

# GENERAL BIOLOGICAL RESOURCES ASSESSMENT

JOSHUA TREE, SAN BERNARDINO COUNTY, CALIFORNIA  
APN: 0602-361-04

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**Project: #2021-163 BA**

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## **TITLE PAGE**

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**Report Title:** General Biological Resources Assessment

**Project Location:** 61650 Alta Loma Dr.  
Joshua Tree, California  
APN: 0602-361-04  
TTM: 20433

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Appendix A – Tables and Figures  
Regulatory Context

## **1.0 INTRODUCTION AND SUMMARY**

Biological surveys were conducted on a parcel (APN: 0602-361-04) that is approximately 19-acres in size located northwest of the intersection of Sunset Road and Alta Loma Drive in Joshua Tree, San Bernardino County, California (Figures 1 and 2). The site is specifically located SE ¼ of the SE ¼ of Section 35, Township 1 North, Range 6 West in the USGS Joshua Tree South 7.5-minute California Quadrangle. The project site is located in an area zoned for a rural living land use district. The project proponent is proposing to develop single-family residential dwellings.

As part of the environmental process, California Department of Fish and Wildlife (CDFW) and U.S. Fish and Wildlife Service (USFWS) data sources were reviewed. Following the data review, surveys were performed on the site on June 29, 2023, during which the biological resources on the site and in the surrounding areas were documented by biologists from RCA Associates, Inc. As part of the surveys, the property and adjoining areas were evaluated for the presence of native habitats which may support populations of sensitive wildlife species. The property was also evaluated for the presence of sensitive habitats including wetlands, vernal pools, riparian habitats, and jurisdictional areas.

Focused surveys were also conducted for both desert tortoise, burrowing owl, and Joshua trees. Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2000) and Whitaker (1980).

## 2.0 EXISTING CONDITIONS

The property is approximately 19-acres located northwest of the intersection of Sunset Road and Alta Loma Drive in Joshua Tree, San Bernardino County, California (Section 35, Township 1 North, Range 6 West in the USGS Joshua Tree South 7.5-minute California Quadrangle) (Figures 1 and 2). Surrounding areas to the north, east, and south consist of privately owned parcels that are developed with single family homes. To the west of the site is vacant land.

The site has a downward slope in a southwest to northeast direction, and the southwestern boundary of the site is approximately 925 meters above sea level and slopes down to 905 meters above sea level at the northeast corner. The site is relatively undisturbed, except for the graded area in the center of the site (approximately 45,000 square feet) and two roads, one that runs through the property in a east-west direction, and the other is located at the southwest corner. The vegetation community on site is Mojave Desert scrub consisting of mainly native plants and a few non- native grasses. The site is dominated by Mojave yucca (*Yucca schidigera*), Joshua Tree (*Yucca brevifolia*), pencil cholla (*Cylindropuntia leptocaulis*) and turpentine broom (*Thamnosma montana*). Other species of flora that are expected to occur on site and the surrounding area are discussed in section 5.0.

The site is expected to support a variety of wildlife species given its location in the rural area of Joshua Tree just north of the National Park and being surrounded by native desert vegetation providing shelter and suitable habitat. Desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Otospermophilus beecheyi*), antelope ground squirrel (*Ammospermophilus leucurus*), and black-tailed jackrabbit (*Lepus californicus*) were the only mammals observed during the field investigations even though other species, which are common in the area, are expected to inhabit the site such as the California ground squirrel (*Spermophilus beecheyi*). Tracks and scat were observed throughout the site belonging to coyotes (*Canis latrans*), which may traverse the site during hunting activities.

Some birds observed on site during the field investigations included ravens (*Corvus corax*), house finches (*Haemorrhous mexicanus*), cactus wren (*Campylorhynchus brunneicapillus*), black-throated sparrow (*Amphispiza bilineata*), Eurasian collared dove (*Streptopelia decaocto*), and mourning dove (*Zenaida macroura*). Other avian species that were observed or expected to utilize the site

and surrounding area are discussed in section 5.0.

Reptiles observed during the survey were limited to only the western whiptail lizard (*Cnemidophorus tigris*). A list of reptiles that could possibly inhabit the site or occur in the surrounding areas are discussed in section 5.0.

A drainage swale was observed entering the property at the southeast corner and flowing north along the eastern boundary until exiting the property at the northeast corner. This intermittent channel may be considered jurisdictional due to its size which has increased over the past few years due to heavier seasonal rainfall.

In addition, no sensitive habitats (e.g. sensitive species, critical habitats, vernal pools, etc.) have been documented in the immediate area according to the CNDDDB (2023) and none were observed during the field investigations.

### 3.0 METHODOLOGIES

General biological surveys were conducted on June 29, 2023, during which biologists from RCA Associates, Inc. walked 10-meter parallel belt transects throughout the property site in a north-south direction. During the surveys, data was collected on the plant and animal species present on the site. All plants and animals detected during the surveys were recorded and are provided in Tables 1 & 2 (Appendix A). The property was also evaluated for the presence of habitats which might support sensitive species. Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2000), and Whitaker (1980). Following completion of the initial reconnaissance survey, protocol surveys were conducted for the burrowing owl (*Athene cunicularia*) as per agency requirements. Weather conditions consisted of wind speeds of 0 to 5 mph, temperatures in the mid-high 80's (°F) (AM) with approximately 0% cloud cover. The applicable methodologies are summarized below.

