, while average low temperatures range from 29.8°F in January to 60.8°F in July.

Climate data for this weather station indicates that average annual rainfall in the vicinity is approximately 5.52 inches and average annual snowfall is approximately 1.4 inches (WRCC 2024).

## 4.5 Surrounding Land Uses

The Study Area is owned by San Bernardino County and is classified as *Exempt from Assessment*. The assessor class for the Study Area is commercial (San Bernardino County 2024). Primary land uses within the vicinity of the Study Area include single family residential (RL), commercial (GC), and single family residential (RS-1).

## 4.6 Special-status Plants

Based on the database review of IPaC, CNDDDB, and CNPS, Terracon did not identify special-status plant species that required evaluation for potential to occur in the Study Area.

## 4.7 Special-status Wildlife

Based on the database review of IPaC and CNDDDB, Terracon identified 12 special-status wildlife species (threatened, endangered, or candidate threatened/endangered), 14 California Species of Special

Concern or Fully Protected species, and 3 migratory bird species that required evaluation for potential to occur in the Study Area.

The special-status species include monarch butterfly (*Danaus plexippus*), Crotch's bumble bee (*Bombus crotchii*), Mohave ground squirrel (*Xerospermophilus mohavensis*), Mohave tui chub (*Siphateles bicolor mohavensis*), Arroyo toad (*Anaxyrus californicus*), California red-legged frog (*Rana draytonii*), desert tortoise (*Gopherus agassizii*), tricolored blackbird (*Agelaius tricolor*), Swainson's hawk (*Buteo swainsoni*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), southwestern willow flycatcher (*Empidonax traillii extimus*), and least Bell's vireo (*Vireo bellii pusillus*).

The California species listed as Species of Special Concern or Fully Protected that required evaluation Townsend's big-eared bat (*Corynorhinus townsendii*), pallid bat (*Antrozous pallidus*), Mohave river vole (*Microtus californicus mohavensis*), southwester pond turtle (*Actinemys pallida*), coast horned lizard (*Phrynosoma blainvillii*), long-eared owl (*Asio otus*), yellow-breasted chat (*Icteria virens*), loggerhead shrike (*Lanius ludovicianus*), summer tanager (*Piranga rubra*), yellow warbler (*Toxostoma lecontei*), Le Conte's thrasher (*Toxostoma lecontei*), burrowing owl (*Athene cunicularia*), golden eagle (*Aquila chrysaetos*), and gray vireo (*Vireo vicinior*).

The migratory bird species that required evaluation include the California thrasher (*Toxostoma redivivum*), Costa's hummingbird (*Calypte costae*), and Lawrence's goldfinch (*Spinus lawrencei*).

These species and their habitats are listed in **Table 1** and **Table 2** below.

**Table 1.**

**Special-Status Species Potentially Occurring within the Study Area**

<i>Common Name</i>	<i>Scientific Name</i>	<i>Status Fed/CA/ other</i>	<i>Habitat and Seasonal Distribution in California</i>	<i>Habitat Present/ Absent</i>	<i>Likelihood of Occurrence Within the Study Area</i>
<b>Invertebrates</b>					
Monarch Butterfly	<i>Danaus plexippus</i>	FC/--/--	Grasslands and milkweed plants. Low incidence in California during winter. Critically important wintering areas in Coastal California.	HP	<b>Low:</b> Study Area is located within migratory path and monarch butterfly may be present during migration; typically March to August in Study Area region (NPS 2019).
Crotch's Bumble Bee	<i>Bombus crotchii</i>	--/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	<b>Low:</b> Creosote bush-white bursage scrub present in Study Area may provide suitable habitat. Additionally, <i>Eriogonum</i> species observed within Study Area may provide suitable food plants for foraging.
<b>Mammals</b>					

**Special-Status Species Potentially Occurring within the Study Area**

<i>Common Name</i>	<i>Scientific Name</i>	<i>Status Fed/CA/other</i>	<i>Habitat and Seasonal Distribution in California</i>	<i>Habitat Present/Absent</i>	<i>Likelihood of Occurrence Within the Study Area</i>
Mohave Ground Squirrel	<i>Xerospermophilus mohavensis</i>	--/ST/--	Found in chenopod scrub, Joshua tree woodlands, and Mojavean desert scrub.	HP	<b>Low:</b> Creosote bush-white bursage scrub and burrows present in Study Area may provide suitable habitat. Protocol-level surveys were completed and no evidence of species were observed on site.
Townsend's Big-Eared Bat	<i>Corynorhinus townsendii</i>	--/--/SSC, BLMS	Found in broadleaved upland forest, chaparral, chenopod scrub, Great Basin grasslands and scrub, Joshua tree woodland, lower montane coniferous forest, meadows and seeps, Mojavean desert scrub, riparian forests and woodlands, Sonoran desert scrub and thorn woodlands, upper montane coniferous forest, and valley and foothill grasslands almost always near caves or other roosting areas.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.

**Special-Status Species Potentially Occurring within the Study Area**

<i>Common Name</i>	<i>Scientific Name</i>	<i>Status Fed/CA/other</i>	<i>Habitat and Seasonal Distribution in California</i>	<i>Habitat Present/Absent</i>	<i>Likelihood of Occurrence Within the Study Area</i>
Pallid Bat	<i>Antrozous pallidus</i>	--/--/SSC	Found in chaparral, coastal scrub, desert washes, Great Basin grasslands and scrub, Mojavean desert scrub, riparian woodlands, Sonoran desert scrub, upper montane coniferous forests, and valley and foothill grasslands.	HP	<b>Low:</b> Creosote bush-white bursage scrub present in Study Area may provide suitable foraging habitat. <i>Washingtonia</i> species present may provide suitable roosting habitat.
Mohave River Vole	<i>Microtus californicus mohavensis</i>	--/--/SSC	Found in riparian scrub and woodlands.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.
<b>Fish</b>					
Mohave Tui Chub	<i>Siphateles bicolor mohavensis</i>	FE/SE/FP	Found in artificial flowing and standing waters.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.
<b>Amphibians</b>					
Arroyo Toad	<i>Anaxyrus californicus</i>	FE/--/SSC	Found in desert washes, riparian scrub and woodlands, and south coast flowing and standing waters.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.

**Special-Status Species Potentially Occurring within the Study Area**

<i>Common Name</i>	<i>Scientific Name</i>	<i>Status Fed/CA/other</i>	<i>Habitat and Seasonal Distribution in California</i>	<i>Habitat Present/Absent</i>	<i>Likelihood of Occurrence Within the Study Area</i>
California Red-legged Frog	<i>Rana draytonii</i>	FT/--/SSC	Found in artificial flowing and standing waters, freshwater marshes and swamps, riparian forests, scrub, and woodlands, Sacramento/San Joaquin standing waters, south coast flowing and standing waters, and wetlands.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.
<b>Reptiles</b>					
Desert Tortoise	<i>Gopherus agassizii</i>	FT/ST/--	Found in Joshua tree woodland, Mojavean desert scrub, and Sonoran desert scrub.	HP	<b>Low:</b> Creosote bush-white bursage scrub and burrows present in Study Area may provide suitable habitat. Protocol-level surveys were completed and no evidence of species were observed on site.
Southwestern Pond Turtle	<i>Actinemys pallida</i>	PT/--/SSC	Found in ponds, marshes, rivers, streams, and irrigation ditches, usually with aquatic vegetation and in proximity to adequate basking sites.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.

### Special-Status Species Potentially Occurring within the Study Area

<i>Common Name</i>	<i>Scientific Name</i>	<i>Status Fed/CA/ other</i>	<i>Habitat and Seasonal Distribution in California</i>	<i>Habitat Present/ Absent</i>	<i>Likelihood of Occurrence Within the Study Area</i>
Coast Horned Lizard	<i>Phrynosoma blainvillii</i>	--/--/SSC, BLMS	Found in chaparral, cismontane woodlands, coastal bluff scrub, coastal scrub, desert washes, pinyon and juniper woodlands, riparian scrub and woodlands, and valley and foothill grasslands.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.
<b>Birds</b>					
Long-eared Owl	<i>Asio otus</i>	--/--/SSC	Found in cismontane woodlands, Great Basin scrub, riparian forests and woodlands, and upper montane coniferous forests.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.
Tricolored Blackbird	<i>Agelaius tricolor</i>	--/ST/SSC	Found in freshwater marshes, swamps, and wetlands.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.
Swainson's Hawk	<i>Buteo swainsoni</i>	--/ST/--	Found in Great Basin grasslands, riparian forests and woodlands, and valley and foothill grasslands.	HP	<b>Low:</b> Study Area located within migratory path of Swainson's hawk.
Western Yellow-billed Cuckoo	<i>Coccyzus americanus occidentalis</i>	FT/SE/--	Found in riparian forests.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.
Southwestern Willow Flycatcher	<i>Empidonax traillii extimus</i>	FE/SE/--	Found in riparian woodlands.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.

**Special-Status Species Potentially Occurring within the Study Area**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Status Fed/CA/other</b>	<b>Habitat and Seasonal Distribution in California</b>	<b>Habitat Present/Absent</b>	<b>Likelihood of Occurrence Within the Study Area</b>
Yellow-breasted Chat	<i>Icteria virens</i>	--/--/SSC	Found in riparian forests, scrub, and woodlands.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.
Loggerhead Shrike	<i>Lanius ludovicianus</i>	--/--/SSC	Found in broadleaved upland forests, desert washes, Joshua tree woodlands, Mojavean desert scrub, pinyon and juniper woodlands, riparian woodlands, and Sonoran Desert scrub	HP	<b>Low:</b> Creosote bush-white bursage scrub present in Study Area may provide suitable habitat.
Summer Tanager	<i>Piranga rubra</i>	--/--/SSC	Found in riparian forests	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.
Yellow Warbler	<i>Setophaga petechia</i>	--/--/SSC	Found in riparian forests, scrub, and woodlands.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.
Le Conte's Thrasher	<i>Toxostoma lecontei</i>	--/--/SSC, BLMS	Found in desert washes, Mojavean desert scrub, and Sonoran desert scrub.	HP	<b>Low:</b> Creosote bush-white bursage scrub present in Study Area may provide suitable habitat.
Least Bell's Vireo	<i>Vireo bellii pusillus</i>	FE/SE/--	Found in riparian forests, riparian scrub, and riparian woodlands.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.

**Special-Status Species Potentially Occurring within the Study Area**

<i>Common Name</i>	<i>Scientific Name</i>	<i>Status Fed/CA/ other</i>	<i>Habitat and Seasonal Distribution in California</i>	<i>Habitat Present/ Absent</i>	<i>Likelihood of Occurrence Within the Study Area</i>
Burrowing Owl	<i>Athene cunicularia</i>	--/--/SSC, BLMS	Found in wide-open, sparsely vegetated areas like praries, deserts, grasslands, and agricultural fields.	HP	<b>Low:</b> Sparsely vegetated desert scrub containing mammal burrows present in Study Area may provide suitable habitat. Protocol-level surveys were completed and no evidence of species were observed on site.
Golden Eagle	<i>Aquila chrysaetos</i>	--/--/ FP, BLMS	Found in broadleaved upland forest, cismontane woodlands, coastal praries, Great Basin grasslands and scrub, lower montane coniferous forest, pinyon and juniper woodlands, upper montane coniferous forests, and valley and foothill grasslands.	HP	<b>Low:</b> Sparsely vegetated desert scrub present in Study Area may provide suitable habitat.
Gray Vireo	<i>Vireo vicinior</i>	--/--/SSC	Found in chaparral.	A	<b>Not Expected:</b> Suitable habitat not present in Study Area.

**SOURCE:**



- CDFW Natural Diversity Database (CNDDDB), October 2024 for the U.S. Geological Survey's (USGS) 7.5-minute Victorville quadrangle and eight surrounding quadrangles, and Riverside County.
- California Native Plant Society (CNPS), October 2024 for the U.S. Geological Survey's (USGS) 7.5-minute Victorville quadrangle and eight surrounding quadrangles.
- U.S. Fish and Wildlife Service (USFWS), October 2024 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
SPD	State-Proposed for Delisting
S	State Sensitive
SR	State Rare
SC	State Candidate
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.
BLMS	Bureau of Land Management Sensitive

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 potential 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., CNDDDB, 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, disturbance regime). The species is not expected to be found on the site.

## 4.8 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 and CNDDDB database review, Terracon identified the following migratory Bird of Conservation Concern that may require evaluation for potential to occur in the Study Area. The species are 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
California Thrasher ( <i>Toxostoma redivivum</i> )	Yes	Breeds Jan 1 to Jun 31
Costa's Hummingbird ( <i>Calypte costae</i> )	Yes	Breeds Jan 15 to Jun 10
Lawrence's Goldfinch ( <i>Spinus lawrencei</i> )	Yes	Breeds Mar 20 to Sep 20

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

## 5. Biological Survey Results

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

### 5.1 Vegetation

Terracon biologists mapped one natural vegetation communities within the Study Area: Creosote Bush – White Bursage Scrub (*Larrea tridentata* – *Ambrosia dumosa* Shrubland Alliance) (CNPS 2024). The creosote bush—white bursage scrub community consists primarily of *Larrea tridentata* dominant covering the majority of the Study Area. A brief description of this natural community and other areas present in the Study Area are provided below.

Vegetation observed within the Study Area consisted primarily of desert scrub species, dominantly creosote (*Larrea tridentata*). Additional species observed among this dominant species include but are

not limited to Joshua tree (*Yucca brevifolia*), white bursage (*Ambrosia dumosa*), Mediterranean grass (*Schismus barbatus*), oleander (*Nerium oleander*), ephedra (*Ephedra* sp.), California buckwheat (*Eriogonum fasciculatum*), London rocket (*Sisymbrium irio*), compact brome (*Bromus madritensis*), cholla (*Cylindropuntia* sp.), rubber rabbitbrush (*Ericameria nauseosa*), Santa-Rita prickly pear (*Opuntia santa-rita*), sacred datura (*Datura wrightii*), Russian prickly thistle (*Salsola tragus*), cheesebush (*Ambrosia salsola*), wattle (*Acacia* sp.), doveweed (*Croton setiger*), eucalyptus (*Eucalyptus* sp.), Chinese pistache (*Pistacia chinensis*), spotted spurge (*Euphorbia maculata*), golden torch cactus (*Trichocereus spachianus*), California fan palm (*Washingtonia californica*), blue palo verde (*Parkinsonia florida*), mesquite (*Prosopis* sp.), tobacco (*Nicotiana* sp.), olive (*Olea europaea*), century plant (*Agave americana*), single-leaf pinyon (*Pinus monophylla*), paperbag bush (*Scutellaria mexicana*), flatspine bursage (*Ambrosia acanthocarpa*), bud sagebrush (*Artemisia spinescens*), whitemargin sandmat (*Euphorbia albomarginata*), Chinaberry (*Melia azedarach*), and Chinese arborvitae (*Platycladus orientalis*).

### **Creosote Bush—White Bursage Scrub – *Larrea tridentata*—*Ambrosia dumosa* Shrubland Alliance**

This community is defined as having *Ambrosia dumosa* and *Larrea tridentata* as co-dominant in the shrub canopy with *Ambrosia salsola*, *Amphipappus fremontii*, *Atriplex confertifolia*, *Atriplex hymenelytra*, *Atriplex polycarpa*, *Bebbia juncea*, *Croton californicus*, *Cylindropuntia acanthocarpa*, *Cylindropuntia ramosissima*, *Dalea mollissima*, *Echinocactus polycephalus*, *Encelia farinosa*, *Encelia virginensis*, *Ephedra* sp., *Eriogonum fasciculatum*, *Krameria* sp., *Lepidium fremontii*, *Lycium andersonii*, *Psoralea sp.*, *Salazaria mexicana*, *Senna armata*, *Viguiera parishii*, and *Yucca shidigera*. Emergent trees or tall shrubs in this community may be present at low cover, including *Fouquieria splendens* or *Yucca brevifolia*.

Membership rules for this community may include *Ambrosia dumosa* and *Larrea tridentata*  $\geq 1\%$  absolute cover in the shrub canopy with both species exceeding 2x the cover of other shrub species (CNPS 2024). Additionally, both *Larrea tridentata* and *Ambrosia dumosa*  $\geq 1\%$  absolute cover in the shrub canopy; *Ambrosia dumosa* may be higher cover than *Larrea tridentata*. No shrub with cover greater than *Larrea tridentata* or *Ambrosia dumosa* with the following exceptions: *Acamptopappus sphaerocephalus*, *Bebbia juncea*, *Cylindropuntia acanthocarpa*, *Ephedra nevadensis*, *Ericameria teretifolia*, or *Krameria* spp. may have higher cover, but no more than 3 times (CNPS 2024).

It should be noted that the majority of the Study Area is comprised of the creosote bush—white bursage scrub vegetation community, at approximately 22.40 acres of the total 31.9 acres of the Study Area.

## **5.2 General Wildlife**

The creosote bush-white bursage scrub vegetation community and surrounding areas observed within the Study Area have the potential to support a variety of wildlife. Wildlife species observed included house finch (*Haemorhous mexicanus*), common raven (*Corvus corax*), black-tailed jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus audubonii*), and fence lizard (*Sceloporus occidentalis*). Small mammal and reptile burrows were observed throughout the Study Area. Many of these burrows appeared to be inactive. Additionally, one relatively large burrow that has potential to support desert tortoise and burrowing owl was observed within the western portion of the Study Area. Observed biological resources are displayed in **Exhibit 7**. Additional protocol-level surveys were completed for desert tortoise and burrowing owl, with no individuals or signs of presence of either species detected.

## 5.3 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 any 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 CNDDDB. 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., CNDDDB, 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 CNDDDB query for the Study Area respectively.

### 5.3.1 Special-Status Wildlife Species

Terracon evaluated 26 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 Fully Protected (FP). Referenced occurrence data is displayed in **Exhibit 9a & Exhibit 9b**.

#### Monarch Butterfly

The Study Area is located in the migratory path of the monarch butterfly, however, no *Asclepias* species were observed within the Study Area, and will likely not make use of the Study Area to breed. The Study Area contains a wide variety of flowering plant species that may provide a nectar food source for this species during its migration. Therefore, if present, the monarch butterfly would likely be for a short period of time (Reppert & Roode 2018). Therefore, the monarch butterfly has a low potential to occur within the Study Area.

### **Crotch's Bumble Bee**

Crotch's bumble bee has been reported through the CNDDDB and there is one recorded occurrence approximately 12.7 miles to the northeast of the Study Area (Occurrence No. 171, 1944). Although there are no recent occurrences of this species within the vicinity, the Study Area contains desert scrub, specifically creosote bush-white bursage scrub within the Mojave Desert, which provides suitable habitat for this species of bee (Hatfield and Jepsen 2021). Additionally, the typical food-plant species for this bee include *Asclepias*, *Chaenactis*, *Medicago*, *Phacelia*, *Salvia*, *Clarkia*, *Eriogonum*, *Lupinus*, *Papaver*, etc. (IUCN 2024 & LPF 2013). *Eriogonum fasciculatum* was observed within the Study Area and may provide this species with forage, however, its cover is very sparse and therefore, the Crotch's bumble bee has a low potential to occur within the Study Area.

### **Mohave Ground Squirrel**

The Mohave ground squirrel is found only in the western Mojave Desert of California, found from the area of Palmdale and Victorville in the south to Owens Lake in the North (Leitner 2008). Optimal habitats for this species include open desert scrub, alkali desert scrub, Joshua tree woodlands, and annual grasslands, burrowing at the bases of shrubs for cover (Johnson 2019). The CNDDDB contains multiple recorded occurrences of this species within the vicinity of the Study Area approximately 4.7 miles to the northwest, 4.2 miles to the southwest, 1.6 miles to the south, and 4.5 miles to the northeast (Occurrence No. 372, 2011; No. 318, 2005; No. 11, 1977; and 47, 1919; respectively). The San Bernardino County Biotic Resources Overlay shows the Study Area to be in an area of Mohave ground squirrel habitat. The Study Area contains open desert scrub habitat with many small mammal burrows, which provides suitable habitat for this species.