**General Plant and Animal Surveys:** Ten meter transects were walked throughout the site and in the surrounding area (i.e., the zone of influence) at a pace that allowed for careful documentation of the plant and animal present on the site. All plants observed were identified in the field and wildlife was identified through visual observations and/or by vocalizations. Tables 1 and 2 (Appendix A) provide a comprehensive compendium of the various plant and animal species observed during the field investigations on site or in the surrounding areas. The taxonomic nomenclature used in this study follows the California Native Plant Society (CNPS 2023).

**Desert Tortoise (*Gopherus agassizii*):** A habitat assessment was conducted on June 29, 2023 for the desert tortoises (*Gopherus agassizii*) and a survey was also performed for the presence of any potential tortoise burrows by biologists from RCA Associates, Inc. Parallel 10-meter belt transects were walked in a north-south direction until the entire property had been checked for any tortoises or tortoise sign (burrows, tracks, scats, etc.). Surveys in the zone of influence (ZOI) were also conducted where accessible. Comprehensive field investigations were conducted throughout the site during the biological surveys and no tortoise sign was identified on the site or zone of influence.

During the various biological surveys, all transects were walked at a pace that allowed careful observations along the transect routes and in the immediate vicinity. Field notes were recorded regarding native plant assemblages, wildlife sign, and human effects to determine the

presence or absence of suitable tortoise foraging habitat. If tortoises are found to inhabit the site in the future, a Section 10(a) incidental take permit from the USFWS and a Section 2081 permit from CDFW will be required to mitigate impacts to the species.

**Burrowing Owl (*Athene cunicularia*):** A habitat assessment (Phase 1) was conducted for the burrowing owl in conjunction with the general biological surveys to determine if the site supports suitable habitat for the species on June 29, 2023. Following completion of the habitat assessment, it was determined that the site does support minimal suitable habitat for the burrowing owl. As part of the burrowing owl survey, transects were walked throughout the site during which any suitable burrows were evaluated for owls and owl signs (e.g. white wash, feathers, or castings). After the field investigations it was determined that there are no inhabiting owls even with suitable habitat present due to the lack of suitable burrows and owl signs observed on site. Burrowing owls typically utilize burrows which have been excavated by other animals (squirrels, coyotes, foxes, dogs, etc.) since owls rarely dig their own burrows. CDFW protocol also requires surveys be conducted in the surrounding area out to a distance of about 500 feet where accessible; therefore, the zone of influence (ZOI) surveys was performed in the area surrounding the site. If present on a site, CDFW typically requires the owls to be passively relocated during the non-breeding season.

**Review of Background Information:** Aerial photography was reviewed prior to conducting the field investigations on June 29, 2023. The aerial photographs were used to locate and inspect any potential natural drainage features and water bodies that may be considered riparian/riverine habitat, or which may be jurisdictional under either the U.S. Army Corps of Engineers (USACE), Regional Water Control Board (RWQCB) and/or CDFW. After the background review of aerial imagery, the site appears to have a potential jurisdictional channel within its boundaries. In general, surface drainage features are typically indicated as blue-line streams on USGS maps, which are expected to exhibit evidence of water flow through the channel. Such areas are considered potentially riparian/riverine habitat and may be subject to State and federal regulatory authority as “Waters of the State” or “Waters” of the U.S. Riparian/riverine habitat is defined as lands which contain habitat dominated by trees, shrubs, persistent emergent, or emergent mosses and lichens, which occur close to or which depend upon soil moisture from a nearby freshwater source, or areas with freshwater flow during all or a portion of the year.



#### 4.0 LITERATURE RESEARCH

As part of the environmental process, a search of the California Natural Diversity Database (CNDDDB) search was performed. Based on this review, it was determined that twelve special status species, five animals and seven plants, have been documented within the Joshua Tree South quadrangle of the property. The following tables provide data on each special status species which has been documented in the area.

**Table 4-1: Federal and State Listed Species and State Species of Special Concern.**

E = Endangered; T = Threatened; SSC = Species of special concern; CNPS = California Native Plant Society; CNDDDB = California Natural Diversity Data Base

NAME	STATUS	HABITAT REQUIREMENTS	PRESENCE/ ABSENCE ON PROPERTY
<b>PLANTS</b>			
<b>Within Joshua Tree South Quadrangle</b>			
San Bernardino milk-vetch <i>(Astragalus bernardinus)</i>	Federal: None State: None CNPS: 1B.2	Joshua tree woodland, pinyon and juniper woodland often on granitic or carbonate dry mountain slope	The site does not have suitable habitat and none were observed on site.
Triple-ribbed milk-vetch <i>(Astragalus tricarinatus)</i>	Federal: Endangered State: None CNPS: 1B.2	Joshua tree woodland. Grows in desert scrub and expanses of rock litter in sandy and gravelly soils.	The site does not have suitable habitat and none were observed on site.
Pinyon rockcress <i>(Boechera dispar)</i>	Federal: None State: None CNPS: 2B.3	Rocky areas in deserts and mountain habitats in granitic or gravelly rocks	The site does not have suitable habitat and none were observed on site.
Parish's Daisy <i>(Erigeron parishii)</i>	Federal: Threatened State: None CNPS: 1B.1	Typically grows on rocky slopes and active washes made of limestone substrate requiring very alkaline soils in pinyon woodlands.	The site does not have suitable habitat and none were observed on site.
Robison's monardella <i>(Monardella robisonii)</i>	Federal: None State: None CNPS: 1B.3	Found among granite boulders in desert chaparral and pinyon-juniper woodland	The site does not have suitable habitat and none were observed on site.

Little San Bernardino Mountains linanthis ( <i>Linanthus maculatus ssp. maculatus</i> )	Federal: None State: None CNPS: 1B.2	Dunes, creosote bush scrub, Joshua tree woodland, Mojavean desert scrub	No suitable habitat, none observed on site.
Latimer's woodland-gila ( <i>Saltugilla latimeri</i> )	Federal: None State: None CNPS: 1B.2	Dry, rocky and coarse desert canyons or slopes.	No suitable habitat, no Latimer's woodland gila was observed on site.

**Notes:**

Status abbreviations:

- CNPS List 1A: Plants presumed extirpated in California and either rare or extinct elsewhere
- CNPS List 1B: Plants rare, threatened, or endangered in California and elsewhere
- CNPS List 2A: Plants presumed extirpated in California, but more common somewhere else
- CNPS List 2B: Plants rare, threatened, or endangered in California, but more common somewhere else
- CNPS List 3: Plants about which more information is needed - a review list
- CNPS List 4: Plants of limited distribution - a watch list
  - .1 Seriously threatened in California (over 80% of occurrences threatened/ high degree and immediacy of threat)
  - .2 Moderately threatened in California (20-80% occurrences threatened/ moderate degree and immediacy of threat)
  - .3 No very threatened in California (<20% of occurrences threatened/ low degree and immediacy of threat or no current threats known)

NAME	STATUS	HABITAT REQUIREMENTS	PRESENCE/ ABSENCE ON PROPERTY
<b>Wildlife Species</b>			
<b>Within Joshua South Quadrangle</b>			
Southern California legless lizard ( <i>Anniella stebbinsi</i> )	Federal: None State: None CDFW: SSC	Found in coastal sand dunes, sandy washes, and alluvial fans in moist warm loose soil with plant cover in sparsely vegetated areas.	No suitable habitat, none observed on site.
Pallid San Diego pocket mouse ( <i>Chaetodipus fallax pallidus</i> )	Federal: None State: None CDFW: SSC	Variety of temperate and arid habitats, through coastal sage and deserts of Baja California	Some suitable habitat, although none observed on site.
Desert tortoise ( <i>Gopherus agassizii</i> )	Federal: Threatened State: Threatened	Desert shrub	No suitable habitat observed due to the lack of occupiable burrows and roadways that act as barriers of entry. No tortoises or tortoise signs were observed on site.
Desert Bighorn Sheep ( <i>Ovis canadensis nelsoni</i> )	Federal: None State: None CDFW: Fully protected	Rugged open habitat, rocky slopes and cliffs, canyons, washes, and alluvial fans	No suitable habitat, none observed on site.
Hoary bat ( <i>Lasiurus cinereus</i> )	Federal: None State: None	A migratory species that spends the winter in southern California. Prefers trees in heavy forest shade trees, and edge of clearings	No suitable habitat, none observed on site.

## 5.0 RESULTS

### 5.1 General Biological Resources

The site supports a desert scrub community that predominantly consists of native vegetation throughout the site and surrounding area. Plants observed on the site include Joshua tree (*Yucca brevifolia*), white bursage (*Ambrosia dumosa*), goat nut (*Simmondsia chinensis*), silver cholla (*Cylindropuntia echinocarpa*), pencil cholla (*Cylindropuntia ramosissima*), desert chia (*Salvia columbariae*), and bladder sage (*Scutellaria mexicana*). Table 1 provides a compendium of all plants occurring on the site and/or in the immediate surrounding area.

Birds observed included house finch (*Haemorhous mexicanus*), common raven (*Corvus corax*), Eurasian collared-dove (*Streptopelia decaocto*), Red tailed hawk (*Buteo jamaicensis*), black-throated sparrow (*Amphispiza bilineata*), and mourning dove (*Zenaida macroura*). Table 2 provides a compendium of wildlife species observed during the various surveys and those likely to occur in the area.

Mammals observed on site were limited to the desert cottontail (*Sylvilagus audubonii*), jackrabbit (*Lepus californica*), California ground squirrel (*Otospermophilus beecheyi*) and Antelope ground squirrel (*Ammospermophilus leucurus*). Coyote scat was also observed on the site and the species is known to traverse the area when foraging. Tables 1 and 2 (Appendix A) provides a compendium of the various plant and animal species identified during the field investigations and those common to the area. No distinct wildlife corridors were identified on the site or in the immediate area.

Reptiles observed during the field investigations June 29, 2023 included only the western whiptail lizard (*Cnemidophorus tigris*). Reptiles common in the region which are expected to inhabit the site include side-blotched lizards (*Uta stansburiana*), and desert iguana (*Dipsosaurus dorsalis*). Table 2 provides a compendium of wildlife species observed during the various surveys and those likely to occur in the area.

One drainage swale was observed entering the property at the southeast corner and flowing north along the eastern boundary until exiting the property at the northeast corner. This drainage swale

may be considered jurisdictional due to its size. The channel is approximately two to three feet wide and two feet deep and shows a clear indication of erosion from the past rainy season.

No sensitive habitats (e.g., wetlands, vernal pools, critical habitats for sensitive species, etc.) were observed on the site during the field investigations.