No evidence, including Mohave ground squirrel (live or photographed), vocalizations, or scat, was observed during the three survey visits conducted on March 17–21, May 1–5, and June 16–21. Therefore, the Mohave ground squirrel has low potential to occur within the Study Area.

### **Townsend's Big-eared Bat**

Townsend's big-eared bat is associated with areas containing caves and cave-analogs for roosting habitat, and beyond this roosting habitat requirement, are found foraging in a wide range of dry upland habitat types throughout the western United States (Gruver & Keinath 2006). The CNDDDB contains two recorded occurrences of this species approximately 14.1 miles to the east and 6.6 miles to the northeast (Occurrence No. 302, 1930 and No. 18, 1955). The Study Area does not contain suitable roosting habitat for this species, and although there is a possibility of this bat foraging within the Study Area, it is likely to be for very short periods of time at night. Therefore, the Townsend's big-eared bat is not expected to occur within the Study Area in a manner that impacts will occur to the species.

### **Pallid Bat**

The pallid bat occupies a wide range of habitats including grasslands, shrublands, woodlands, and forests, and most commonly found in open, dry habitats with rocky areas for roosting (Harris 1998). Roosting habitat for this species typically consists of caves, crevices, mines, hollow trees, and buildings, however, trees with exfoliating bark, cracks, and other crevices, along with palm trees have been known to be used as roosting habitat (Byrnes 2022 & Sabiston 2018). The CNDDDB contains one recorded occurrence of this species approximately 6.9 miles to the southeast of the Study Area (Occurrence No. 429, 2016). The Study Area contains California fan palms, which have a low potential to support roosting

pallid bats. Additionally, the desert scrub vegetation within the Study Area provides suitable foraging habitat. Therefore, the pallid bat has a low potential to occur within the Study Area.

### **Mohave River Vole**

The Mojave River vole is found in moist habitats including meadows, freshwater marshes, and irrigated pastures in areas surrounding the Mojave River between Victorville and Helendale, California (SBC 2024). The CNDDDB contains recorded occurrences of this species approximately 5 miles to the northeast and 5.5 miles to the east of the Study Area (Occurrence No. 6, 2010 and No. 1, 1967, respectively). The recorded occurrences are associated with the Mojave River. The Study Area consists entirely of desert scrub habitat, which is not appropriate for this species. Therefore, the Mojave River vole is not expected to occur within the Study Area.

### **Mohave Tui Chub**

The Mohave tui chub is a species of fish that requires aquatic habitats. The Study Area consists entirely of uplands and does not contain aquatic habitat. Therefore, the Mohave tui chub is not expected to occur within the Study Area.

### **Arroyo Toad**

The arroyo toad is found in semi-arid regions near washes and intermittent streams utilizing habitats including desert riparian, desert washes, palm oases, Joshua tree woodlands, mixed chaparral, and sagebrush (Simon 2005). The CNDDDB contains two recorded occurrences approximately 5 miles and 5.5 miles northeast of the Study Area (Occurrence No. 133, 1979 and No. 132, 1956, respectively). The Study Area contains desert scrub with a few individual Joshua trees, however the Study Area is not in proximity to appropriate breeding habitat for this species. This species is thought to only travel short distances from their upland habitat to breeding sites (Simon 2005), and therefore, the arroyo toad is not expected to occur within the Study Area.

### **California Red-legged Frog**

The California red-legged frog is found in aquatic habitats and surrounding uplands including marshes, creeks, and ponds with standing water for breeding. It relies on riparian and upland habitats with dense vegetation and open areas for cover outside of its aquatic habitat (CBD 2024). The CNDDDB contains one recorded occurrence approximately 5 miles to the northeast of the Study Area (Occurrence No. 13, unknown date). This occurrence is associated with the Mojave River approximately 5 miles east of the Study Area. The Study Area does not contain appropriate aquatic habitat to support breeding of this species, and there does not appear to be appropriate breeding habitat within the vicinity of the Study Area. Therefore, the California red-legged frog is not expected to occur within the Study Area.

### **Desert Tortoise**

The desert tortoise is found in the Mojave and Colorado-Sonoran Desert in creosote scrub, cactus scrub, shadscale scrub, Joshua tree woodlands, Sonoran Desert Scrub, seaside scrub thornbush, and Sinaloan deciduous forest plant communities (Grover & DeFalco 1995). This species uses burrows for shelter against extreme temperatures in dry, gravelly soil beneath creosote bushes or other large desert scrub shrubs (CDPR 2024). The Study Area contains desert scrub, specifically creosote bush—white bursage scrub, and contains burrows throughout. The vegetation and burrows within the Study Area are

appropriate habitat for this species. Additionally, one large burrow with potential for harboring desert tortoise was observed in the western portion of the Study Area.

The CNDDDB contains multiple occurrences of desert tortoise approximately 2.3 miles to the north, 4.5 miles to the northeast, and 6.3 miles to the north and northeast (Occurrence No. 51, 2007; No. 1003, 2018; No. 68, 2005; and 142, 2008; respectively). The San Bernardino County Biotic Resources Overlay shows the Study Area to be in a sparse population area for desert tortoise. However, the DRECP Habitat Model shows the Study Area to be within predicted range of this species (CBI 2014).

Although these recorded occurrences are not within the immediate vicinity of the Study Area, the vegetation and burrows present within the Study Area provide suitable habitat for this species and the Study Area is within a sparse population area and within predicted habitat of this species.

No evidence, including live desert tortoise, scat, carcasses, eggshells, or Class 1-3 burrows, was observed during the site visit conducted on April 10, 2025. Twelve uninhabited possible desert tortoise burrows (Class 4) were documented on site. Surveyors returned to the site on May 1, May 22, and June 16, 2025, to conduct surveys for other species and found no new incidental observations of desert tortoise occupancy on the site. Protocol-level survey results for desert tortoise are detailed in **Appendix G**. Therefore, the desert tortoise has a low potential to occur within the Study Area.

### **Southwestern Pond Turtle**

The southwestern pond turtle is found in aquatic habitats and surrounding uplands including ponds, marshes, rivers, streams, and irrigation ditches, with adequate basking sites and suitable upland habitat up to 0.3 miles from water for breeding (UCSC 2024). The CNDDDB does not contain recorded occurrences within the vicinity of the Study Area. The Study Area contains primarily desert scrub and is not within the vicinity of appropriate aquatic habitat for this species. Therefore, the southwestern pond turtle is not expected to occur within the Study Area.

### **Coast Horned Lizard**

The coast horned lizard inhabits open areas with sandy soils and low-growing vegetation in valleys, foothills, and semi-arid mountains in a wide range of habitats including grasslands, coniferous forests, and chaparral with open areas (Stebbins 1972). This species is often found feeding near ant hills in open, sandy areas in valleys foothills, and semi-arid mountains (NPS 2022). The CNDDDB contains multiple recorded occurrences within the vicinity of the Study Area approximately 4.6, 6.7, and 10.6 miles to the southeast, 7 miles to the north, and 8.3 miles to the southwest (Occurrence No. 217, unknown; No. 782, 1919; No. 405, 1978; No. 215, unknown date; and No. 224, 1992). There are, however, no recent recorded occurrences of this species within the vicinity of the Study Area. Additionally, the range of this species is extremely fragmented due to land alteration causing the destruction of appropriate habitat (Brattstrom 2013). Therefore, the coast horned lizard is not expected to occur within the Study Area.

### **Long-eared Owl**

The long-eared owl is primarily found in woodlands and conifer groves with dense tree cover for roosting and nesting and open areas such as meadows for foraging. This species can occupy forests with meadows, conifer or deciduous forests near prairies, and even desert groves nearby streams (Audubon 2024). Additionally, the long-eared owl is known to avoid unbroken forest. The CNDDDB contains one recorded occurrence within the vicinity of the Study Area approximately 9.2 miles to the southeast

(Occurrence No. 27, 1949). The Study Area does not contain forest habitats and therefore, the long-eared owl is not expected to occur within the Study Area.

### **Tricolored Blackbird**

The tricolored blackbird is found in wetlands, freshwater marshes, alkali flats, native grasslands, riparian forests, and oak savannahs usually with nearby surface waters (Shuford & Gardali 2008). The CNDDDB contains one recorded occurrence of this species approximately 5.4 miles to the northeast of the Study Area (Occurrence No. 760, 2014). This occurrence, however, is in close proximity to the Mojave river, which likely provides the species with suitable habitat. There does not appear to be any surface water sources within the immediate vicinity of the Study Area and the desert scrub vegetation present does not provide suitable habitat for this species. Therefore, the tricolored blackbird is not expected to occur within the Study Area.

### **Swainson's Hawk**

Swainson's hawk is adapted to open grasslands and often nests near riparian habitats, but will also use trees near agricultural fields or pastures and roadside trees adjacent to suitable foraging habitat (CDFW 2024). This species is a migratory bird that breeds in North America and overwinters in South America (Kochert et al. 2011). The Study Area is located in the migratory path of this hawk and has potential to provide foraging ground along its migration. Therefore, Swainson's hawk has a low potential to occur within the Study Area.

### **Western Yellow-billed Cuckoo**

The western yellow-billed cuckoo is a riparian species found in native forests near rivers and streams within the United States, most often using *Populus* species as breeding habitat although other riparian tree species can provide breeding habitat as well, such as *Alnus*, *Acer*, *Prosopis*, *Juglans*, *Platanus*, *Quercus*, *Celtis*, *Fraxinus*, *Sambucus*, *Baccharis*, and occasionally *Tamarix* species (NPS 2024a). This species requires large, contiguous areas of riparian habitat for nesting and migration and wintering habitat is known to include a wide range of habitats such as coastal scrub, second-growth forests and woodlands, hedgerows, forest edges, and smaller riparian areas. Wintering individuals of this species, however generally use woody lowland vegetation near fresh water (NPS 2024a). The CNDDDB contains one recorded occurrence of this species approximately 5.6 miles to the east of the Study Area (Occurrence No. 138, 1978). This occurrence was in close proximity to the Mojave River, which likely contains riparian vegetation to support this species. The Study Area does not contain riparian vegetation and is not in proximity to a fresh water source, and therefore, the western yellow-billed cuckoo is not expected to occur within the Study Area.

### **Southwestern Willow Flycatcher**

The southwestern willow flycatcher is primarily found in broad, open river valleys or large mountain meadows with dense areas of *Salix* species (Serena 1982). This species is found primarily in riparian habitats throughout the state of California, with the requirement of *Salix* for nesting (Remsen 1978). The CNDDDB contains one recorded occurrence within the vicinity of the Study Area approximately 5.5 miles to the northeast (Occurrence No. 36, 1990). This occurrence is in close proximity of the Mojave River, which likely contains the riparian vegetation required to support this species. The Study Area does not contain *Salix* species or other riparian vegetation, and therefore, the southwestern willow flycatcher is not expected to occur within the Study Area.

### **Yellow-breasted Chat**

The yellow-breasted chat is found in valley foothill riparian and desert riparian habitats (Gaines 1977b). This species requires thickets of *Salix* species and other riparian species for cover and are found near watercourses (Green 2005). The CNDDDB contains one recorded occurrence approximately 5.5 miles east of the Study Area (Occurrence No. 55, 1990). This occurrence is in close proximity of the Mojave River, which likely contains the riparian vegetation required to support this species. The Study Area does not contain *Salix* species or other riparian vegetation, and therefore, the yellow-breasted chat is not expected to occur within the Study Area.

### **Loggerhead Shrike**

The loggerhead shrike is found in a wide range of habitats including open-canopied valley foothill hardwood and hardwood-conifer, valley foothill riparian, pinyon juniper, juniper, desert riparian, and Joshua tree woodlands (Granholm 1996). This species nests on branches of shrubs or trees, requiring dense foliage for cover (Miller 1931). The CNDDDB contains multiple recorded occurrences within the vicinity of the Study Area approximately 2 miles to the north, 3.9 miles to the southwest, 5.2 miles to the northeast, and 6.2 miles to the east (Occurrence No. 56, 2005; No. 53, 2007; No. 54, 2006; and No. 55, 2006; respectively). The Study Area consists primarily of desert scrub and contains multiple Joshua trees throughout, which may provide suitable foraging habitat, however it is unlikely that nesting individuals would occur within the Study Area. Therefore, the loggerhead shrike has a low potential to occur within the Study Area.

### **Summer Tanager**

The summer tanager is found in desert riparian habitats dominated by *Populus* and *Salix* species (Dobkin 2008). This species makes use of these riparian trees and shrubs along rivers and streams for nesting, foraging, and general cover. The CNDDDB contains two recorded occurrences within the vicinity of the Study Area approximately 5.6 miles east and 5.7 miles northeast (Occurrence No. 19, 1990 and No. 18, 1986). This occurrence is in close proximity of the Mojave River, which likely contains the riparian vegetation required to support this species. The Study Area does not contain riparian vegetation to support this species, and therefore, the summer tanager is not expected to occur within the Study Area.

### **Yellow Warbler**

The yellow warbler is typically found in deciduous riparian habitats containing *Populus*, *Salix*, *Alnus* species and other riparian shrub and tree species typically of low, open canopy riparian woodlands (Green 2005a). This species breeds in deciduous saplings or shrubs which provide cover during nesting but is also known to breed in montane chaparral and open ponderosa pine and mixed conifer habitats with substantial amounts of brush (Green 2005a). The CNDDDB contains two recorded occurrences within the vicinity of the Study Area approximately 5.5 miles northeast and 9 miles south (Occurrence No. 102, 2016 and No. 29, 1953). The Study Area does not contain riparian vegetation to support this species, and therefore, the yellow warbler is not expected to occur within the Study Area.

### **Le Conte's Thrasher**

Le Conte's thrasher primarily occurs in open desert washes, desert scrub, alkali desert scrub, and desert succulent shrub habitats along with Joshua tree habitat with scattered shrubs (Dobkin & Granholm 2005). This thrasher uses scattered desert shrubs and cactus for cover, primarily *Atriplex* and *Cholla* species. The CNDDDB contains multiple recorded occurrences of this species within the vicinity of the

Study Area approximately 2.1 miles north, 4.7 miles and 5.4 miles to the northeast, and 6.9 miles to the southeast (Occurrence No. 259, 1990; No. 252, 2017; No. 21, 1921; and No. 17, 1917; respectively). The Study Area contains desert scrub and Joshua trees are present throughout, providing suitable habitat for this species. Therefore, Le Conte's thrasher has a low potential to occur within the Study Area.

### **Least Bell's Vireo**

The least Bell's vireo is a riparian species that depends on low-growing thickets of *Salix*, *Artemisia vulgaris*, *Rosa californica*, and *Baccharis salicifolia* with an overstory of taller *Salix*, *Populus*, and *Platanus* are present (CBD 2024a). The CNDDDB contains four recorded occurrences within the vicinity of the Study Area approximately 6.16 miles, 5.7 miles, 5.2 miles, 5 miles, and 5.5 miles to the northeast (Occurrence No. 331, 2004; No. 265, 2005; No. 340, 2009; No. 341, 2009; and No. 342, 2013; respectively). These occurrences is in close proximity of the Mojave River, which likely contains the riparian vegetation required to support this species. The Study Area does not contain riparian vegetation to support this species, and therefore, the least Bell's vireo is not expected 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 (Polite 1999). These owls depend on pre-existing burrows made by other animals, particularly ground squirrels, which they adapt for their own shelter.

The CNDDDB contains may recorded occurrences within the vicinity of the Study Area approximately 0.5 miles and 1.2 miles southwest, 0.8 miles and 2.1 miles northwest, 1.6 miles and 1.8 miles northeast (Occurrence No. 672, 2004; No. 645, 2004; No. 828, 2009; No. 736; 2006; No. 803, 2007; and 1607, 2007; respectively). The San Bernardino County Biotic Resources Overlay shows the Study Area to be in an area of burrowing owl habitat, and the DRECP shows the Study Area to be within the predicted habitat of this species (CBI 2013).

The Study Area contains many burrows, some of which are large enough to support burrowing owls during nesting season. Additionally, the Study Area is located within predicted and modeled habitat for this species.

No evidence of occupancy by burrowing owls, including burrowing owls, pellets, prey remains, whitewash, or decoration, was observed. A total of 18 unique burrow locations were recorded by surveyors over the four survey visits on April 10, May 1, May 22, and June 16, 2025. Potential burrowing owl burrows were determined by the presence of one or more burrowing owls, pellets, prey remains, whitewash, or decoration, or a burrow with a diameter greater than 11 centimeters (height and width) and greater than 150 centimeters in depth (Johnson et al. 2010). Of the 18 burrows detected, nine met the minimum height measurement of 11 centimeters, seven met the minimum measurement of 11 centimeters in both width and height, and none of the burrows detected met the depth minimum of 150 centimeters. Protocol-level survey results for burrowing owl are detailed in **Appendix H**. Therefore, the burrowing owl has a low potential to occur within the Study Area.

### **Golden Eagle**

The golden eagle can be found in a wide range of habitats including tundra, grasslands, intermittent forests and woodlands to arid deserts and canyons (USFWS 2024). When found in deserts, this species typically uses areas with sparse vegetation. This species nests on cliffs and large trees in open areas (Polite & Pratt 2001). The CNDDDB contains one recorded occurrence within the vicinity of the Study Area approximately 4.7 miles to the northeast (Occurrence No. 317, 1927). The Study Area is located in the Mojave Desert and contains desert scrub with areas of sparse vegetation, which may provide suitable foraging habitat for this species. However, the Study Area does not contain appropriate nesting habitat for this species, and therefore, if present the golden eagle would likely only use the site for short periods of time. Therefore, the golden eagle has a low potential to occur within the Study Area.

### **Gray Vireo**

The gray vireo is found in pinyon-juniper, juniper, and chamise-redshank chaparral habitats in the mountains of Southern California (Gaines 2008a). This species nests in shrubs or small trees and breeding individuals are found in arid, shrub-covered slopes with sparse to moderate vegetative cover and small trees. The CNDDDB contains 2 recorded occurrences in the vicinity of the Study Area approximately 6.9 miles and 9.2 miles to the southeast (Occurrence No. 34, 1937 and No. 27, 1949). The Study Area does not contain the appropriate vegetation community to support this species, and therefore, the gray vireo is not expected to occur within the Study Area.

### **Migratory Birds**

The Study Area contains foraging habitat for a variety of native avian species common to the region. Additionally, vegetation present within the vicinity of the Study Area may provide suitable nesting habitat. 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 September in the region for the migratory birds of conservation concern listed in **Table 2**, above.

#### **5.3.2 Sensitive Plant Communities, Critical Habitats, and Habitat Connectivity**

Based on the database review of IPaC, CNDDDB, and CNPS, Terracon did not identify special-status or protected plant species that required evaluation for potential to occur in the Study Area.

Federally-designated critical habitat for the southwestern willow flycatcher was identified approximately 5.5 miles to the northeast of the Study Area. Additionally, the nearest Federally-designated critical habitat for arroyo toad was identified approximately 12.5 miles to the south of the Study Area. Federally-designated critical habitat for the desert tortoise was also identified approximately 15 miles to the north of the Study Area. Finally, Federally-designated critical habitat for the mountain yellow legged frog was identified approximately 21 miles to the southwest of the Study Area. The Study Area, however, does not contain Federally-designated critical habitat. The Critical Habitat Map is displayed as **Exhibit 6**.

The Study Area is not located in a California Essential Habitat Connectivity (CEHC) area. The nearest CEHC area to the Study Area is approximately 13 miles to the south. The CEHC Map is displayed as **Exhibit 8**.

### 4.3.3 Jurisdictional 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 <4.6% in extremely arid areas such as the Sonoran and Mojave Deserts, decreased from the approximately 30% coverage that was estimated to be present in the 1850s (USACE 2008).

During the survey, a plant species list (provided in **Section 5.1**) 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 *Upland* or *Facultative Upland*. Hydrology indicators were observed towards the western and southern portion of the Study Area, specifically *Drainage Patterns*. These were observed as a drainage feature and an upland swale, respectively. These features were nearly unvegetated, and the vegetation that was present was typical of the desert scrub throughout the Study Area. Additionally, these features did not contain a relatively-permanent surface water connection to a navigable water, and therefore are not likely to be federally-jurisdictional. These features are displayed in **Exhibit 7**.

The NWI database did not identify aquatic features within the Study Area. Additionally, the Study Area was identified in a FEMA-designated *Area of Minimal Flood Hazard*.

The Study Area does not appear to have a relatively-permanent surface water connection to a navigable water, and therefore, is not likely to contain Federally-jurisdictional waters or wetland features.

## 6. 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)
- Central Valley 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)
- County of San Bernardino General Plan

### **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 regulate 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. Any fill of wetland 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 an 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 offense 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 intended 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 rare. 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 Bernadino Countywide General Plan

The San Bernadino 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 Bernadino County during the decision-making process for any project that could impact biological resources. The San Bernadino 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:

*§ 82.11.020 Biotic Resources (BR) Overlay – Location Requirements*

The BR Overlay shall be applied to areas that have been identified by a County, State, or Federal agency as habitat for species of unique, rare, threatened, or endangered plants or animals or their habitats listed in the General Plan. The overlay applies to policy areas on the Open Space Overlay.

*§ 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 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, nolin, yucca)
- (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)

## 7. Limitations, Assumptions, and Use Reliance

This Biological Resources 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 CNDDDB, 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.

## 8. Impacts and Recommendations

Implementation of the proposed Project in the natural desert scrub habitats 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 San Bernardino County in coordination with USFWS and CDFW.

### 8.1 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 primarily composed of one natural vegetation community. This vegetation community has been identified as the creosote bush—white bursage scrub community. 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, impacts would be reduced to a ***less than significant level***.

Additionally, as described above, the Study Area contains western Joshua trees. Therefore, in the event that removal of Joshua trees is necessary for Project activities, the Project would be ***potentially significant, absent mitigation***. Attainment of an Incidental Take Permit for western Joshua tree and payment of CDFW mitigation fees for Joshua tree removal, would bring Project impacts to a ***less than significant*** level.

#### 8.1.1 Special-Status Wildlife Species

No special-status species were observed within the Study Area during the field surveys. However, portions of the Study Area exhibit low potential to support suitable habitat for monarch butterfly, Crotch's bumble bee, Mohave ground squirrel, pallid bat, desert tortoise, Swainson's hawk, loggerhead shrike, Le Conte's thrasher, and burrowing owl. This low potential is attributed to the limited presence of habitat components, and/or the majority of unsuitable or very poor-quality habitat on and adjacent to the site, making it unlikely that these species occur within the area. It is supported by negative findings for completed protocol-level species surveys for Mohave ground squirrel, desert tortoise, and

burrowing owl. No USFWS-designated critical habitat for Federally listed wildlife species is mapped within the Study Area. Therefore, 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 impacted directly or indirectly.

### **Desert Tortoise Impacts**

The majority of the Study Area contains the undisturbed creosote bush—white bursage scrub vegetation community and therefore, providing suitable habitat for the desert tortoise. Additionally, one potential desert tortoise burrow was observed during the existing conditions surveys detailed in **Appendix A (Exhibit 7)**. Protocol-level surveys for desert tortoise were conducted in accordance with the USFWS *Clearance Survey Protocol for the Mojave Desert Tortoise* (USFWS 2019) in areas with this vegetation community. No evidence, including live tortoise, scat, carcasses, eggshells, or Class 1-3 burrows, was observed during the survey.

### **Burrowing Owl Impacts**

The majority of the Study Area contains undisturbed natural desert scrub vegetation community with areas of low vegetation cover, therefore providing suitable burrowing and foraging habitat for burrowing owl. Protocol-level surveys were conducted for burrowing owls in accordance with the DFG's *Staff Report on Burrowing Owl Mitigation* (DFG 2012). No evidence of occupancy of burrowing owls, including burrowing owls, pellets, prey remains, whitewash, or decoration, was observed during the surveys.

### **Mohave Ground Squirrel Impacts**

The majority of the Study Area contains the undisturbed creosote bush—white bursage scrub vegetation community and therefore, the greatest potential to support the Mohave ground squirrel. Additionally, these areas of the Study Area contain burrows throughout. Protocol-level surveys were conducted for Mohave ground squirrel in accordance with the CDFW *Mohave Ground Squirrel Survey Guidelines* (CDFW 2023). There was no evidence of Mohave ground squirrel during the surveys.

### **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.

#### **8.1.2 Avian Impacts**

Common bird species were observed within the Study Area and vicinity. No nests were observed during the site reconnaissance, however, suitable nesting habitat for migratory birds 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 BGEPA and 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.

## 8.2 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 primarily characterized by one main vegetation community: creosote bush—white bursage scrub. This community is not considered a sensitive natural community. Native habitats, including riparian habitats and other communities designated by the CDFW as sensitive do not occur within the Study Area. Considering this information, the Project’s impacts on existing vegetation would be **less than significant**.

## 8.3 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.**

The majority of the dominant species present throughout the Study Area have an indicator status of either *Facultative Upland* or *Upland*. Hydrology indicators were observed towards the western and southern portion of the Study Area, specifically *Drainage Patterns*. These were observed as a drainage feature and an upland swale, respectively. These features were nearly unvegetated, and the vegetation that was present was typical of the desert scrub throughout the Study Area. Additionally, these features did not contain a relatively-permanent surface water connection to a navigable water, and therefore are not likely to be federally-jurisdictional.

The NWI database did not identify any aquatic features within the Study Area. Additionally, the Study Area was identified in a FEMA-designated *Area of Minimal Flood Hazard*.

The Study Area does not appear to have a relatively-permanent surface water connection to a navigable water, and therefore, is not likely to contain Federally-jurisdictional waters or wetland features, and **no impact** to jurisdictional waters and streambeds would occur as a result of the Project.

## 8.4 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 13 miles to the south. Therefore, potential impacts of the proposed Project on wildlife movement would be **less than significant** and no mitigation is recommended.

## 8.5 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 the removal of Joshua trees. If Joshua trees are to be removed during project activities, an incidental take permit must be obtained through CDFW and mitigation fees will apply. With an incidental take permit and payment of mitigation fees for Joshua trees, project impacts to local policies and ordinances will be ***less than significant, with mitigation***.

Additionally, the San Bernardino County Biotic Resources Overlay shows that the Study Area is in a BLM designated area of low desert tortoise population density, and CDFW-designated habitat for burrowing owl and Mohave ground squirrel. Therefore, with implementation of the protocol-level surveys described in 7.1.1, above, the Project would have ***no impact*** regarding consistency with local policies and ordinances.

## 8.6 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 located within the West Mojave Plan (WMP) area. The Study Area occurs on land owned and managed by the County of San Bernardino. Through the WMP, the County of San Bernardino has integrated conservation measures into its land-use planning and permitting processes for projects within the plan area. This partnership allows the county to streamline environmental compliance for projects in accordance with the plan's goals, ensuring both habitat conservation and responsible development. Therefore, the Project will be in compliance with the local policies and ordinances described in Section 8.5 above, and will subsequently be in compliance with the WMP and the Project would have ***no impact***.

## 8.7 Avoidance and Minimization Measures

Avoidance and minimization measures described below may offset potentially significant impacts on biological resources. The lead agency, LRWQB 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 Program**

Prior to Project activities within the Study Area, a qualified biologist shall initiate an Worker Environmental Awareness Program (WEAP) designed to educate on-site workers about critical environmental concerns associated with the Project. This training shall be mandatory for on-site personnel. It shall be administered on the first day of work, before Project activities commence. This training shall 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, Mohave ground squirrel, other potentially-occurring special-status species, and nesting birds.

The program shall include the following elements:

- A presentation, either developed by a qualified biologist or in consultation with one, which shall address the sensitive biological resources that may be present within the Study Area. It shall 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 shall be distributed to all participants in the WEAP.
- Contact information for the project's biological monitor, along with clear instructions for participants to contact the monitor with inquiries concerning the WEAP presentation or booklets.
- An acknowledgement form that each worker is required to sign, confirming their receipt of WEAP training and their commitment to adhere to the rules aimed at preserving biological resources.

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

### **Pre-Construction Surveys for Nesting and Breeding Songbirds and Raptors**

To avoid impacts to nesting birds associated with the proposed Project, initial construction related to ground disturbing activities shall occur outside of the avian nesting season (January through September). If construction and construction noise occur within this avian nesting season, all suitable habitats within 100 feet of the Project Site shall be surveyed for the presence of nests by a qualified biologist no more than five (5) days before commencement of any vegetation removal or other ground disturbing. If it is determined that the Project Site is occupied by nesting birds, protective measures shall be implemented as described below.

If pre-construction nesting bird surveys result in the location of active nests, no grading, vegetation removal, or heavy equipment activity shall take place within 300 feet of non-raptor nests and 500 feet of raptor nests, or as determined by a qualified biologist. Protective measures (e.g., sampling) shall be required to ensure compliance with the California Fish and Game Code requirements. The qualified biologist shall serve as a construction monitor during those periods when construction activities occur near active nest areas to ensure that no inadvertent impacts occur. A report of the findings, prepared by a qualified biologist, shall be submitted to San Bernardino County prior to construction-related activities that have the potential to disturb any active nests during the nesting season.

These surveys shall provide avoidance to impacts to Swainson's hawk, loggerhead shrike, and Le Conte's thrasher. These species are not likely to nest within the Project Site, however, they may use portions of the Project Site temporarily to forage. In the event of a nest observation, during pre-construction nesting bird surveys, the minimization measures described above shall be followed.

### **Biological Monitor**

In the event of an observation of an active nest, Swainson's hawk, loggerhead shrike, Le Conte's thrasher and/or any other species-status species, a qualified biologist shall be designated as the biological monitor. This monitor shall be required to be on-site at all times during activities involving vegetation clearance or ground disturbance. Their primary responsibility shall be to ensure 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 shall be 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.

## **8.8 Mitigation Measures**

### **Western Joshua Tree**

Western Joshua trees are present within the Study Area and may require removal as a result of the Project. Removal of this species will require mitigation and CDFW 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 - \$2,544.75
- Trees 1 meter (3.28 feet) or greater but less than 5 meters - \$509
- Trees less than 1 meter - \$346

### **General**

If additional sensitive species are observed during pre-construction surveys, CDFW and USFWS (as applicable) shall 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.

## 9. Closing

Terracon appreciates the opportunity to submit this report to County of San Bernardino, California. 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](mailto: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 – CNDDDB Critical Habitat Map**

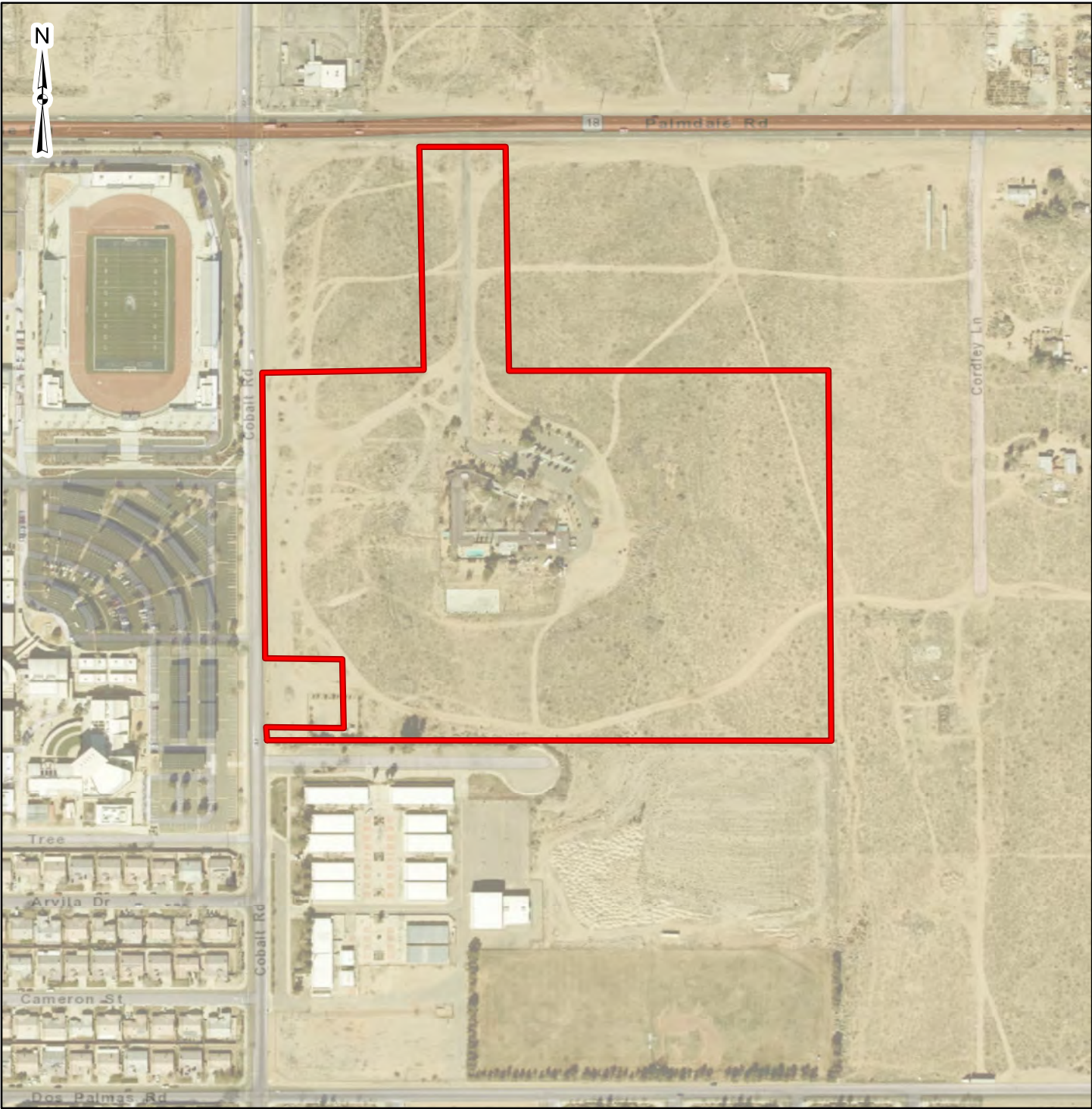
**Exhibit 7 – Biological Resource Map**

**Exhibit 8 – California Essential Habitat Connectivity Map**

**Exhibit 9a & 9b – CNDDDB Occurrence Map**

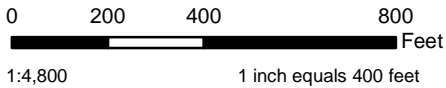
**Exhibit 10 – Photo Reference Map**

**Exhibit 11 – Western Joshua Tree Census Map**



**Legend**

Study Area (31.9 ac)



DATA SOURCES:  
ESRI WMS - World Aerial Imagery, OpenStreetMap

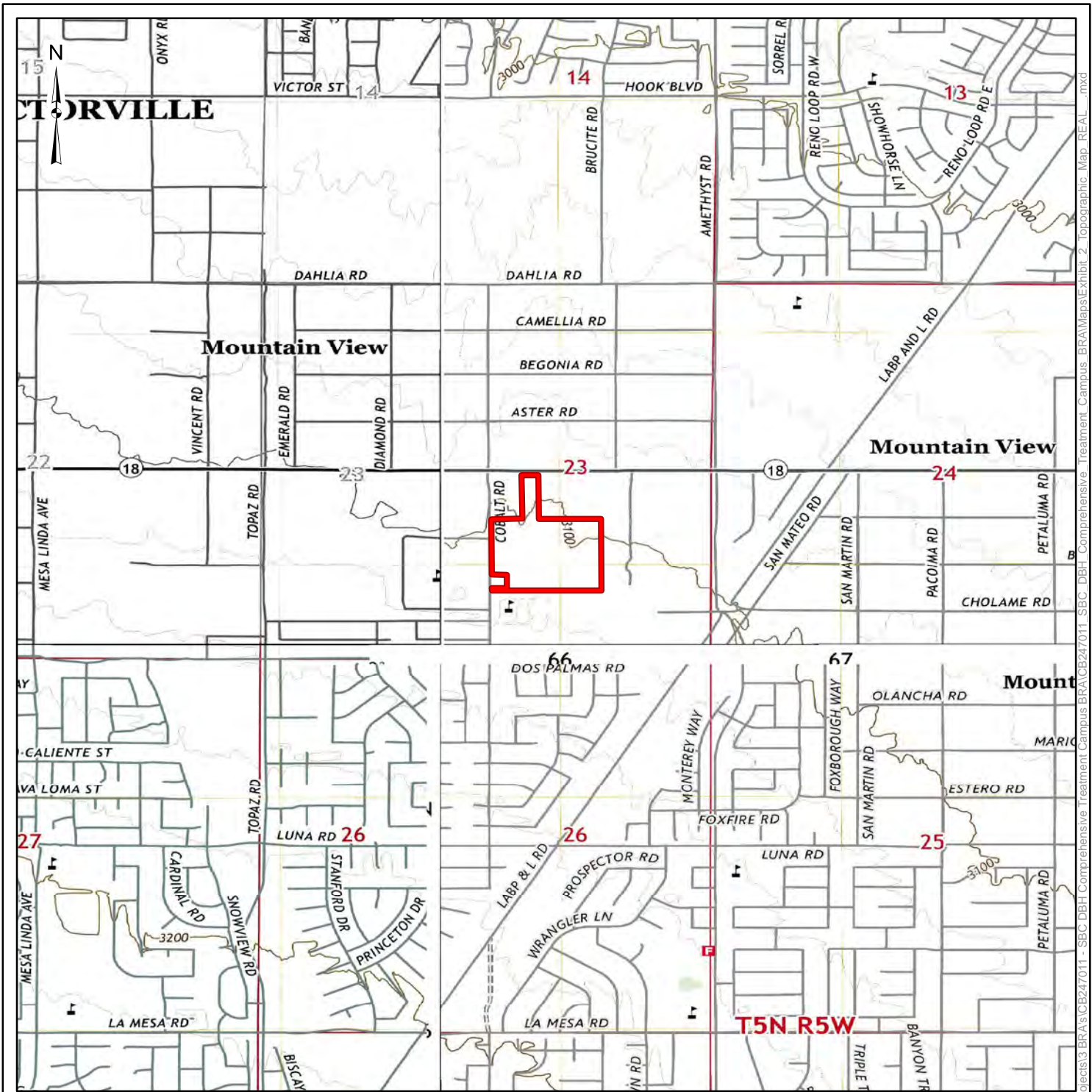
Project No.:	CB247011
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Reviewed By:	JHW




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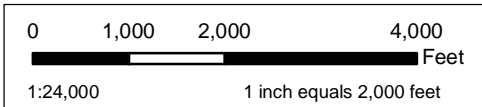
<b>SITE DIAGRAM</b>
Biological Resources Assessment Report
DBH Comprehensive Treatment Campus Victorville, CA

<b>Exhibit</b>
<b>1</b>



**Legend**

 Study Area (31.9 ac)