## 5.2 Federal and State Listed Species

**Desert Tortoise:** The desert tortoise is a federally and state threatened species. Desert tortoises can be found in the Mojave Desert and occupy desert scrubs that may consist of shrub steppe, perennial grasses, Joshua trees, and open scrub areas consisting of creosote bush. The site does not contain suitable habitat for the desert tortoise due to the lack of suitable burrows and multiple busy roadways acting as barriers of entry to the site; however, it is also located within the documented tortoise habitat according to CNDBB. As per the USFWS desert tortoise protocol, ten meter transects were walked during the June 29, 2023 survey to observe the site for any desert tortoises or desert tortoise signs (i.e., scat, active burrow, or carcasses). No tortoises or signs were observed on the site, and the species is not expected to move onto the site in the near future based on the absence of any sign, and absence of any recent observations in the immediate area. The survey results are valid for one year as per CDFW and USFWS requirements.

**Triple-Ribbed Milkvetch:** The triple-ribbed milkvetch is a federally endangered plant species that occupies sandy and gravelly soils in Joshua tree woodlands. The site does not support suitable habitat for the triple-ribbed milkvetch and none were observed on site or expected to occur on the site.

**Parish's Daisy:** Parish's daisy is a federally threatened plant species that occupies rocky slopes and active washes made of limestone substrate that requires very alkaline soils. The site does not provide suitable habitat and is not expected to occur on the site in the future.

## 5.3 Species of Special Concern

**Sensitive Plants:** There are five plant species that are species of special concern; these species are the: San Bernardino milk-vetch, pinyon rockcress, Robison's monardella, Little San Bernardino Mountains linanthus, and Laitmer's woodland gila. All the species mentioned will not

occur on the site due to lack of suitable habitat and none were observed on the site during the June 29, 2023 survey.

**Sensitive Wildlife:** There are two wildlife species that are species of special concern in the Joshua Tree South quadrangle the southern California legless lizard and the pallid San Diego pocket mouse. Due to lack of suitable habitat the southern California legless lizard will not occur on the site and none were observed during the survey. The site does provide suitable habitat for the pallid San Diego pocket mouse, but none were observed during the survey on June 29, 2023. Although suitable habitat is present, several factors are present that contribute to the unlikelihood that the San Diego pocket mouse will inhabit the site in the future. These factors include the busy roadways surrounding the site that act as barriers of entry and the overall developments surrounding the area that have already fractured most if not all natural entryways to the project site.

#### **5.4 Jurisdictional Waters and Riparian Habitat**

The United States Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the United States, and the State of California also regulates waters of the State and streambeds under the purview of regional water quality boards and CDFW jurisdiction. These waters include wetlands and non-wetland bodies of water that meet specific criteria. After performing the field surveys on June 29, 2023, it was determined by biologists from RCA Associates, Inc. that the swale transecting the property in a north to south direction may be considered jurisdictional based on the increased depth and width of the channel due to the larger amount of rainfall from the previous season as well as an increased ordinary high-water mark (OHWM).

#### **5.5 Protected Plants**

As of September 22, 2020, the California Department of Fish and Wildlife temporarily listed the western Joshua tree (*Yucca brevifolia*) as an endangered species for one year until a final decision is made in 2023. There were 26 Joshua Trees (*Yucca brevifolia*) observed on site during the June 29, 2023 field investigations. Due to the presence of Joshua Trees, a “Protected Plant Plan” was conducted on June 29, 2023 in tandem with the Biological Assessment. The project proponent will avoid impacting the Joshua trees during construction activities and will maintain a 12 foot buffer around each tree. Any attempt to remove a Joshua tree, dead or alive, from its current position will require an Incidental Take Permit (ITP) and/or mitigation fees compulsory by the City or County.

## 6.0 IMPACTS AND MITIGATION MEASURES

### 6.1 General Biological Resources

Future development of the site will have minimal impact on the general biological resources (plants & animals) present on the site. Wildlife on site will be impacted by development activities and those species with limited mobility (i.e., small mammals and reptiles) will experience increases in mortality during the construction phase. However, more mobile species (i.e., birds, large mammals) will be displaced into adjacent areas and will likely experience minimal impacts. Therefore, development of about 19-acres of desert scrub vegetation is not expected to have a significant cumulative impact on the overall biological resources in the region given the presence of similar habitat throughout the surrounding area.

No sensitive habitats (e.g., wetlands, vernal pools, critical habitats for sensitive species, etc.) were observed on the site during the field investigations. However, the channel which bisects the site may be considered jurisdictional due to its size and distinct cut bank which has become more significant than when previously surveyed in 2021.

### 6.2 Federal and State Listed and Species of Special Concern

Only the western Joshua tree was observed during the 2023 field investigation. Any attempt to remove or displace the species dead or alive will require an incidental take permit (ITP) from CDFW. Take of the western Joshua tree falls under CDFW jurisdiction and will require agency approval before any ground disturbance within 50ft of any tree occurs. There were no documented observations of any other listed or special status species on the site or in the immediate surrounding area. The site is not expected to support populations of the desert tortoise based on the absence of any tortoise sign (e.g., burrows, scats, tracks, etc.), and although suitable habitat is present on the site, the probability of the species inhabiting the site is very low, given the lack of suitable burrows.

A pre-construction burrowing owl survey may be required by CDFW to determine if any owls have moved on to the site since the June 29, 2023 surveys. As stated in CDFW's *Staff Report on Burrowing Owl Mitigation*, the most effective method of completing a pre-construction survey (take avoidance survey) should be performed within 14 days of ground disturbance, followed by a final pre-construction survey within 24 hours of breaking ground.

## 7.0 CONCLUSIONS AND RECCOMENDATIONS

Future development activities are expected to result in the removal of vegetation from a portion of the 19-acre parcel; however, cumulative impacts to the general biological resources (plants and animals) in the surrounding area are expected to be negligible. This assumption is based on the presence of habitat on the site which is very common throughout the region. In addition, future development activities are not expected to have any impact on any State or Federal listed or State special status plant or animal species. As discussed above, the site does not support any desert tortoises. In addition, burrowing owls do not inhabit the site and are not expected to be impacted given the absence of any suitable burrows. The following mitigation measures are recommended:

1. Pre-construction surveys for burrowing owls, desert tortoise, and nesting birds protected under the Migratory Bird Treaty Act and Section 3503 of the California Fish and Wildlife Code shall be conducted prior to the commencement of Project-related ground disturbance.
  - a. Appropriate survey methods and timeframes shall be established, to ensure that chances of detecting the target species are maximized. In the event that listed species, such as the desert tortoise, are encountered, authorization from the USFWS and CDFW must be obtained. If nesting birds are detected, avoidance measures shall be implemented to ensure that nests are not disturbed until after young have fledged.
  - b. Pre-construction surveys shall encompass all areas within the potential footprint of disturbance for the project, as well as a reasonable buffer around these areas.
2. If any sensitive species are observed on the property during future activities, CDFW and USFWS (as applicable) should be contacted to discuss specific mitigation measures which may be required for the individual species. CDFW and USFWS are the only agencies which can grant authorization for the “take” of any sensitive species and can approve the implementation of any applicable mitigation measures.



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## CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits, presents the data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief. Fieldwork conducted for this assessment was performed by Ryan Hunter and Brian Bunyi. I certify that I have not signed a non-disclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