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

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Reviewed By:	JHW



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**TOPOGRAPHIC MAP**

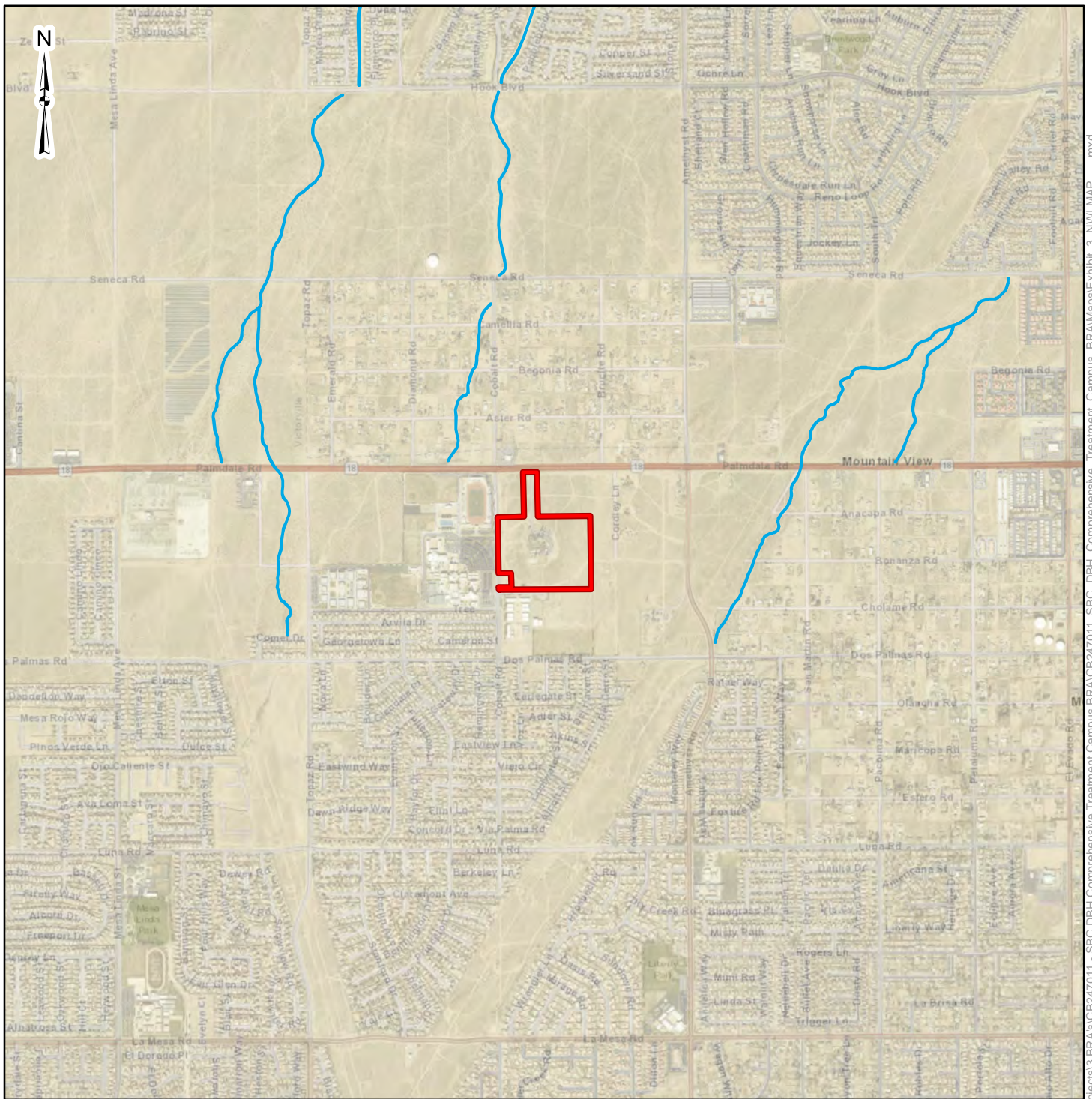
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**Exhibit**

**2**

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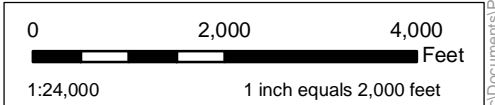


**Legend**

Study Area (31.9 ac)

**Wetland Units (NWI 2024)**

Riverine



DATA SOURCES:  
 ESRI WMS - World Aerial Imagery, OpenStreetMap  
 National Wetlands Inventory (USFWS, 2024)

Project No.:	CB247011
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Reviewed By:	JHW



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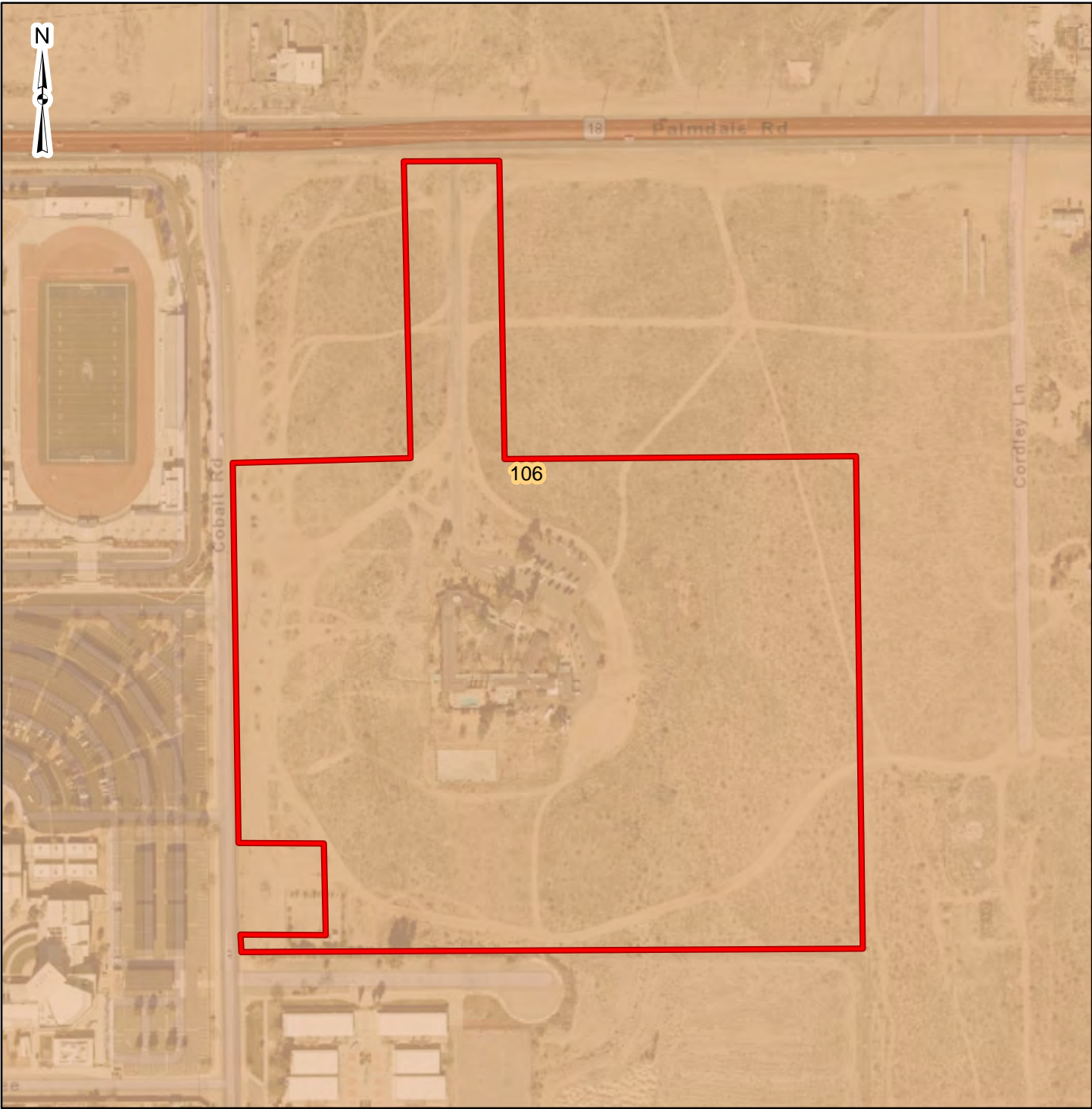
**NATIONAL WETLANDS INVENTORY MAP**

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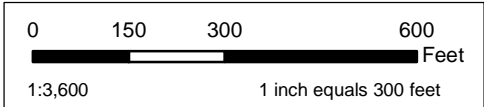
**Exhibit**

**3**



**Legend**

- Study Area (31.9 ac)
- Soil Map Unit (NRCS 2024)**
- Bryman loamy fine sand, 2 to 5 percent slopes (106)



DATA SOURCES:  
 ESRI WMS - World Aerial Imagery, OpenStreetMap  
 NRCS Soil Survey (USDA, 2024)

Project No.:	CB247011
Date:	Nov 2024
Drawn By:	CNP
Reviewed By:	JHW

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**NRCS SOIL SURVEY MAP**

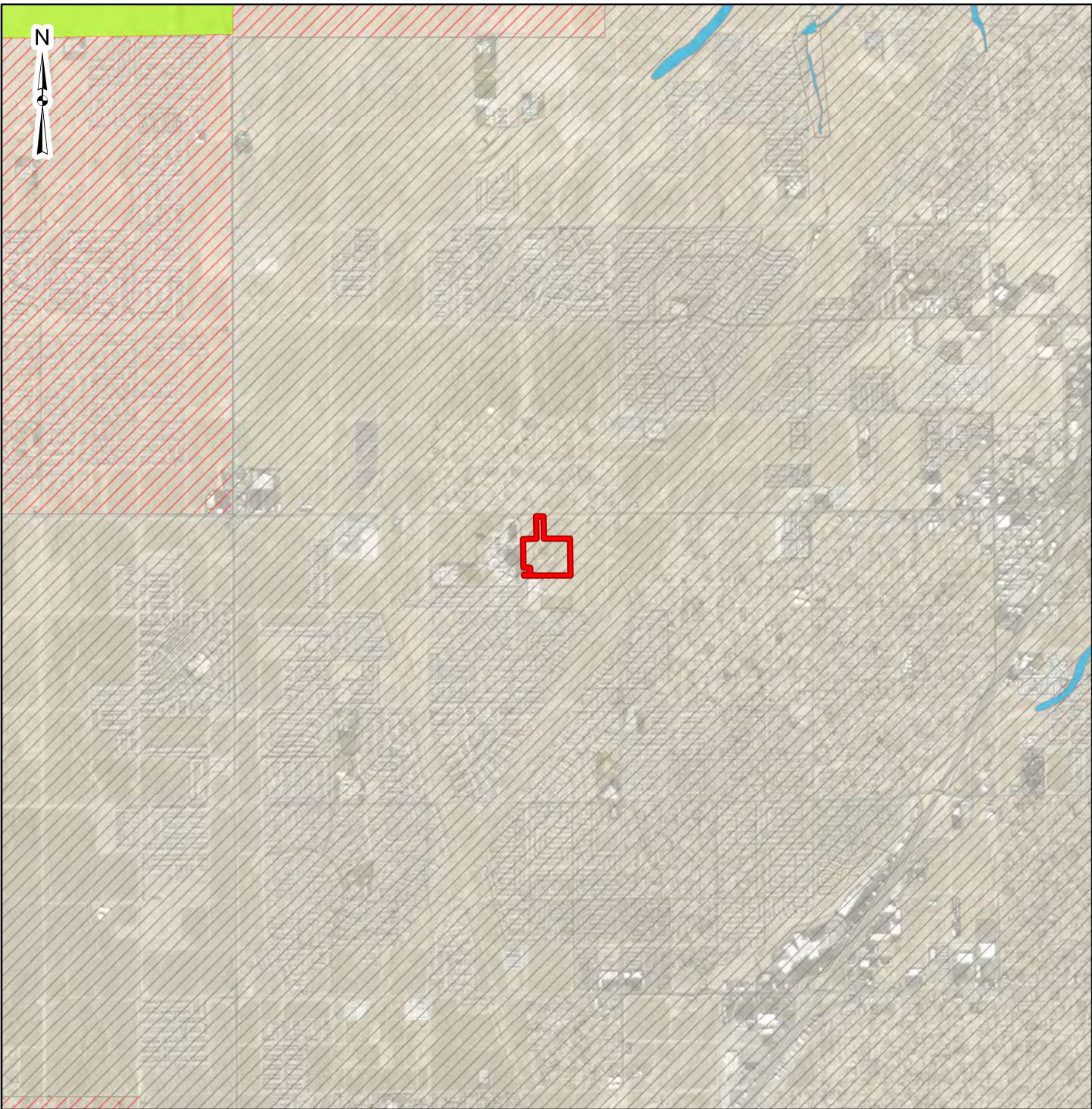
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**Exhibit**

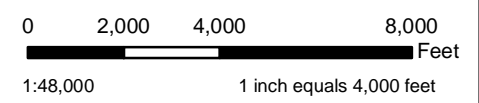
**4**

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**Legend**

- Study Area (31.9 ac)
- Area of minimal flood hazard
- 100-year floodplain
- Area of undetermined flood risk
- 500-year floodplain



DATA SOURCES:  
 ESRI WMS - World Aerial Imagery, World Topographic Map  
 FEMA FIRM - (FEMA, 2024)

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**FEMA FLOODPLAIN MAP**

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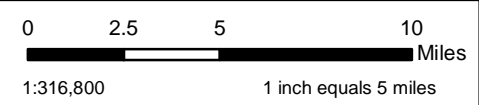
**Exhibit**

5



**Legend**

- Study Area (31.9 ac)
- Critical Habitat (USFWS 2024)**
- Arroyo toad
- Desert tortoise
- Mountain yellow-legged frog
- San Bernardino Merriam's kangaroo rat
- Southwestern willow flycatcher



DATA SOURCES:  
 ESRI WMS - World Aerial Imagery, OpenStreetMap  
 U.S. Fish and Wildlife Service (USFWS 2024)

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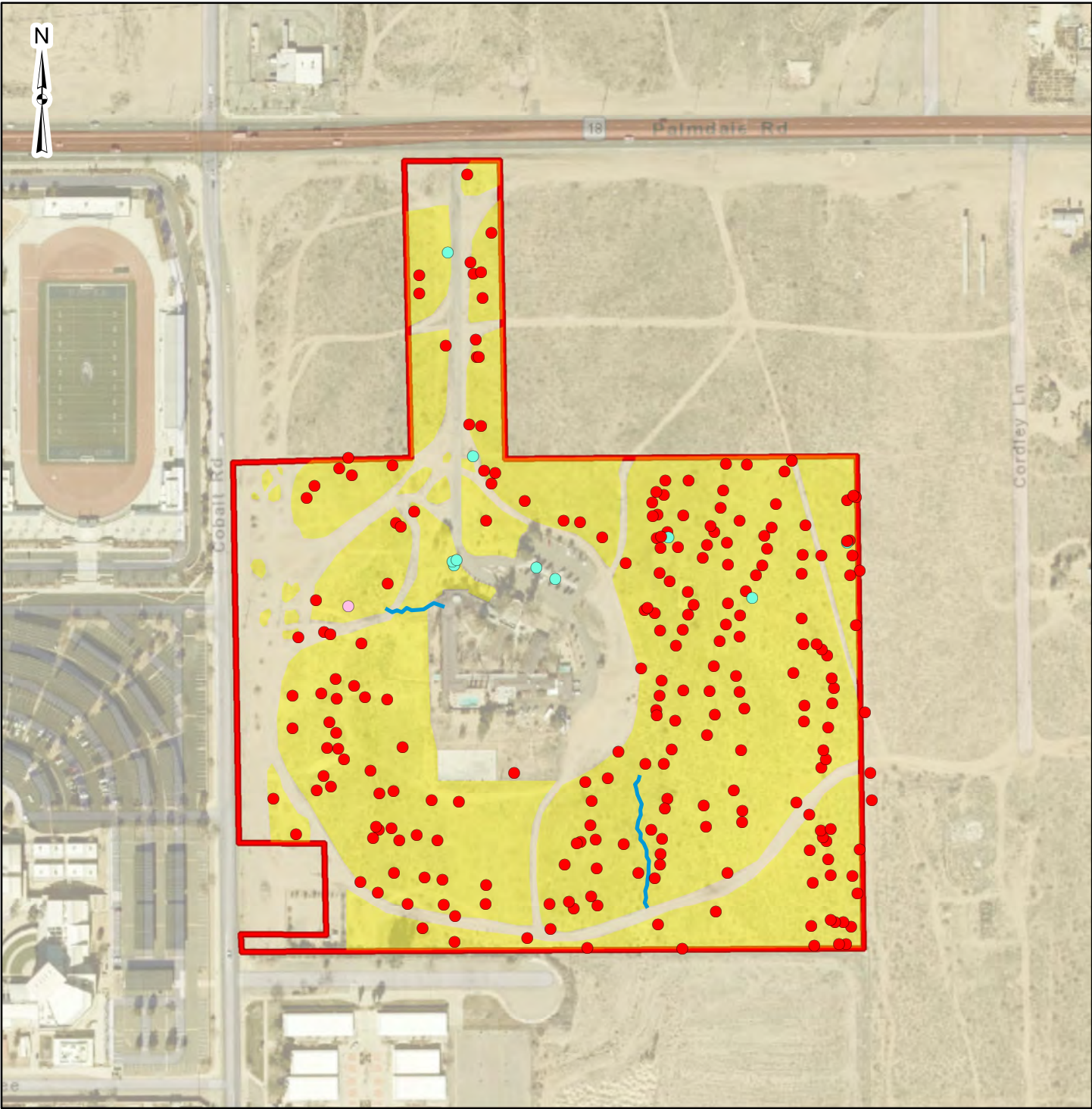
**USFWS CRITICAL HABITAT MAP**

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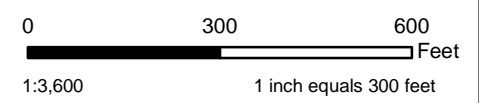
**Exhibit**

6



**Legend**

- Study Area (31.9 ac)
- Creosote bush--white bursage scrub
- Joshua tree
- Upland drainage feature/swale
- Potential desert tortoise burrow
- Burrow complex



DATA SOURCES:  
 ESRI WMS - World Aerial Imagery, OpenStreetMap

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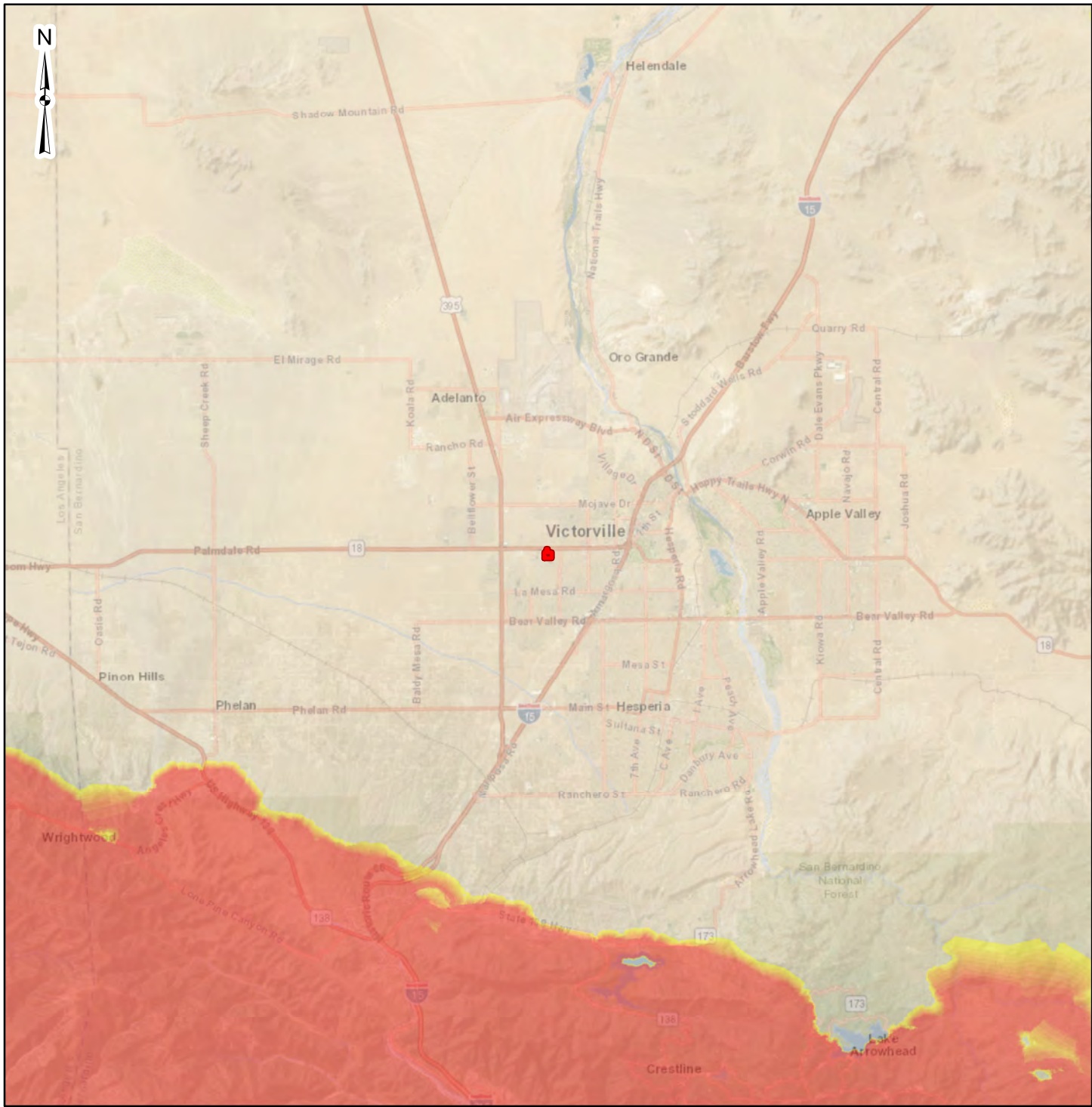
**BIOLOGICAL RESOURCES MAP**

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**Exhibit**

7

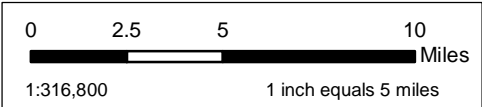
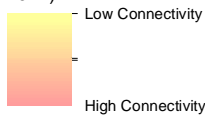


**Legend**



Study Area (31.9 ac)

Habitat Connectivity (CDFW 2024)



DATA SOURCES:  
 ESRI WMS - World Aerial Imagery, OpenStreetMap  
 California Department of Fish and Wildlife 2024

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Reviewed By:	JHW

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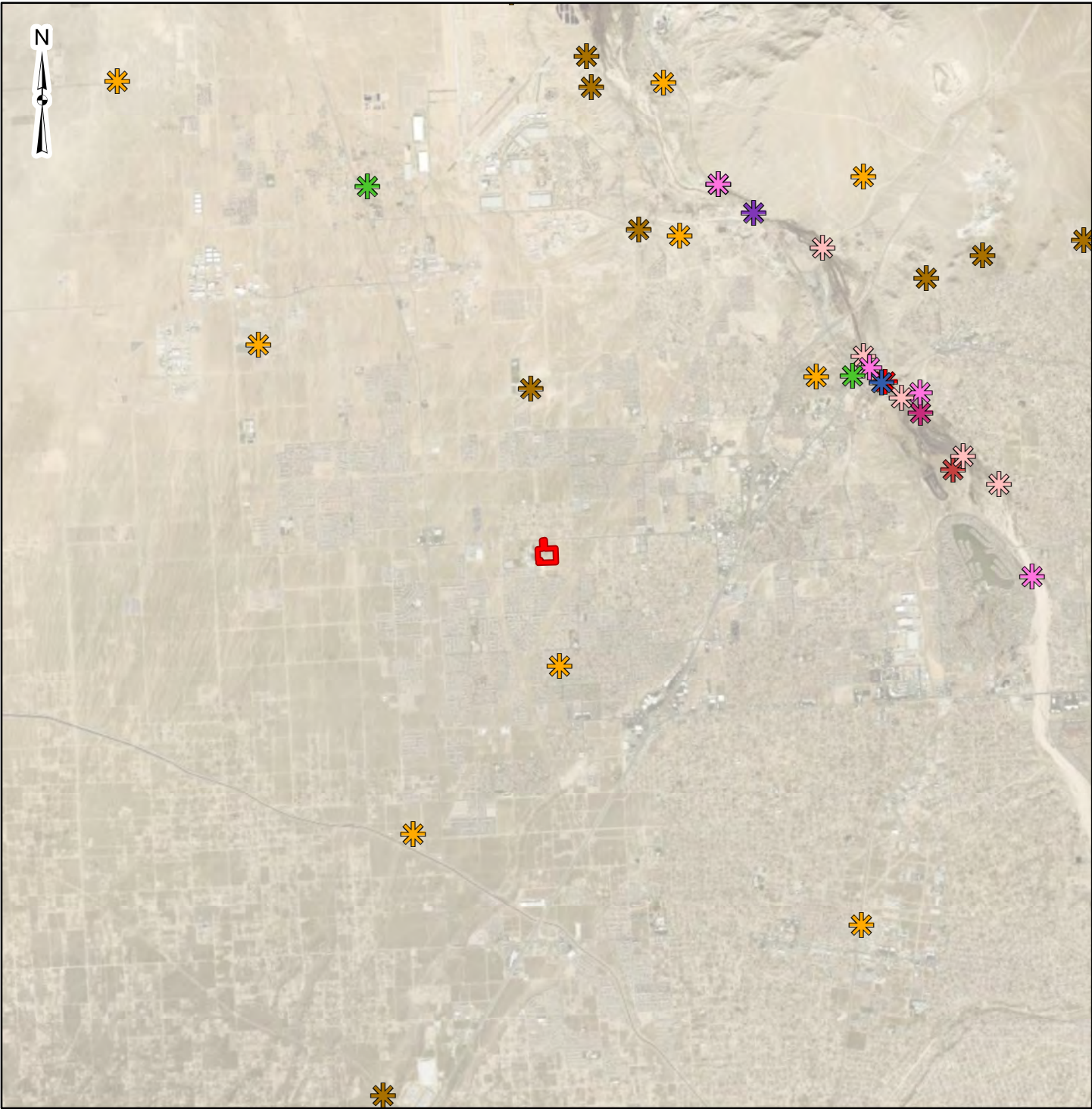
**CALIFORNIA ESSENTIAL HABITAT CONNECTIVITY MAP**

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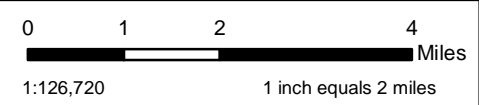
**Exhibit**

**8**



**Legend**

- Study Area (31.9 ac)
- \* Arroyo toad
- \* Desert tortoise
- \* California red-legged frog
- \* Least Bell's vireo
- \* Mohave ground squirrel
- \* Southwestern willow flycatcher
- \* Mohave tui chub
- \* Tricolored blackbird
- \* Swainson's hawk
- \* Western yellow-billed cuckoo



DATA SOURCES:  
 ESRI WMS - World Aerial Imagery, OpenStreetMap  
 CNDDDB (CDFW 2024)

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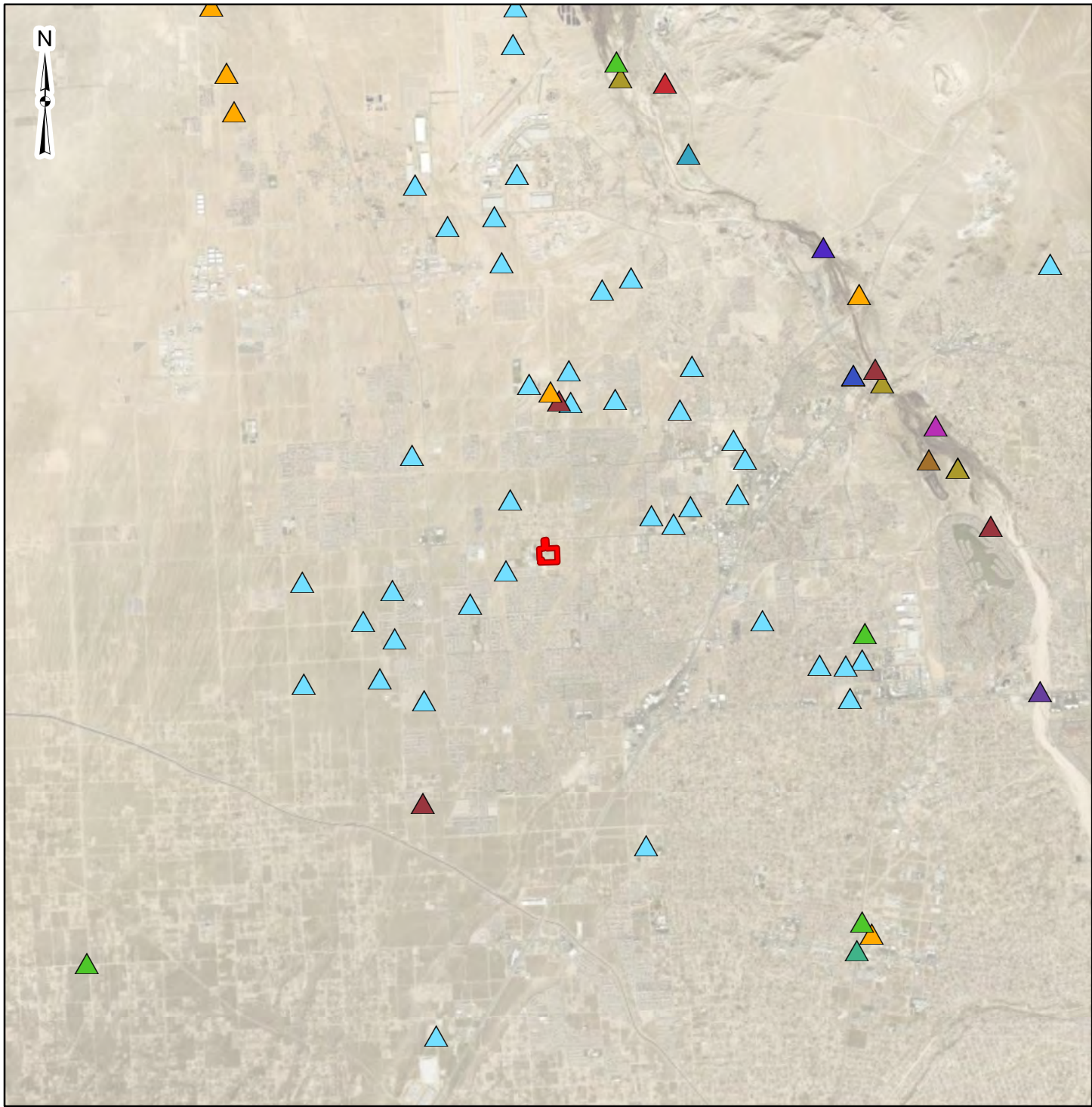
**CNDDDB SPECIAL-STATUS OCCURRENCE MAP**

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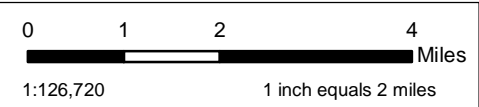
**Exhibit**

**9a**



**Legend**

- Study Area (31.9 ac)
- ▲ Southwestern pond turtle
- ▲ Coast horned lizard
- ▲ Pallid bat
- ▲ Burrowing owl
- ▲ Loggerhead shrike
- ▲ Townsend's big-eared bat
- ▲ Yellow-breasted chat
- ▲ Yellow warbler
- ▲ Gray vireo
- ▲ Mohave river vole
- ▲ Summer tanager
- ▲ Golden eagle
- ▲ Le Conte's thrasher



DATA SOURCES:  
 ESRI WMS - World Aerial Imagery, OpenStreetMap  
 CNDDB (CDFW 2024)

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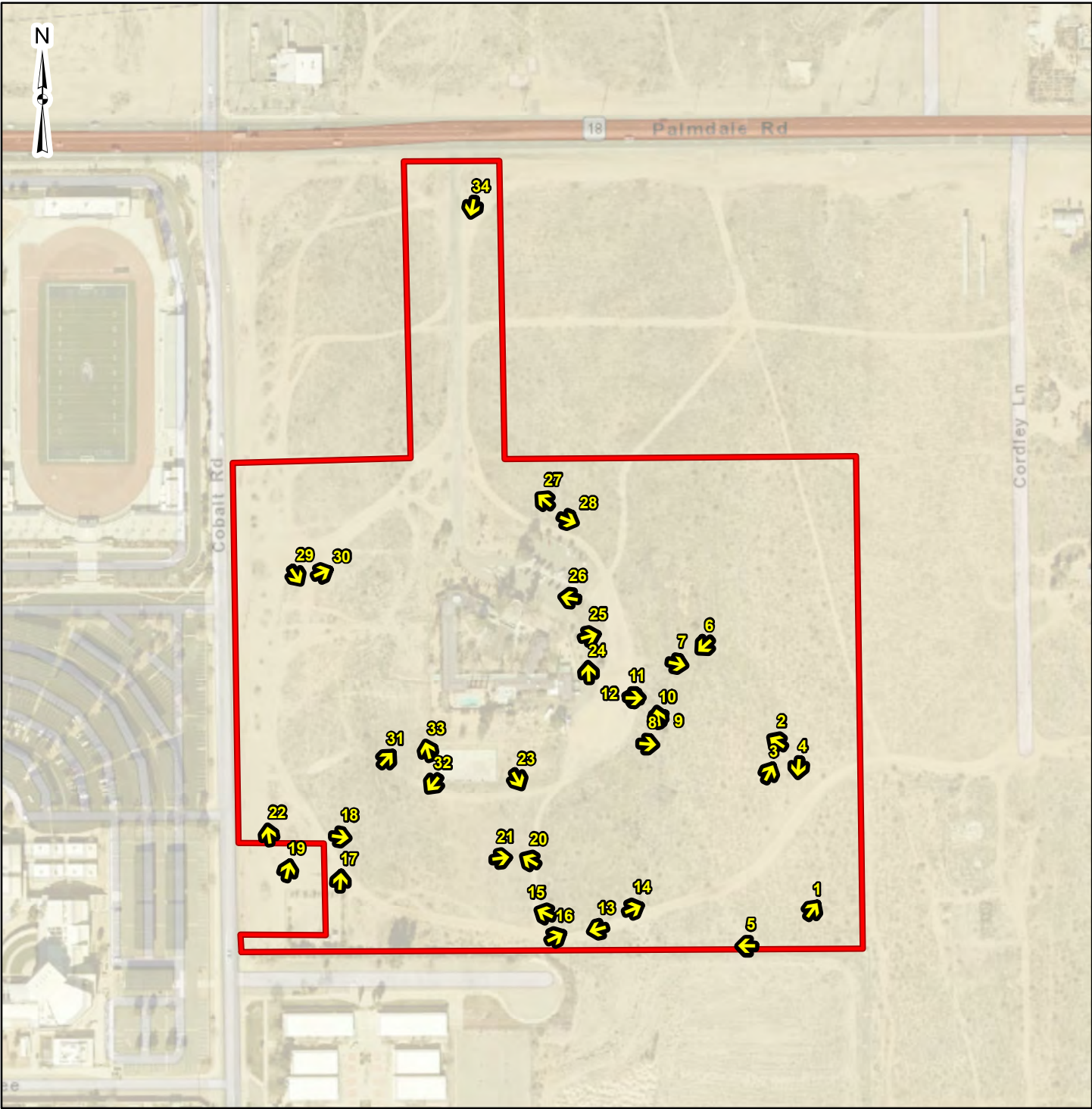
**CNDDB SSP&FP OCCURRENCE MAP**

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DBH Comprehensive Treatment Campus  
 Victorville, CA

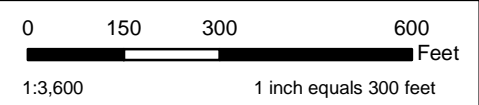
**Exhibit**

**9b**



**Legend**

- Study Area (31.9 ac)
- ↗ Photo Location



DATA SOURCES:  
 ESRI WMS - World Aerial Imagery, OpenStreetMap

Project No.:	CB247011
Date:	Nov 2024
Drawn By:	CNP
Reviewed By:	JHW

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

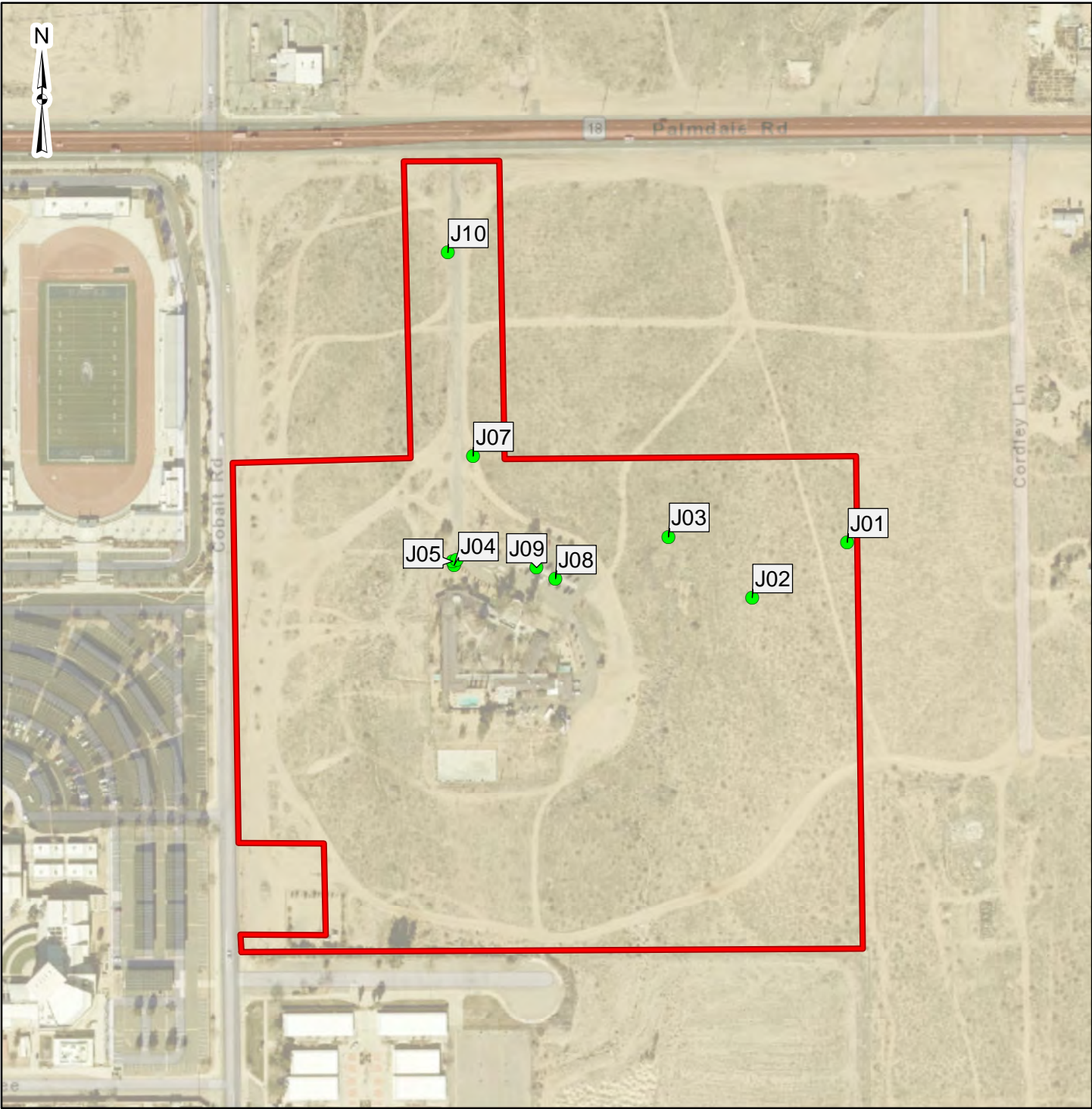
**PHOTO REFERENCE MAP**

Biological Resources Assessment Report

DBH Comprehensive Treatment Campus  
 Victorville, CA

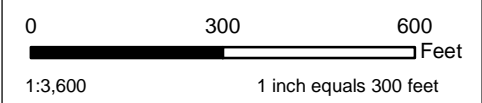
**Exhibit**

**10**



**Legend**

- Study Area (31.9 ac)
- Joshua tree



DATA SOURCES:  
 ESRI WMS - World Aerial Imagery, OpenStreetMap

Project No.:	CB247011
Date:	Nov 2024
Drawn By:	CNP
Reviewed By:	JHW

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

**WESTERN JOSHUA TREE CENSUS MAP**



Biological Resources Assessment Report



DBH Comprehensive Treatment Campus  
 Victorville, CA



**Exhibit**



**11**



## Appendix B – Photo Log



<b>Photo 1</b>	
Date: October 16, 2024	
Description:  View of desert scrub habitat in southeastern corner of Study Area	
<b>Photo 2</b>	
Date: October 16, 2024	
Description:  View of desert scrub habitat in eastern portion of Study Area	