Date: 07/21/2023

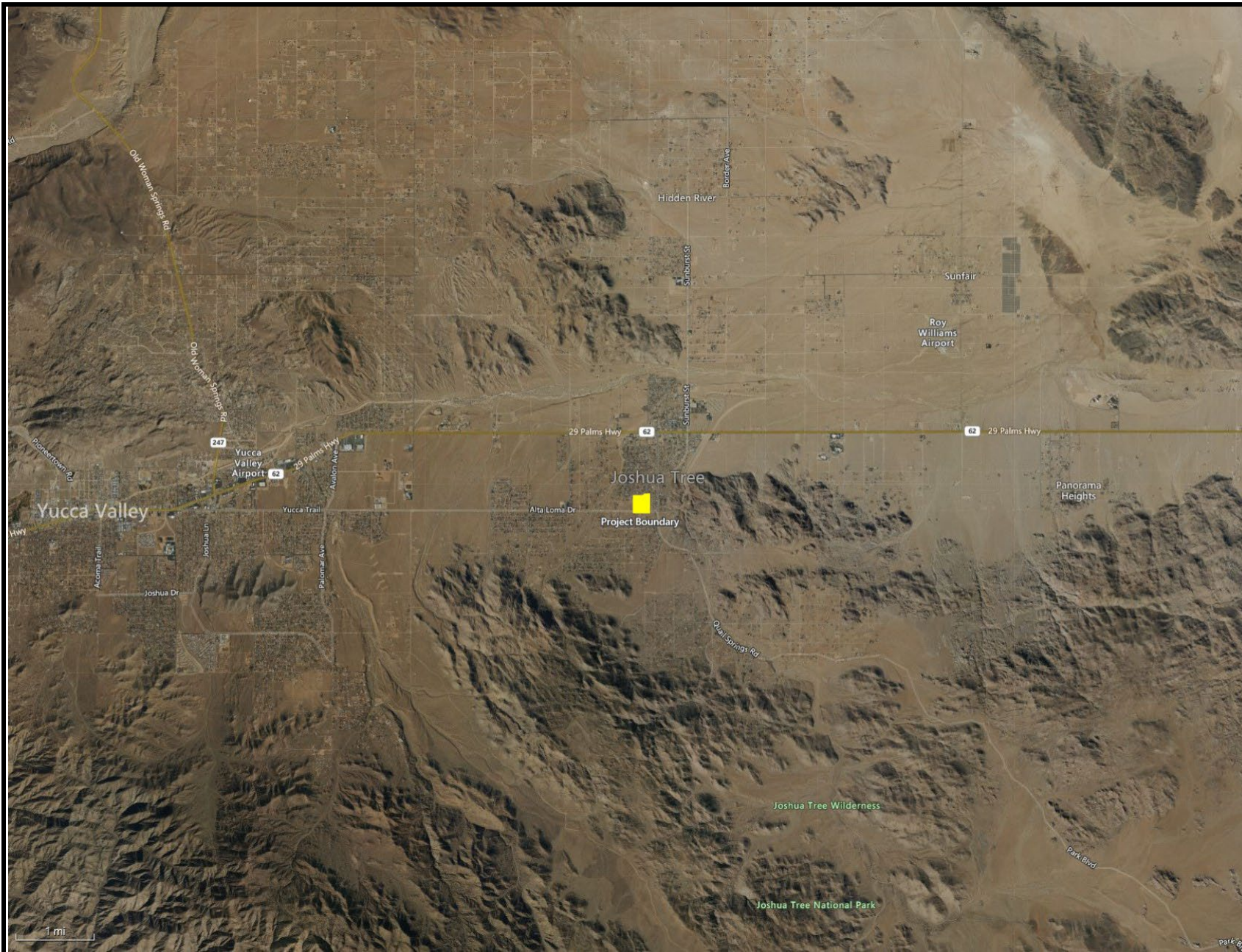
Signed: *Ryan Hunter*

Signed: *Brian Bunyi*

Field Work Performed By: Ryan Hunter  
Environmental Scientist & Biologist

Field Work Performed By: Brian Bunyi  
Wildlife Biologist

**Appendix A**  
**Tables and Figures**



**Legend**

 Project Boundary



**Figure 1: Regional Exhibit**

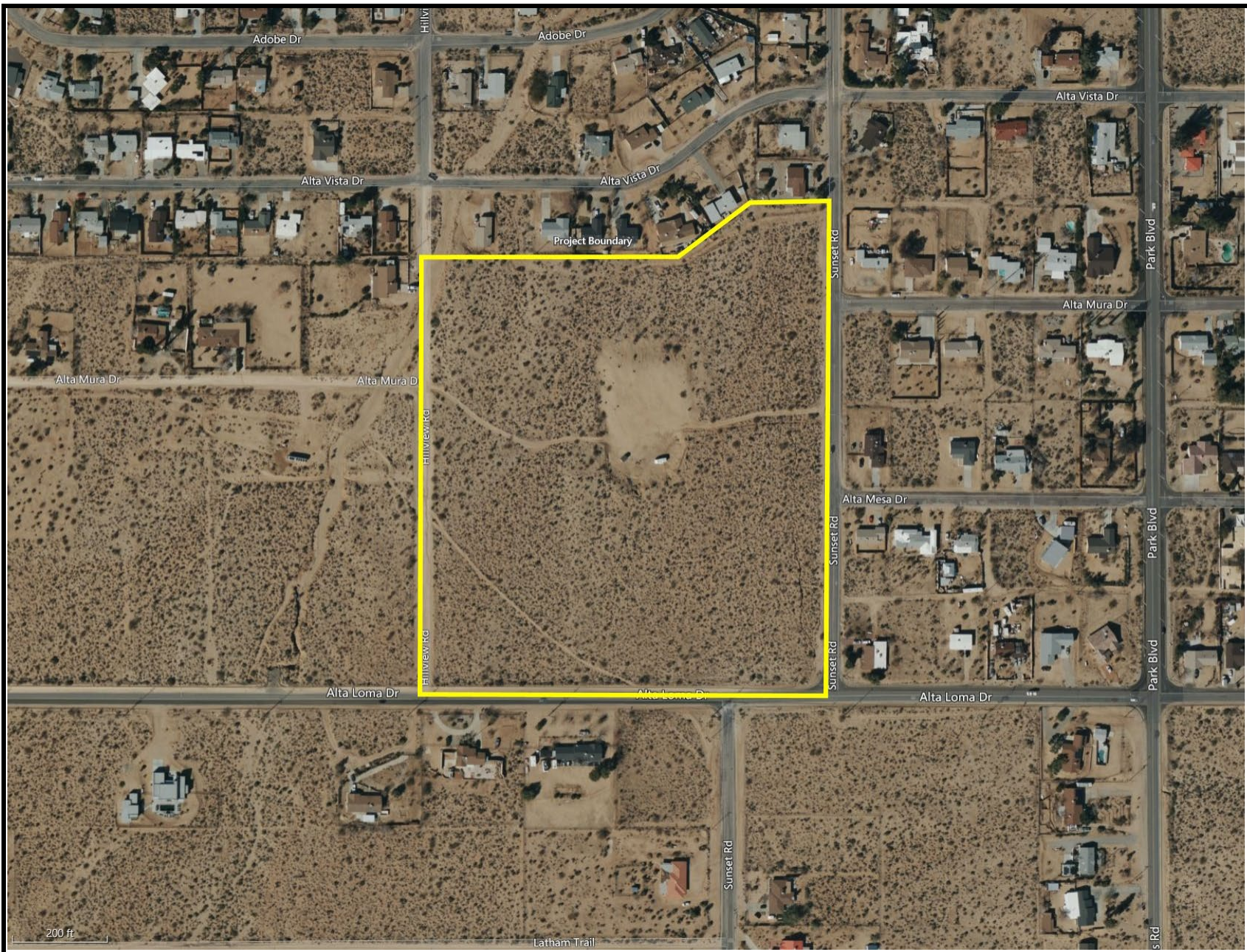
Produced By: RCA Associates Inc.


**NW of the Intersection of  
Sunset Rd. and Alta Loma Dr.  
in Joshua Tree, CA.**

Source:	Uinta Software
Acreage:	19-Acres (Approximately)
Project #:	2021-163







**Legend**  
 Project Boundary



**Figure 2: Vicinity Exhibit**

Produced By: RCA Associates Inc.

**NW of the Intersection of  
 Sunset Rd. and Alta Loma Dr.  
 in Joshua Tree, CA.**

Source:	Uinta Software
Acreage:	19-Acres (Approximately)
Project #:	2021-163





CENTER OF SITE LOOKING NORTH



CENTER OF SITE LOOKING EAST



FIGURE 3: PHOTOGRAPHS OF SITE



CENTER OF SITE LOOKING SOUTH



CENTER OF SITE LOOKING WEST



FIGURE 3, cont: PHOTOGRAPHS OF SITE



**Table 1 - Plants observed on the site and known to occur in the immediate surrounding area.**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Location</b>
White Bursage	<i>Ambrosia dumosa</i>	On site and Surrounding Area
Creosote Bush	<i>Larrea tridentata</i>	“
Beavertail cactus	<i>Opuntia basilaris</i>	“
Kelch grass	<i>Schismus barbatus</i>	“
Pencil cholla	<i>Cylindropuntia ramosissima</i>	“
Silver cholla	<i>Cylindropuntia echinocarpa</i>	“
Whipple cholla	<i>Cylindropuntia whipplei</i>	“
Joshua tree	<i>Yucca brevifolia</i>	“
California buckwheat	<i>Eriogonum fasciculatum</i>	“
Desert chia	<i>Salvia columbrariae</i>	“
Mojave yucca	<i>Yucca chidigera</i>	“
Common burrobrush	<i>Ambrosia salsola</i>	“
Bladder sage	<i>Scutellaria mexicana</i>	“
Goat nut	<i>Simmondsia chinensis</i>	“
White stem paper flower	<i>Psilostrophe cooperi</i>	“
Strawberry hedgehog cactus	<i>Echinocereus engelmannii</i>	“
Desert wishbone bush	<i>Mirabilis laevis</i>	“
Red stem storksbill	<i>Erodium cicutarium</i>	“
Beavertail cactus	<i>Opuntia basilaris</i>	“
Big galleta	<i>Hilaria rigida</i>	“
Flatspine bur ragweed	<i>Ambrosia acanthicarpa</i>	“
Desert willow	<i>Chilopsis linearis</i>	“
Desert globe mallow	<i>Sphaeralcea ambigua</i>	“
Prickly pear cactus	<i>Nopalea cochenillifera</i>	“

California barrel cactus	<i>Ferocactus cylindraceus</i>	“
Turpentine broom	<i>Thamnosma montana</i>	“
Cheatgrass	<i>Bromus tectorum</i>	“
Manybristle chinchweed	<i>Pectis papposa</i>	“

Note: The above list is not intended to be a comprehensive list of every plant which may occur on the site or in the zone of influence.

**Table 2 - Wildlife observed on the site during the field investigations.**

<b>Common Name</b>	<b>Scientific Name</b>	<b>Location</b>
House Finch	<i>Haemorhous mexicanus</i>	On site
Common raven	<i>Corvus corax</i>	“
Mourning dove	<i>Zenaida macroura</i>	“
Eurasian collared dove	<i>Streptopelia decaocto</i>	“
Black-throated Sparrow	<i>Amphispiza bilineata</i>	“
Rock pigeon	<i>Columba livia</i>	“
Western kingbird	<i>Tyrannus verticalis</i>	“
Red tail hawk	<i>Buteo jamaicensis</i>	“
Say’s phoebe	<i>Sayornis saya</i>	“
Cactus wren	<i>Campylorhynchus brunneicapillus</i>	“
Desert cottontail	<i>Sylvilagus audubonii</i>	“
Coyote (scat)	<i>Canis latrans</i>	“
Antelope ground squirrel	<i>Ammospermophilus leucurus</i>	“
Jackrabbit	<i>Lepus californicus</i>	“
Western whiptail	<i>Cnemidophorus tigris</i>	“

Note: The above Table is not a comprehensive list of every animal species which may occur in the area, but is a list of those common species which were identified on the site or which have been observed in the region by biologists from RCA Associates, Inc.

## **REGULATORY CONTEXT**

The following provides a summary of federal and state regulatory jurisdiction over biological and wetland resources. Although most of these regulations do not directly apply to the site, given the general lack of sensitive resources, they provide important background information.

### **Federal Endangered Species Act**

The USFWS has jurisdiction over federally listed threatened and endangered plant and animal species. The federal Endangered Species Act (ESA) and its implementing regulations prohibit the take of any fish or wildlife species that is federally listed as threatened or endangered without prior approval pursuant to either Section 7 or Section 10 of the ESA. ESA defines “take” as “harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Federal regulation 50CFR17.3 defines the term “harass” as an intentional or negligent act that creates the likelihood of injuring wildlife by annoying it to such an extent as to significantly disrupt normal behavior patterns such as breeding, feeding, or sheltering (50CFR17.3). Furthermore, federal regulation 50CFR17.3 defines “harm” as an act that either kills or injures a listed species. By definition, “harm” includes habitat modification or degradation that actually kills or injures a listed species by significantly impairing essential behavior patterns such as breeding, spawning, rearing, migrating, feeding, or sheltering (50CFR217.12).

Section 10(a) of the ESA establishes a process for obtaining an incidental take permit that authorizes nonfederal entities to incidentally take federally listed wildlife or fish. Incidental take is defined by ESA as take that is “incidental to, and not the purpose of, the carrying out of another wise lawful activity.” Preparation of a habitat conservation plan, generally referred to as an HCP, is required for all Section 10(a) permit applications. The USFWS and National Oceanic and Atmospheric Administration’s National Marine Fisheries Service (NOAA Fisheries Service) have joint authority under the ESA for administering the incidental take program. NOAA Fisheries Service has jurisdiction over anadromous fish species and USFWS has jurisdiction over all other fish and wildlife species.

Section 7 of the ESA requires all federal agencies to ensure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of any species listed under the ESA, or result in the destruction or adverse modification of its habitat. Federal agencies are also required

to minimize impacts to all listed species resulting from their actions, including issuance or permits or funding. Section 7 requires consideration of the indirect effects of a project, effects on federally listed plants, and effects on critical habitat (ESA requires that the USFWS identify critical habitat to the maximum extent that it is prudent and determinable when a species is listed as threatened or endangered). This consultation results in a Biological Opinion prepared by the USFWS stating whether implementation of the HCP will result in jeopardy to any HCP Covered Species or will adversely modify critical habitat and the measures necessary to avoid or minimize effects to listed species.