<p><b>Photo 3</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of desert scrub habitat in eastern portion of Study Area</p>	
<p><b>Photo 4</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of desert scrub habitat in eastern portion of Study Area</p>	



<p><b>Photo 5</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View along southern boundary of Study Area desert scrub habitat and boundary fence line</p>	
<p><b>Photo 6</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of desert scrub habitat within eastern portion of Study Area</p>	



<p><b>Photo 7</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of desert scrub habitat within eastern portion of Study Area</p>	
<p><b>Photo 8</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of desert scrub habitat within eastern portion of Study Area</p>	



<p><b>Photo 9</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of desert scrub habitat within eastern portion of Study Area</p>	
<p><b>Photo 10</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of desert scrub habitat within eastern portion of Study Area</p>	


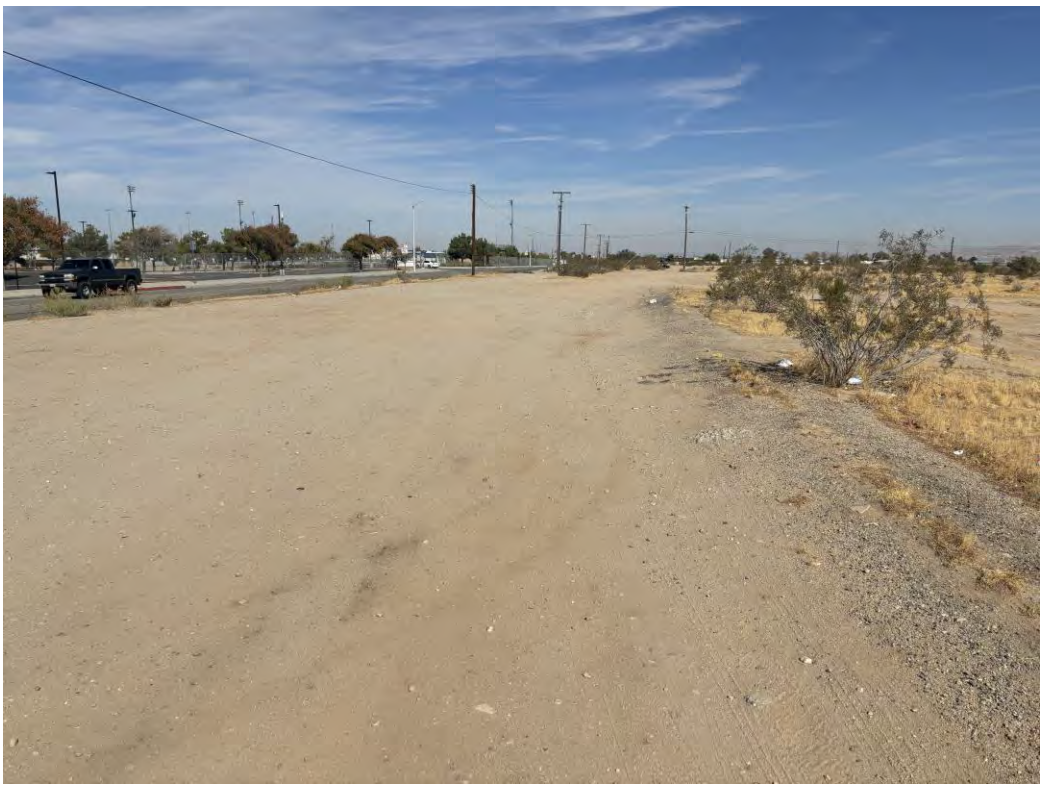
<p><b>Photo 11</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of existing buildings within central portion of Study Area</p>	
<p><b>Photo 12</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of desert scrub habitat within eastern portion of Study Area</p>	



<p><b>Photo 13</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of road running along southern boundary of Study Area</p>	
<p><b>Photo 14</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of road running along southern boundary of Study Area</p>	



<p><b>Photo 15</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of road running along southern boundary of Study Area</p>	
<p><b>Photo 16</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of road running along southern boundary of Study Area</p>	



<p><b>Photo 17</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of road running along southwestern corner of Study Area</p>	
<p><b>Photo 18</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of road running along southwestern corner of Study Area</p>	



<p><b>Photo 19</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of road running along southwestern corner of Study Area</p>	
<p><b>Photo 20</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of road running along southcentral portion of Study Area</p>	



<b>Photo 21</b>	
Date: October 16, 2024	
Description:  View of desert scrub habitat in southcentral portion of Study Area	
<b>Photo 22</b>	
Date: October 16, 2024	
Description:  View along western boundary of Study Area	



<b>Photo 23</b>	
Date: October 16, 2024	
Description:  View of desert scrub habitat in central portion of Study Area	
<b>Photo 24</b>	
Date: October 16, 2024	
Description:  View of asphalt parking area in central portion of Study Area	

<p><b>Photo 25</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of access road and desert scrub habitat in central portion of Study Area</p>	
<p><b>Photo 26</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of exiting building and asphalt parking area in central portion of Study Area</p>	

<p><b>Photo 27</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of desert scrub habitat in northern portion of Study Area</p>	
<p><b>Photo 28</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of desert scrub habitat in northern portion of Study Area</p>	

<p><b>Photo 29</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of desert scrub habitat in northwestern portion of Study Area</p>	
<p><b>Photo 30</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of desert scrub habitat in northwestern portion of Study Area</p>	

<p><b>Photo 31</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of existing building and tennis court in central portion of Study Area</p>	
<p><b>Photo 32</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of desert scrub habitat in southcentral portion of Study Area</p>	

<p><b>Photo 33</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View of access road a and desert scrub habitat in southcentral portion of Study Area</p>	
<p><b>Photo 34</b></p>	
<p>Date: October 16, 2024</p>	
<p>Description:  View along northern access road to main portion of Study Area</p>	

## Appendix C – IpaC Letter Report

# 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<sup>1</sup> 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<sup>2</sup>).

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
Least Bell's Vireo <i>Vireo bellii pusillus</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/5945">https://ecos.fws.gov/ecp/species/5945</a>	Endangered

## Reptiles

NAME	STATUS
Desert Tortoise <i>Gopherus agassizii</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/4481">https://ecos.fws.gov/ecp/species/4481</a>	Threatened
Southwestern Pond Turtle <i>Actinemys pallida</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/4768">https://ecos.fws.gov/ecp/species/4768</a>	Proposed Threatened

## Amphibians

NAME	STATUS
Arroyo (=arroyo Southwestern) Toad <i>Anaxyrus californicus</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/3762">https://ecos.fws.gov/ecp/species/3762</a>	Endangered

## Fishes

NAME	STATUS
Mohave Tui Chub <i>Gila bicolor</i> ssp. <i>mohavensis</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/8466">https://ecos.fws.gov/ecp/species/8466</a>	Endangered

## Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. <a href="https://ecos.fws.gov/ecp/species/9743">https://ecos.fws.gov/ecp/species/9743</a>	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

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

### 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<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats<sup>3</sup> should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the "[Supplemental Information on Migratory Birds and Eagles](#)".

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:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incident-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

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, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
California Thrasher <i>Toxostoma redivivum</i> 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 <i>Calypte costae</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/9470">https://ecos.fws.gov/ecp/species/9470</a>	Breeds Jan 15 to Jun 10
Lawrence's Goldfinch <i>Spinus lawrencei</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9464">https://ecos.fws.gov/ecp/species/9464</a>	Breeds Mar 20 to Sep 20

## 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 "[Supplemental Information on Migratory Birds and Eagles](#)", specifically the FAQ section titled "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  $0.05/0.25 = 0.2$ .

- 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.

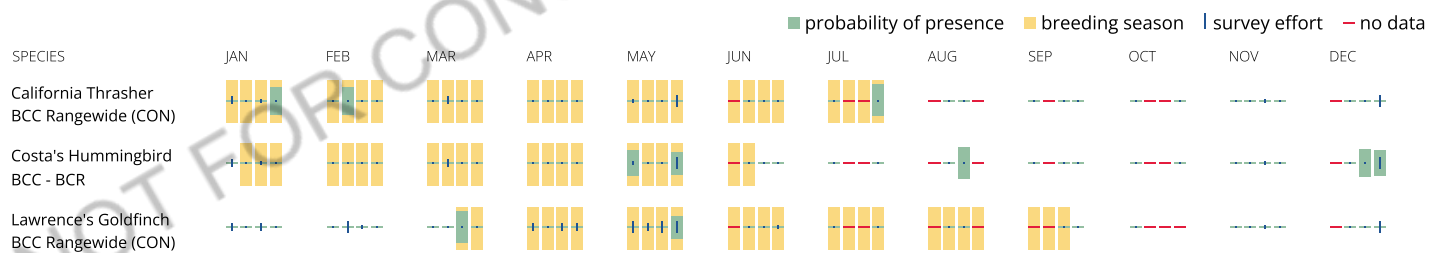
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

#### 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 tubercid 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 – CNDDDB Query

CALIFORNIA DEPARTMENT OF

Fish and WILDLIFE *RareFind*

Query Summary:

Quad IS (Victorville (3411753) OR Victorville NW (3411764) OR Helendale (3411763) OR Turtle Valley (3411762) OR Apple Valley North (3411752) OR Apple Valley South (3411742) OR Hesperia (3411743) OR Baldy Mesa (3411744) OR Adelanto (3411754))  
 AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)  
 AND Federal Listing Status IS (Endangered OR Threatened OR Candidate) OR State Listing Status IS (Endangered OR Threatened 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
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	960	1	None	Threatened	G1G2	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Marsh & swamp, Swamp, Wetland
Anaxyrus californicus	arroyo toad	Amphibians	AAABB01230	139	2	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's bumble bee	Insects	IIHYM24480	443	1	None	Candidate Endangered	G2	S2	null	IUCN_EN-Endangered	null
Buteo swainsoni	Swainson's hawk	Birds	ABNKC19070	2577	4	None	Threatened	G5	S4	null	BLM_S-Sensitive, IUCN_LC-Least Concern	Great Basin grassland, Riparian forest, Riparian woodland, Valley & foothill grassland
Coccyzus americanus occidentalis	western yellow-billed cuckoo	Birds	ABNRB02022	165	1	Threatened	Endangered	G5T2T3	S1	null	BLM_S-Sensitive, USFS_S-Sensitive	Riparian forest
Empidonax traillii extimus	southwestern willow flycatcher	Birds	ABPAE33043	75	1	Endangered	Endangered	G5T2	S3	null	null	Riparian woodland
Gopherus agassizii	desert tortoise	Reptiles	ARAAF01012	988	18	Threatened	Threatened	G3	S2S3	null	IUCN_CR-Critically Endangered	Joshua tree woodland, Mojavean desert scrub, Sonoran desert scrub
Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1782	1	Threatened	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable	Aquatic, Artificial flowing waters, Artificial standing waters, Freshwater marsh, Marsh & swamp, Riparian forest, Riparian scrub, Riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast

												standing waters, Wetland
Siphateles bicolor mohavensis	Mohave tui chub	Fish	AFCJB1303H	24	4	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	9	Endangered	Endangered	G5T2	S3	null	null	Riparian forest, Riparian scrub, Riparian woodland
Xerospermophilus mohavensis	Mohave ground squirrel	Mammals	AMAFB05150	432	15	None	Threatened	G3	S2	null	BLM_S-Sensitive, IUCN_NT-Near Threatened	Chenopod scrub, Joshua tree woodland, Mojavean desert scrub

CALIFORNIA DEPARTMENT OF

Fish and WILDLIFE *RareFind*

Query Summary:

Quad IS (Victorville (3411753) OR Victorville NW (3411764) OR Helendale (3411763) OR Turtle Valley (3411762) OR Apple Valley North (3411752) OR Apple Valley South (3411742) OR Hesperia (3411743) OR Baldy Mesa (3411744) OR Adelanto (3411754))  
 AND Taxonomic Group IS (Fish OR Amphibians OR Reptiles OR Birds OR Mammals OR Mollusks OR Arachnids OR Crustaceans OR Insects OR Ferns OR Gymnosperms OR Monocots OR Dicots OR Lichens OR Bryophytes)  
 AND Other Status CONTAINS (CDFW\_FP-Fully Protected OR CDFW\_SSC-Species of Special Concern)

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
Actinemys pallida	southwestern pond turtle	Reptiles	ARAAD02032	477	2	Proposed Threatened	None	G2G3	SNR	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable, USFS_S-Sensitive	null
Agelaius tricolor	tricolored blackbird	Birds	ABPBXB0020	960	1	None	Threatened	G1G2	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_EN-Endangered, USFWS_BCC-Birds of Conservation Concern	Freshwater marsh, Marsh & swamp, Swamp, Wetland
Anaxyrus californicus	arroyo toad	Amphibians	AAABB01230	139	2	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
Antrozous pallidus	pallid bat	Mammals	AMACC10010	424	1	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Chaparral, Coastal scrub, Desert wash, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Riparian woodland, Sonoran desert scrub, Upper montane coniferous forest, Valley & foothill grassland
Aquila chrysaetos	golden eagle	Birds	ABNKC22010	332	6	None	None	G5	S3	null	BLM_S-Sensitive, CDF_S-Sensitive, CDFW_FP-Fully Protected, CDFW_WL-Watch List, IUCN_LC-Least Concern	Broadleaved upland forest, Cismontane woodland, Coastal prairie, Great Basin grassland, Great Basin scrub, Lower montane coniferous forest, Pinon & juniper woodlands, Upper montane coniferous forest, Valley & foothill grassland
Asio otus	long-eared owl	Birds	ABNSB13010	56	1	None	None	G5	S3?	null	CDFW_SSC-Species of	Cismontane woodland, Great

											Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Basin scrub, Riparian forest, Riparian woodland, Upper montane coniferous forest
Athene cunicularia	burrowing owl	Birds	ABNSB10010	2057	61	None	None	G4	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern	Coastal prairie, Coastal scrub, Great Basin grassland, Great Basin scrub, Mojavean desert scrub, Sonoran desert scrub, Valley & foothill grassland
Corynorhinus townsendii	Townsend's big-eared bat	Mammals	AMACC08010	635	2	None	None	G4	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive	Broadleaved upland forest, Chaparral, Chenopod scrub, Great Basin grassland, Great Basin scrub, Joshua tree woodland, Lower montane coniferous forest, Meadow & seep, Mojavean desert scrub, Riparian forest, Riparian woodland, Sonoran desert scrub, Sonoran thorn woodland, Upper montane coniferous forest, Valley & foothill grassland
Icteria virens	yellow-breasted chat	Birds	ABPBX24010	101	1	None	None	G5	S4	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Riparian forest, Riparian scrub, Riparian woodland
Lanius ludovicianus	loggerhead shrike	Birds	ABPBR01030	110	5	None	None	G4	S4	null	CDFW_SSC-Species of Special Concern, IUCN_NT-Near Threatened	Broadleaved upland forest, Desert wash, Joshua tree woodland, Mojavean desert scrub, Pinon & juniper woodlands, Riparian woodland, Sonoran desert scrub
Microtus californicus mohavensis	Mohave river vole	Mammals	AMAFF11031	6	5	None	None	G5T1	S1	null	CDFW_SSC-Species of Special Concern	Riparian scrub
Phrynosoma blainvillii	coast horned lizard	Reptiles	ARACF12100	841	5	None	None	G4	S4	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern	Chaparral, Cismontane woodland, Coastal bluff scrub, Coastal scrub, Desert wash, Pinon & juniper woodlands, Riparian scrub, Riparian woodland, Valley & foothill grassland
Piranga rubra	summer tanager	Birds	ABPBX45030	21	2	None	None	G5	S1	null	CDFW_SSC-Species of Special	Riparian forest

											Concern, IUCN_LC-Least Concern	
Rana draytonii	California red-legged frog	Amphibians	AAABH01022	1782	1	Threatened	None	G2G3	S2S3	null	CDFW_SSC-Species of Special Concern, IUCN_VU-Vulnerable Aquatic, Artificial flowing waters, Artificial standing waters, Freshwater marsh, Marsh & swamp, Riparian forest, Riparian scrub, Riparian woodland, Sacramento/San Joaquin flowing waters, Sacramento/San Joaquin standing waters, South coast flowing waters, South coast standing waters, Wetland	
Setophaga petechia	yellow warbler	Birds	ABPBX03010	78	2	None	None	G5	S3	null	CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern Riparian forest, Riparian scrub, Riparian woodland	
Siphateles bicolor mohavensis	Mohave tui chub	Fish	AFCJB1303H	24	4	Endangered	Endangered	G4T1	S1	null	AFS_EN-Endangered, CDFW_FP-Fully Protected Aquatic, Artificial flowing waters, Artificial standing waters	
Toxostoma lecontei	Le Conte's thrasher	Birds	ABPBK06100	239	13	None	None	G4	S3	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFWS_BCC-Birds of Conservation Concern Desert wash, Mojavean desert scrub, Sonoran desert scrub	
Vireo vicinior	gray vireo	Birds	ABPBW01140	28	2	None	None	G5	S2	null	BLM_S-Sensitive, CDFW_SSC-Species of Special Concern, IUCN_LC-Least Concern, USFS_S-Sensitive Chaparral	

## Appendix E – EFH Mapper Report

## EFH Mapper Report

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### EFH Data Notice

Essential Fish Habitat (EFH) is defined by textual descriptions contained in the fishery management plans developed by the regional fishery management councils. In most cases mapping data can not fully represent the complexity of the habitats that make up EFH. This report should be used for general interest queries only and should not be interpreted as a definitive evaluation of EFH at this location. A location-specific evaluation of EFH for any official purposes must be performed by a regional expert. Please refer to the following links for the appropriate regional resources.

[West Coast Regional Office](#)

### Query Results

Degrees, Minutes, Seconds: Latitude = 34° 30' 10" N, Longitude = 118° 37' 46" W  
Decimal Degrees: Latitude = 34.503, Longitude = -117.371

The query location intersects with spatial data representing EFH and/or HAPCs for the following species/management units.

### EFH

No additional Essential Fish Habitats (EFH) were identified at the report location.

### Pacific Salmon EFH

No Pacific Salmon Essential Fish Habitat (EFH) were identified at the report location.

### Atlantic Salmon

No Atlantic Salmon were identified at the report location.

### HAPCs

No Habitat Areas of Particular Concern (HAPC) were identified at the report location.

### EFH Areas Protected from Fishing

No EFH Areas Protected from Fishing (EFHA) were identified at the report location.

**Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.**

**\*\*For links to all EFH text descriptions see the complete data inventory: [open data inventory -->](#)**

#### **Pacific Coastal Pelagic Species,**

Jack Mackerel,

Pacific (Chub) Mackerel,

Pacific Sardine,

Northern Anchovy - Central Subpopulation,

Northern Anchovy - Northern Subpopulation,

#### **Pacific Highly Migratory Species,**

Bigeye Thresher Shark - North Pacific,

Bluefin Tuna - Pacific,

Dolphinfish (Dorado or Mahimahi) - Pacific,

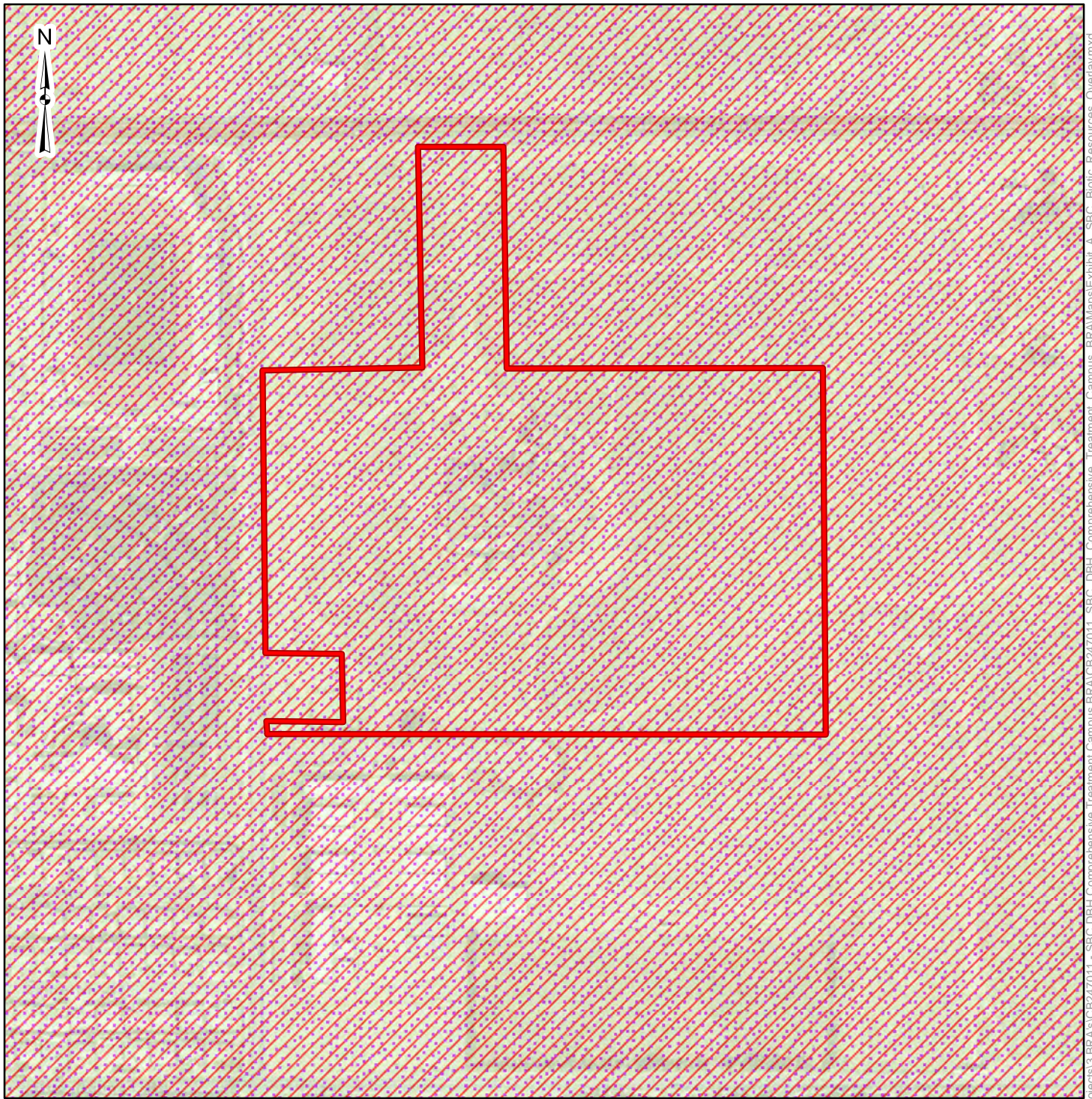
**Spatial data does not currently exist for all the managed species in this area. The following is a list of species or management units for which there is no spatial data.**

**\*\*For links to all EFH text descriptions see the complete data inventory: [open data inventory -->](#)**





Pelagic Thresher Shark - North Pacific,  
Swordfish - North Pacific

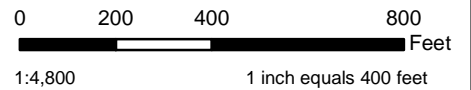
## **Appendix F – San Bernardino County Biotic Resources Overlay**

### **Exhibit A – Biotic Resources Overlay Map**



**Legend**

-  Study Area (31.9 ac)
-  Burrowing Owl (SE)
-  Mohave Ground Squirrel (ST) (FE) *Mohave Ground Squirrel (ST) (FE)*  
*Source: Bureau of Land Management*
-  Desert Tortoise - Sparse Population *Desert Tortoise - Sparse Population*  
*Source: Bureau of Land Management*



DATA SOURCES:  
ESRI WMS - World Aerial Imagery, OpenStreetMap

Project No.:	CB247011
Date:	Nov 2024
Drawn By:	CNP
Reviewed By:	JHW



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

**BIOTIC RESOURCES OVERLAY MAP**

Biological Resources Assessment Report

DBH Comprehensive Treatment Campus  
Victorville, CA

**Exhibit**

**A**

## Appendix G – Desert Tortoise Survey Report

# Memo



**TO:** Bohra Kim, Project Manager III, Project & Facilities Management Dept.  
**FROM:** Kayti Christianson, Senior Ecologist, Terracon Consulting RC  
Sarah Winfrey, Program Manager, Terracon Consulting w  
**CC:** Gil Rios, Supervising Project Manager, Project & Facilities Management Dept.  
**DATE:** July 7, 2025  
**RE:** Desert Tortoise Survey Report

---

## 1.0 METHODS

One survey was conducted on April 10, 2025, in accordance with the methodology detailed in USFWS *Clearance Survey Protocol for the Mojave Desert Tortoise* (LISFWS 2019). Additional surveys were completed when surveyors returned to the site on May 1, May 22, and June 16, 2025, to conduct surveys for another species.

Surveys were conducted during the desert tortoise's peak activity season, covering the entire project site (100% coverage). Surveyors walked 40 straight-line transects in a north-south orientation, spaced 10 meters apart. All potential burrows encountered during the survey were recorded.

## 2.0 RESULTS

No evidence, including live desert tortoise, scat, carcasses, eggshells, or Class 1-3 burrows, was observed. Twelve uninhabited possible desert tortoise burrows (Class 4) were documented on site. Surveyors returned to the site on May 1, May 22, and June 16, 2025, to conduct surveys for other species and found no new incidental observations of desert tortoise occupancy on the site.

## 2.1 Survey 1

### 2.1.1 Survey Details and Results

Survey Date: April 10, 2025

Survey Start Time: 09:00 AM

Survey End Time: 12:50 PM

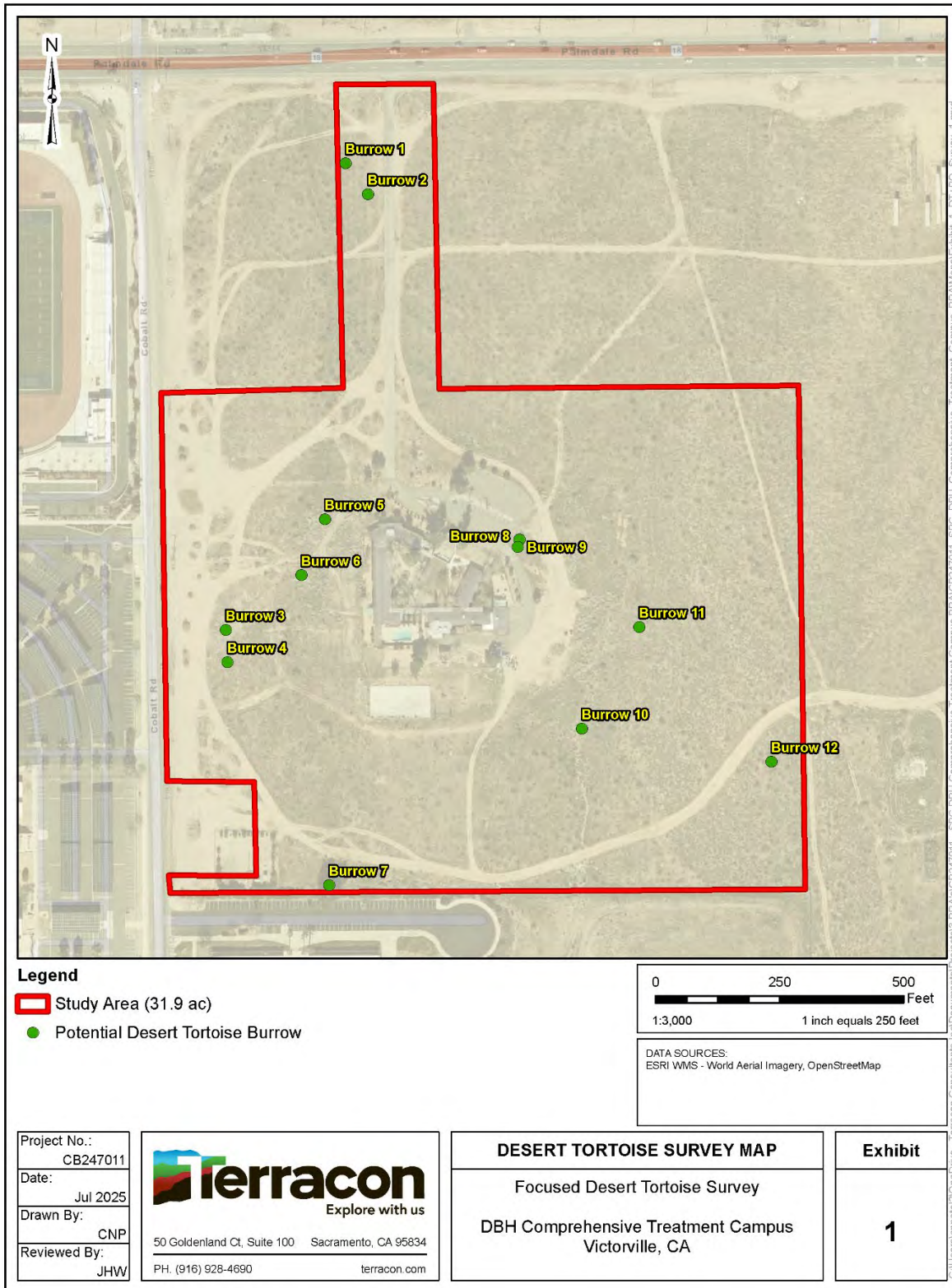
Starting Weather: 22C, winds 1-3mph, 10% cloud cover

Ending Weather: 30C, winds 4-6mph, 10% cloud cover

Surveyors: Sarah Winfrey, Ryan Russell

Burrow ID	Width (cm)	Height (cm)	Depth (cm)	Class	UTM Coordinates (Zone UN)
1	10.5	12.0	25	4	465871, 3818340
2	18.0	8.0	<25	4	465884, 3818321
3	11.1	9.0	75	4	465794, 3818054
4	15.5	8.3	25	4	465795, 3818035
5	15.5	11.0	<25	4	465856, 3818122
6	12.0	8.0	25	4	465841, 3818088
7	13.5	10.0	<25	4	465856, 3817897
8	9.0	9.5	<25	4	465975, 3818108
9	17.0	8.0	<25	4	465974 3818104
10	27.5	20.0	100	4	466012 3817992
11	19.0	11.0	25	4	466048, 3818053
12	10.0	14.0	50	4	466129, 3817970

### 2.1.2 Survey Map



### 2.1.3 Survey Photographs



**Burrow 1 105mm width, 120mm height, 0.25m depth, Class 4 GPS: 11N 465871, 3818340**



**Burrow 2 180mm width, 80mm height, <0.25m depth, Class 4 GPS: 11N 465884 3818321**



**Burrow 3 111mm width, 90mm height, 0.75 m depth, Class 4 GPS: 11N 465794, 3818054**



**Burrow 4 155mm width, 83mm height, 0.25m depth, Class 4 GPS: 11N 465795, 3818035**



**Burrow 5 155mm width, 110mm height, <0.25m depth, Class 4 GPS: 11N 465856, 3818122**



**Burrow 6 120mm width, 80mm height, 0.25m depth, Class 4 GPS: 11N 465841, 3818088**



**Burrow 7 135mm width, 100mm height, <0.25m depth, Class 4 GPS: 11N 465856, 3817897**



**Burrow 8 90mm width, 95mm height, <0.25m depth, Class 4 GPS: 11N 465975, 3818108**



**Burrow 9 170mm width, 80mm height, <0.25m depth, Class 4 GPS 11N 465974 3818104**



**Burrow 10 275mm width, 200mm height, 1m depth, Class 4 GPS 11N 466012 3817992**



**Burrow 11 190mm width, 110mm height, 0.25m depth, Class 4 GPS: 11N 466048, 3818053**



**Burrow 12 100mm width, 140mm height, 0.5m depth, Class 4 GPS: 11N 466129, 3817970**

### 2.1.4 Survey Field Form

#### USEWS DESERT TORTOISE PRE-PROJECT SURVEY DATA SHEET

Date of survey: 04/10/25 Survey biologist(s): Sarah Winfrey Ryan Russell  
(month, day, year)  
 Site description: San Bernardino County Comprehensive Treatment Campns (30 acres)  
(project name and size; general location)  
 County: San Bernardino Quad: Parcel 8105-191-11 Location: 13333 Palmdale Rd Victorville CA  
(UTM coordinates, lat-long, and/or TRS; map datum)  
 Transect #: 40 Transect length: 300m Type of survey: 100% coverage P/A 10m transect  
(acres to be surveyed; 100% coverage/probabilistic sampling)  
 GPS Start-point: 465760 3818198 Start time: 09:00 am/pm  
(easting, northing, elevation in meters)  
 GPS End-point: 466148 3818196 End time: 12:50 am/pm  
(easting, northing, elevation in meters)  
 Start Temp: 22 °C Weather: Partly Cloudy 10% cover End Temp: 30 °C

#### Live Tbrtoises

Detection number	GPS location		Time	Tortoise location (in burrow: all of tortoise beneath plane of burrow opening, or not in burrow)	Approx MCL >160-mm? (Yes, No or Unknown)	Existing tag # and color, if present
	Easting	Northing				
1						
2						
3						
4						
5						
6						
7						

#### Tortoise Sign (burrows<sup>1</sup>, scats, carcasses, etc)

Detection number	GPS location		Type of sign (burrows, scats, carcass, etc)	Description and comments
	Easting	Northing		
1	465871	3818340	Burrow (cork scats)	W: 105mm H: 120mm Class 4 Dark 0.25m
2	465884	3818321	Burrow	W: 180mm H: 80mm Class 4 Dark < 0.25m
3	465794	3818054	Burrow	W: 111mm H: 90mm D: 0.75m Class 4
4	465795	3818035	Burrow	W: 155mm H: 83mm D: 0.25m Class 4
5	465856	3818122	Burrow	W: 155mm H: 110mm D: < 0.25m Class 4
6	465841	3818088	Burrow	W: 120mm H: 80mm D: 0.25m Class 4
7	465856	3817997	Burrow	W: 135mm H: 100mm D: < 0.25 Class 4
8	465975	3818108	Burrow	W: 90mm H: 95mm D: < 0.25 Class 4
9	465974	3818104	Burrow	W: 170mm H: 80mm D: < 0.25 Class 4
* 10	466012	3817942	Burrow	W: 275mm H: 200mm D: 1m Class 4
11	466048	3818053	Burrow	W: 190mm H: 110mm D: 0.25m Class 4
12	466129	3817970	Burrow	W: 120mm H: 140mm D: 0.5m Class 4
13				
14				
15				

<sup>1</sup> See section 4.1.2 for information on burrow condition class and photographing burrows

**Signature:** 

**Email:** Kayti.Christianson@terracon.com

**Signature:** 

**Email:** Sarah.Winfrey@terracon.com

## Appendix H – Burrowing Owl Survey Report

# Memo



**TO:** Bohra Kim, Project Manager III, Project & Facilities Management Dept.  
**FROM:** Kayti Christianson, Senior Ecologist, Terracon Consulting K.C.  
Sarah Winfrey, Program Manager, Terracon Consulting W  
**CC:** Gil Rios, Supervising Project Manager, Project & Facilities Management Dept.  
**DATE:** July 7, 2025  
**RE:** Burrowing Owl Survey Report

---

## 1.0 METHODS

With no historical record (eBirds) of burrowing owl on or within 150 meters of the project site, breeding season surveys were determined to be acceptable for assessing presence or absence of the species. Four survey visits were conducted during the 2025 breeding season (April 10, May 1, May 22, and June 16) within the parameters of highest detection probability for date, time of day, and weather conditions (Conway et al. 2008).

Surveys were conducted as outlined in Appendix D of the *Staff Report on Burrowing Owl Mitigation* (CDFW 2012). All portions of the site (100% coverage) were surveyed by walking straight-line transects spaced 10 meters apart. At the start of each transect, and at intervals of at least every 100 meters, surveyors scanned the entire visible project area for burrowing owls. Adjacent private properties were also scanned using binoculars, with observations extending up to 150 meters. Surveyors listened for burrowing owls throughout the survey and recorded each newly detected burrow.

## 2.0 RESULTS

No evidence of occupancy by burrowing owls, including burrowing owls, pellets, prey remains, whitewash, or decoration, was observed. A total of 18 unique burrow locations were recorded by surveyors over the four survey visits. Potential burrowing owl burrows were determined by the presence of one or more burrowing owls, pellets, prey remains, whitewash, or decoration, or a burrow with a diameter greater than 11 centimeters (height and width) and greater than 150 centimeters in depth (Johnson et al. 2010). Of the 18 burrows detected, nine met the minimum height measurement of 11 centimeters, seven met the minimum measurement of 11 centimeters in both width and height, and none of the burrows detected met the depth minimum of 150 centimeters. Additional wildlife observations included:

- Common raven\*
- Coyote\* (scat only)
- Desert cottontail
- Blacktail jackrabbit

- Brewer's sparrow
- Mourning dove
- Say's phoebe
- House finch
- Northern mockingbird
- possible burrowing owl predator

## 2.1 Survey 1

### 2.1.1 Survey Details and Results

Survey Date: April 10, 2025

Survey Start Time: 09:00 AM

Survey End Time: 12:50 PM

Starting Weather: 22C, winds 1-3mph, 10% cloud cover

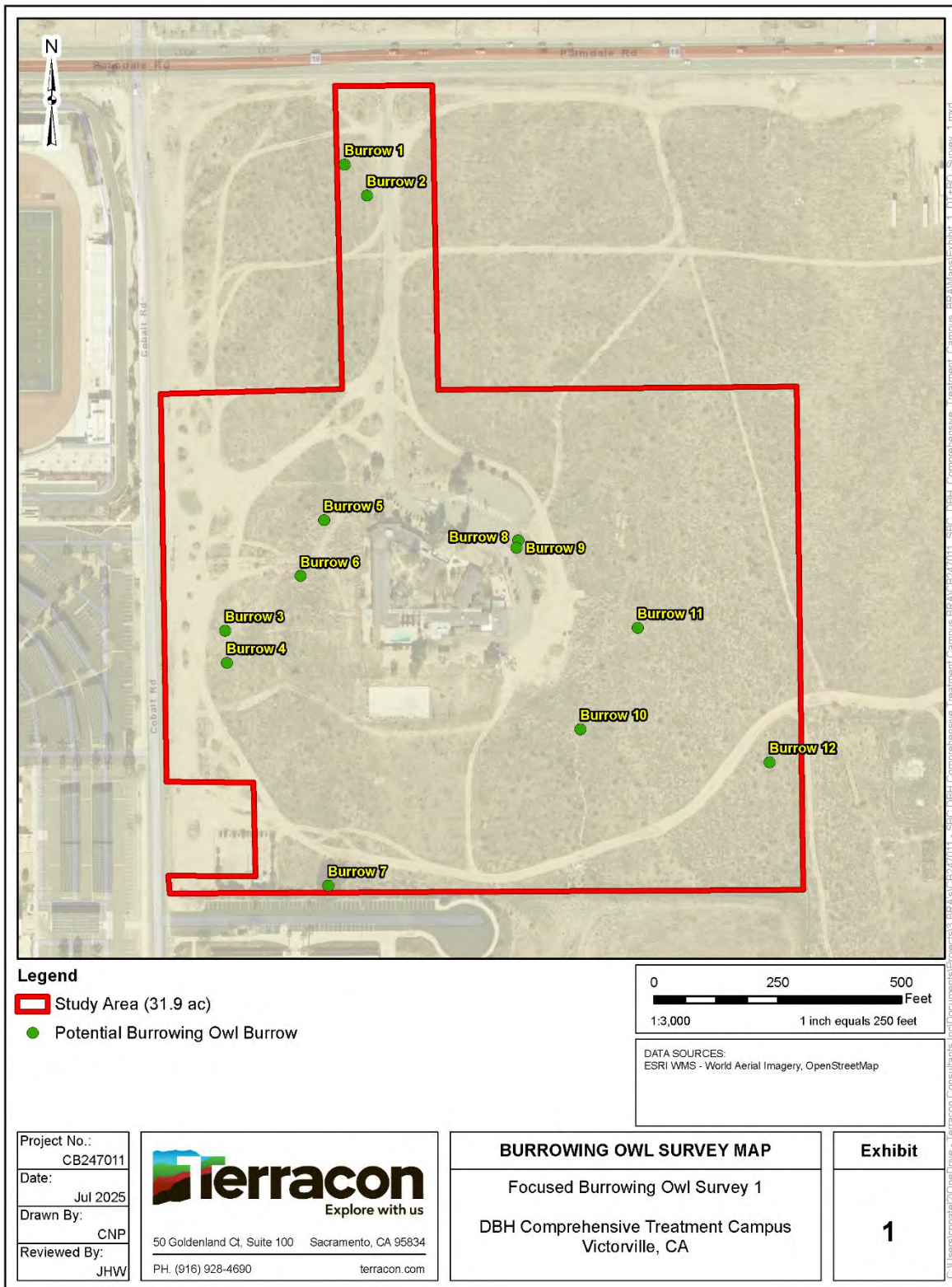
Ending Weather: 30C, winds 4-6mph, 10% cloud cover