Although federally listed animals are legally protected from harm no matter where they occur, Section 9 of the ESA provides protection for endangered plants by prohibiting the malicious destruction on federal land and other “take” that violates State law. Protection for plants not living on federal lands is provided by the California Endangered Species Act.

### **California Endangered Species Act**

CDFW has jurisdiction over species listed as threatened or endangered under Section 2080 of the California Fish and Wildlife Code. Section 2080 prohibits the take of a species listed by CDFW as threatened or endangered. The state definition of take is similar to the federal definition, except that Section 2080 does not prohibit indirect harm to listed species by way of habitat modification. To qualify as take under the state ESA, an action must have direct, demonstrable detrimental effect on individuals of the species. Impacts on habitat that may ultimately result in effects on individuals are not considered take under the state ESA but can be considered take under the federal ESA.

Proponents of a project affecting a state-listed species must consult with CDFW and enter into a management agreement and take permit under Section 2081. The state ESA consultation process is similar to the federal process. California ESA does not require preparation of a state biological assessment; the federal biological assessment and the CEQA analysis or any other relevant information can provide the basis for consultation. California ESA requires that CDFW coordinate consultation for joint federally listed and state-listed species to the extent possible; generally, the state opinion for the listed species is brief and references provisions under the federal opinion.

### **Clean Water Act, Section 404**

The COE and the U.S. Environmental Protection Agency regulate the placement of dredged or fill material into “Waters of the United States” under Section 404 of the Clean Water Act. Waters of the United States include lakes, rivers, streams, and their tributaries, and wetlands. Wetlands are defined for regulatory purposes as “areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions” (33 Code of Federal Regulations [CFR] 328.3, 40 CFR 230.3).

The COE may issue either individual permits on a case-by-case basis or general permits on a program level. General permits are pre-authorized and are issued to cover similar activities that are expected to cause only minimal adverse environmental effects. Nationwide permits (NWP’s) are general permits issued to cover particular fill activities. All NWP’s have general conditions that must be met for the permits to apply to a particular project, as well as specific conditions that apply to each NWP.

### **Clean Water Act, Section 401**

Section 401 of the Clean Water Act requires water quality certification and authorization of placement of dredged or fill material in wetlands and Other Waters of the United States. In accordance with Section 401 of the Clean Water Act, criteria for allowable discharges into surface waters have been developed by the State Water Resources Control Board, Division of Water Quality. As such, proponents of any new project which may impair water quality as a result of the project are required to create a post construction stormwater management plan to ensure offsite water quality is not degraded. The resulting requirements are used as criteria in granting National Pollution Discharge Elimination System (NPDES) permits or waivers, which are obtained through the Central Valley Regional Water Quality Control Board (RWQCB). Any activity or facility that will discharge waste (such as soils from construction) into surface waters, or from which waste may be discharged, must obtain an NPDES permit or waiver from the RWQCB. The RWQCB evaluates an NPDES permit application to determine whether the proposed discharge is consistent with the adopted water quality objectives of the basin plan.

### **California Fish and Wildlife Code, Sections 1600-1616**

Under the California Fish and Wildlife Code, Sections 1600-1616 CDFW regulates projects that divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake. Proponents of such projects must notify CDFW and enter into streambed alteration agreement with them.

Section 1602 of the California Fish and Wildlife Code requires a state or local government agency, public utility, or private entity to notify CDFW before it begins a construction project that will: (1) divert, obstruct, or change the natural flow or the bed, bank, channel, or bank of any river, stream, or lake; (2) use materials from a streambed; or (3) result in the disposal or deposition of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into any river, stream, or lake. Once the notification is filed and determined to be complete, CDFW issues a streambed alteration agreement that contains conditions for construction and operations of the proposed project.

### **California Fish and Wildlife Code, Section 3503.5**

Under the California Fish and Wildlife Code, Section 3503.5, it is unlawful to take, possess, or destroy any birds in the order Falconiformes (hawks, eagles, and falcons) or Strigiformes (owls). Take would include the disturbance of an active nest resulting in the abandonment or loss of young.

### **Migratory Bird Treaty Act**

The federal Migratory Bird Treaty Act (MBTA) prohibits the taking, hunting, killing, selling, purchasing, etc. of migratory birds, parts of migratory birds, or their eggs and nests. As used in the MBTA, the term “take” is defined as “to pursue, hunt, shoot, capture, collect, kill, or attempt to pursue, hunt, shoot, capture, collect, or kill, unless the context otherwise requires.” Most bird species native to North America are covered by this act.

### **Sensitive Natural Communities**

The California Office of Planning and Research and the Office of Permit Assistance (1986) define project effects that substantially diminish habitat for fish, wildlife, or plants, or that disrupt or divide the physical arrangement of an established community as significant impacts under CEQA. This definition applies to certain natural communities because of their scarcity and ecological

values and because the remaining occurrences are vulnerable to elimination. For this study, the term “sensitive natural community” includes those communities that, if eliminated or substantially degraded, would sustain a significant adverse impact as defined under CEQA. Sensitive natural communities are important ecologically because their degradation and destruction could threaten populations of dependent plant and wildlife species and significantly reduce the regional distribution and viability of the community. If the number and extent of sensitive natural communities continue to diminish, the status of rare, threatened, or endangered species could become more precarious, and populations of common species (i.e., not special status species) could become less viable. Loss of sensitive natural communities also can eliminate or reduce important ecosystem functions, such as water filtration by wetlands and bank stabilization by riparian woodlands for example.