Surveyors: Sarah Winfrey, Ryan Russell

Burrow ID	Width (cm)	Height (cm)	Depth (cm)	Class	UTM Coordinates (Zone UN)
1	10.5	12.0*	25	4	465871, 3818340
2	18.0*	8.0	<25	4	465884, 3818321
3	11.1*	9.0	75	4	465794, 3818054
4	15.5*	8.3	25	4	465795, 3818035
5	15.5*	11.0*	<25	4	465856, 3818122
6	12.0*	8.0	25	4	465841, 3818088
7	13.5*	10.0	<25	4	465856, 3817897
8	9.0	9.5	<25	4	465975, 3818108
9	17.0*	8.0	<25	4	465974 3818104
10	27.5*	20.0*	100	4	466012 3817992
11	19.0*	11.0*	25	4	466048, 3818053
12	10.0	14.0*	50	4	466129, 3817970

\* Measurement meets the minimum diameter size characteristic of a potential burrowing owl burrow (11 cm)

### 2.1.2 Survey Map



### 2.1.3 Survey Photographs



**Burrow 1 105mm width, 120mm height, 0.25m depth, Class 4 GPS: 11N 465871, 3818340**



**Burrow 2 180mm width, 80mm height, <0.25m depth, Class 4 GPS: 11N 465884 3818321**



**Burrow 3 111mm width, 90mm height, 0.75 m depth, Class 4 GPS: 11N 465794, 3818054**



**Burrow 4 155mm width, 83mm height, 0.25m depth, Class 4 GPS: 11N 465795, 3818035**



**Burrow 5 155mm width, 110mm height, <0.25m depth, Class 4 GPS: 11N 465856, 3818122**



**Burrow 6 120mm width, 80mm height, 0.25m depth, Class 4 GPS: 11N 465841, 3818088**



**Burrow 7 135mm width, 100mm height, <0.25m depth, Class 4 GPS: 11N 465856, 3817897**



**Burrow 8 90mm width, 95mm height, <0.25m depth, Class 4 GPS: 11N 465975, 3818108**



**Burrow 9 170mm width, 80mm height, <0.25m depth, Class 4 GPS 11N 465974 3818104**



**Burrow 10 275mm width, 200mm height, 1m depth, Class 4 GPS 11N 466012 3817992**



**Burrow 11 190mm width, 110mm height, 0.25m depth, Class 4 GPS: 11N 466048, 3818053**



**Burrow 12 100mm width, 140mm height, 0.5m depth, Class 4 GPS: 11N 466129, 3817970**

### 2.1.4 Survey Field Form

#### USEWS DESERT TORTOISE PRE-PROJECT SURVEY DATA SHEET

Date of survey: 04/10/25 Survey biologist(s): Sarah Winfrey Ryan Russell  
(month, day, year)  
 Site description: San Bernardino County Comprehensive Treatment Campns (30 acres)  
(project name and size; general location)  
 County: San Bernardino Quad: Parcel 8105-191-11 Location: 13333 Palmdale Rd Victorville CA  
(UTM coordinates, lat-long, and/or TRS; map datum)  
 Transect #: 40 Transect length: 300m Type of survey: 100% coverage P1A 10m transect  
(acres to be surveyed; 100% coverage/probabilistic sampling)  
 GPS Start-point: 465760 3818198 Start time: 09:00 am/pm  
(easting, northing, elevation in meters)  
 GPS End-point: 466148 3818196 End time: 12:50 am/pm  
(easting, northing, elevation in meters)  
 Start Temp: 22 °C Weather: Partly Cloudy 10% cover End Temp: 30 °C

#### Live Tbrtoises

Detection number	GPS location		Time	Tortoise location (in burrow: all of tortoise beneath plane of burrow opening, or not in burrow)	Approx MCL >160-mm? (Yes, No or Unknown)	Existing tag # and color, if present
	Easting	Northing				
1						
2						
3						
4						
5						
6						
7						

#### Tortoise Sign (burrows<sup>1</sup>, scats, carcasses, etc)

Detection number	GPS location		Type of sign (burrows, scats, carcass, etc)	Description and comments
	Easting	Northing		
1	465871	3818340	Burrow (cortid scat)	W: 105mm H: 120mm Class 4 Dark 0.25m
2	465884	3818321	Burrow	W: 180mm H: 80mm Class 4 Dark < 0.25m
3	465794	3818054	Burrow	W: 111mm H: 90mm D: 0.75m Class 4
4	465795	3818035	Burrow	W: 155mm H: 83mm D: 0.25m Class 4
5	465856	3818122	Burrow	W: 155mm H: 110mm D: < 0.25m Class 4
6	465841	3818088	Burrow	W: 120mm H: 80mm D: 0.25m Class 4
7	465856	3817997	Burrow	W: 135mm H: 100mm D: < 0.25 Class 4
8	465975	3818108	Burrow	W: 90mm H: 95mm D: < 0.25 Class 4
9	465974	3818104	Burrow	W: 170mm H: 80mm D: < 0.25 Class 4
* 10	466012	3817942	Burrow	W: 275mm H: 200mm D: 1m Class 4
11	466048	3818053	Burrow	W: 190mm H: 110mm D: 0.25m Class 4
12	466129	3817970	Burrow	W: 120mm H: 140mm D: 0.5m Class 4
13				
14				
15				

<sup>1</sup> See section 4.1.2 for information on burrow condition class and photographing burrows

## 2.2 Survey 2

### 2.2.1 Survey Details and Results

Survey Date: May 1, 2025

Survey Start Time: 09:30 AM

Survey End Time: 12:51 PM

Starting Weather: 22C, winds 1-3mph, 10% cloud cover

Ending Weather: 27C, winds 4-7mph, 10% cloud cover

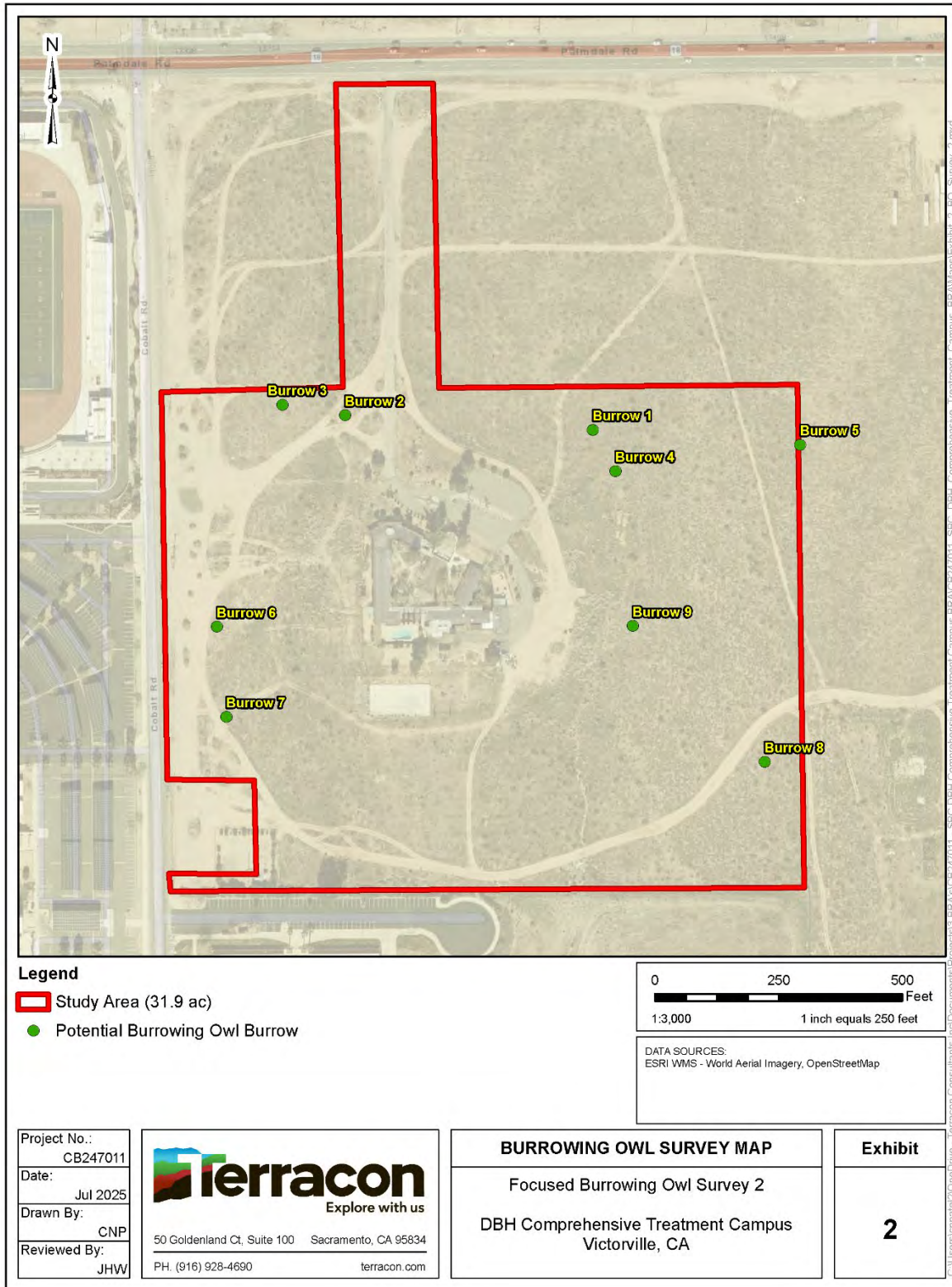
Surveyors: Sarah Winfrey, Ryan Russell

Burrow ID	Width (cm)	Height (cm)	Depth (cm)	Class	UTM Coordinates (Zone UN)
1	10.0*	12.5*	25	4	466021, 3818174
2	12.0*	15.0*	25	4	465869, 3818185
3	11.0*	10.0	50	4	465830, 3818192
4	12.5*	14.5*	50	4	466035, 3818149
5	13.4*	13.0*	25	4	466149, 3818164
6t	12.0*	9.0	50	4	465789 3818056
7	11.5*	7.5	25	4	465794, 3818000
8+	11.0*	10.5	50	4	466125 3817969
9t	18.5*	14.0*	25	4	466045 3818053

\* Measurement meets the minimum diameter size characteristic of a potential burrowing owl burrow (11 cm)

+ Burrows are duplicates of burrows previously surveyed on April 10, 2025 (Burrows 3, 12, and 11, respectively.)

### 2.2.2 Survey Map



### 2.2.3 Survey Photographs



**Burrow 1 100mm width, 125mm height, 0.25m depth, Class 4 GPS: 11N 466021, 3818174**



**Burrow 2 120mm width, 150mm height, 0.25m depth, Class 4 GPS: 11N 465869, 3818185**



**Burrow 3 110mm width, 100mm height, 0.5m depth, Class 4 GPS: 11N 465830, 3818192**



**Burrow 4 125mm width, 145mm height, 0.5m depth, Class 4 GPS: 11N 466035, 3818149**



**Burrow 5 134mm width, 130mm height, 0.25m depth, Class 4 GPS: 11N 466149, 3818164**



**Burrow 6 120mm width, 90mm height, 0.5m depth, Class 4 GPS 11N 465789 3818056**



**Burrow 7 115mm width, 75mm height, 0.25m depth, Class 4 GPS: 11N 465794, 3818000**



**Burrow 8 110mm width, 105mm height, 0.5m depth, Class 4 GPS: 11N 466125 3817969**



**Burrow 9 110mm width, 105mm height, 0.5m depth, Class 4 GPS: 11N 466125 3817969**

## 2.2.4 Survey Field Form

### USEFWS DESERT TORTOISE PRE-PROJECT SURVEY DATA SHEET

Date of survey: 05/01/25 Survey biologist(s): Sarah Winfrey, Ryan Russell, Chelsea R  
(month, day, year)  
 Site description: San Bernardino Comprehensive Treatment Campus (30 acres)  
(project name and size; general location)  
 County: San Bernardino Quad: Parcel 5105-191-11 Location: 13333 Palmdale Rd. Victorville CA  
(UTM coordinates, lat-long, and/or TRS; map datum)  
 Transect # 45 Transect length: 390m Type of survey: 100% coverage  
(acres to be surveyed; 100% coverage/probabilistic sampling)  
 GPS Start-point: 466162 3818183 Start time: 09:30 am/pm  
(easting, northing, elevation in meters)  
 GPS End-point: 466161 3817875 End time: 12:45 am/pm  
(easting, northing, elevation in meters)  
 Start Temp: 72 F °C Weather: wind 3 mph cloud cover 10/10 End Temp: 81 F °C

#### Live Tortoises

Detection number	GPS location		Time	Tortoise location (in burrow: all of tortoise beneath plane of burrow opening, or not in burrow)	Approx MCL >160-mm? (Yes, No or Unknown)	Existing tag # and color, if present
	Easting	Northing				
1						
2						
3						
4						
5						
6						
7						

#### Tortoise Sign (burrows<sup>1</sup>, scats, carcasses, etc)

Detection number	GPS location		Type of sign (burrows, scats, carcass, etc)	Description and comments
	Easting	Northing		
1	466021	3818174	Burrow	100mm W 125mm H 0.25m D Class 4
2	465869	3818185	Burrow	W120mm H150mm D0.25m Class 4
3	465830	3818192	Burrow	W110mm H100mm D0.5m Class 4
4	466035	3818149	Burrow	W125mm H145mm D 0.5m Class 4
5	466149	3818164	Burrow	W134mm H130mm D 0.25m Class 4
6	465789	3818056	Burrow	W120mm H90mm D 0.5m Class 4
7	465794	3818000	Burrow	W115mm H 75mm D0.25m Class 4
8	466125	3817969	Burrow	W110mm H 105m D 0.5m Class 4
9	466045	3818053	Burrow	W185mm H 140mm D. 0.25 (Class 4)
10				
11				
12				
13				
14				
15				

<sup>1</sup> See section 4.1.2 for information on burrow condition class and photographing burrows

December 2009  
 MODO  
 SAPM  
 COIRA Cottontail  
 HOFI Blacktail Teardrop  
 ROPI  
 NODD

## **2.3 Survey 3**

### **2.3.1 Survey Details and Results**

Survey Date: May 22, 2025

Survey Start Time: 08:40 AM

Survey End Time: 11:25 AM

Starting Weather: 29C, winds 1-3mph, 10% cloud cover

Ending Weather: 32C, winds 4-7mph, 10% cloud cover

Surveyors: Sarah Winfrey, Ryan Russell

No new signs found.

### 2.3.2 Survey Field Form

BUOW  
**USEWS DESERT TORTOISE PRE-PROJECT SURVEY DATA SHEET**

Date of survey: 5/22/25 Survey biologist(s): Sarah Winfrey, Ryan Russell  
(month, day, year)  
 Site description: San Bernardino Comprehensive Treatment Campus (30 acres)  
(project name and size, general location)  
 County: San Bernardino Quad: Parcel 3105-191-11 Location: 13333 Palmdale Rd Victorville CA  
(UTM coordinates, lat-long, and/or TRS, map datum)  
 Transect # ~~45~~ 55 Transect length: 300m Type of survey: 100% Coverage P/A BUOW 7 m transects  
(acres to be surveyed, 100% coverage/probabilistic sampling)  
 GPS Start-point: 4666148 3818196 Start time: 09:30  am /  pm  
(easting, northing, elevation in meters)  
 GPS End-point: 468760, 3818198 End time: 11:30  am /  pm  
(easting, northing, elevation in meters)  
 Start Temp: 85 F Weather: Clear Sunny End Temp: 91 F

**Live Tortoises**

Detection number	GPS location		Time	Tortoise location <i>(in burrow: all of tortoise beneath plane of burrow opening, or not in burrow)</i>	Approx MCL >160-mm? <i>(Yes, No or Unknown)</i>	Existing tag # and color, if present
	Easting	Northing				
1						
2						
3						
4						
5						
6						
7						

**Tortoise Sign (burrows<sup>1</sup>, scats, carcasses, etc)**

Detection number	GPS location		Type of sign <i>(burrows, scats, carcass, etc)</i>	Description and comments
	Easting	Northing		
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

<sup>1</sup> See section 4.1.2 for information on burrow condition class and photographing burrows

## **2.4 Survey 4**

### **2.4.1 Survey Details and Results**

Survey Date: June 16, 2025

Survey Start Time: 17:30 PM

Survey End Time: 19:30 PM

Starting Weather: 35C, winds 1-3mph, 10% cloud cover

Ending Weather: 30C, winds 4-6mph, 10% cloud cover

Surveyors: Sarah Winfrey, Ryan Russell

No new signs found.

### 2.4.2 Survey Field Form

Burow  
**USEWS DESERT TORTOISE PRE-PROJECT SURVEY DATA SHEET**

Date of survey 06/16/25 Survey biologist(s) Sarah Winkley, Ryan Russell  
(month, day, year)  
 Site description: San Bernardino Comprehensive Treatment Campus 30 acres  
(project name and size, general location)  
 County San Bernardino Parcel 3105-17-11 Location: 13333 Patindale Rd Victorville CA  
(UTM coordinates, lat-long, and/or TRS, map datum)  
 Transect # 55 Transect length: 300 Type of survey: 100% Coverage BUOW 7m  
(acres to be surveyed, 100% coverage/probabilistic sampling)  
 GPS Start-point: 466161 3817875 Start time: 6:15 am/pm (m)  
(easting, northing, elevation in meters)  
 GPS End-point: 466162 3818183 End time: 8:00 am/pm (m)  
(easting, northing, elevation in meters)  
 Start Temp: 95F °C Weather: wind 10mph, sunny clear End Temp: 86F °C

**Live Tortoises**

Detection number	GPS location		Time	Tortoise location <i>(in burrow: all of tortoise beneath plane of burrow opening, or not in burrow)</i>	Approx MCL >160-mm? <i>(Yes, No or Unknown)</i>	Existing tag # and color, if present
	Easting	Northing				
1						
2						
3						
4						
5						
6						
7						

**Tortoise Sign (burrows<sup>1</sup>, scats, carcasses, etc)**

Detection number	GPS location		Type of sign <i>(burrows, scats, carcass, etc)</i>	Description and comments
	Easting	Northing		
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				

<sup>1</sup> See section 4.1.2 for information on burrow condition class and photographing burrows

**Signature:** 

**Email:** Kayti.Christianson@terracon.com

**Signature:** 

**Email:** Sarah.Winfrey@terracon.com