GENERAL BIOLOGICAL RESOURCES ASSESSMENT

VICTORVILLE, SAN BERNARDINO COUNTY, CALIFORNIA
(Township 5 North, Range 5 West, Section 14)
(APN: 3104-091-12, 13, 14 and 16)

Prepared for:

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Table of Contents

1.0 INTRODUCTION AND SUMMARY

Biological surveys were conducted on a 43-acre parcel (APN: 3104-091-12, 13, 14 and 16) located southeast of the intersection of Cobalt Road and Hook Boulevard, in the city of Victorville, California (Township 5 North, Range 5 West, Section 14, USGS Victorville, California Quadrangle, 1956) (Figures 1 and 2). The property is surrounded by vacant land in the immediate east and west, with housing developments located in the north and south of its boundary. Approximately half mile to the east is Reliable Self Storage and University Preparatory School. One mile south of the property is Silverado High School. The site is located in an area zoned for single family residential (R-1).

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 January 11, 2022, 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, Joshua tree, and a habitat assessment was performed for the Mohave ground squirrel. Based on data from USFWS, CDFW, and a search of the California Natural Diversity Database (CNDDB, 2022). 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 43-acres in size and located southeast of Rancho Road and east of the intersection of Cobalt Road and Hook Boulevard, in the city of Victorville, California (Township 5 North, Range 5 West, Section 14, USGS Victorville, California Quadrangle, 1956) (Figures 1 and 2). Vacant land borders the property in east and west with single family residential homes located to the north and south (Figure 2). The site shows moderate signs of disturbance in the form of OHV roads that transect through the property and has not been previously graded.

The site is approximately 930 meters above sea level. This observation is based on the vegetation and current conditions notated on site during the January 11, 2022 field investigations. The property consists of Bryman Loamy Fine Sand, which has a 5-9 percent slope and Cajon Sand which has a 2-9 percent slope. The project site's soil makeup is somewhat excessively drainage and has a moderately high-water capacity, with no frequency of flooding, and low available water supply. The site has been not been previously graded, but show moderate signs of disturbance due to OHV activity. The species of plants include creosote bush (*Larrea tridentata*), ephedra (*Ephedra nevadensis*), rubber rabbitbrush (*Ericameria nauseosa*), joshua trees (*Yucca brevifolia*), winter fat (*Krascheninnikovia lanata)*, and silver cholla (*Cylindropuntia echinocarpa*). Section 5.0 provides a more detailed discussion of the various plant species observed during the surveys.

The site is not expected to support a variety of wildlife species due to the sparse distribution of vegetation. Only one mammal was observed during our investigation, a black-tailed jackrabbit (*Lepus californicus*), which are very common in the region, and are expected to be fairly prominent in the surrounding area. Mammals which are expected to inhabit the site, but were not observed include coyote (*Canis latrans*), desert cottontails (*Sylvilagus audubonii*), and California ground squirrel (*Spermophilus beecheyi*).

Birds identified by sight or sound included ravens (*Corvus corax*), rock pigeon (*Columba livia*), mourning dove (*Zenaida macroura*) and Anna's humming bird (*Calypte anna*). Section 5.0 provides a more detailed discussion of the various species observed during the surveys.

No reptiles were observed during the January 11, 2022 field investigations, although common reptiles that are expected to inhabit the site include western fence lizard (*Sceloporus occidentalis*),

western whiptail lizard (*Cnemidophorus occidentalis*) and common side-blotched lizard (*Uta stansburiana*). Table 2 provides a compendium of wildlife species.

A potential jurisdictional channel was located within the project's projected scope of work specifically along the western portion of the site boundary. Due to the observation of a potential jurisdictional channel in the north western portion of the property a comprehensive jurisdictional delineation may need to be performed at a future date.

In addition, no sensitive habitats (e.g., sensitive species critical habitats, etc.) have been documented in the immediate area according to the CNDDB (2022) and none were observed during the field investigations.

3.0 METHODOLOGIES

General biological surveys were conducted on January 11, 2022, during which biologists from RCA Associates, Inc. initially walked meandering transects throughout the property site. 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 desert tortoise and burrowing owl as per agency requirements, and a habitat assessment was performed for the Mohave ground squirrel. Weather conditions consisted of wind speeds of 0 to 5 mph, temperatures in the high 40's to low 50's (°F) (AM) with 0% cloud cover skies. The applicable methodologies are summarized below.

General Plant and Animal Surveys: Meandering 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) provides a comprehensive compendium of the various plant and animal species observed during the field investigations.

Desert Tortoise: A habitat assessment was conducted on January 11, 2022 for the desert tortoises and a survey was also performed for the presence of any potential tortoise burrows by biologists from RCA Associates, Inc. Ten-meter, parallel belt transects were walked in a north-south direction until the entire property had been checked for any tortoise sign (burrows, tracks, scats, etc.). Surveys in the zone of influence (ZOI) were also conducted in the areas directly adjacent to the property where accessible. Comprehensive field investigations were conducted throughout the site during the biological surveys and no tortoises or tortoise signs were identified on the site or zone of influence.

During the biological survey, 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 in order 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: 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 January 11, 2022. Following completion of the habitat assessment, it was determined that the site does not support minimal suitable habitat for the burrowing owl. This opinion was based on the lack of burrows and vegetation observed within the site boundaries and a lack of burrows in the zone of influence. As part of the burrowing owl survey, meandering transects were walked throughout the site during which any suitable burrows were evaluated for owls and owl sign. Burrowing owls typically utilize burrows which have been excavated by other animals (squirrels, coyotes, foxes, dogs, etc.) with a minimum four-inch burrow entrance, 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; therefore, the zone of influence (ZOI) surveys were performed in the area surrounding the site where accessible. If present on a site, CDFW typically requires the owls to be passively relocated during the non-breeding season.

Mohave Ground Squirrel: A habitat assessment was performed for the Mohave ground squirrel as per CDFW protocol including an analysis of the on-site habitat, evaluation of local populations, and assessment of connectivity with habitats in the surrounding area which might support populations of the Mohave ground squirrel. Due to the low population levels and no recent observations in this area of the Mojave Desert, it is the opinion of RCA Associates, Inc. that the likelihood of a Mohave ground squirrel occurring on the proposed project site is extremely low. CDFW may choose to conduct a live-trapping survey to definitively determine the presence/absence of Mohave ground squirrels.

4.0 LITERATURE SEARCH

As part of the environmental process, a search of the California Natural Diversity Database (CNDDB, 2022) was performed. Based on this review, it was determined that 32 special status species, twenty-six wildlife and six plant species, have been documented within the Victorville quad 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; CNDDB = California Natural Diversity Data Base

NAME	STATUS	HABITAT REQUIREMENTS	PRESENCE/ ABSENCE ON PROPERTY
PLANTS			
Within Victorville Quadrangle			
White pygmy poppy (*Canbya candida*)	Federal: None State: None CNPS: 4.2	Creosote bush scrub and Joshua tree woodlands on sandy soils	The site does support suitable habitat for the species; and no White pygmy poppies were observed during field surveys.
Mojave monkeyflower (*Diplacus mohavensis*)	Federal: None State: None CNPS: 1B.2	Joshua tree woodlands and creosote bush scrub, gravelly slopes and washes.	The site does support suitable habitat, and no Mojave monkeyflowers were observed.
Booth's evening-primrose (*Eremothera boothii ssp. boothii*)	Federal: None State: None CNPS: 2B.3	Joshua tree woodlands and creosote bush scrub, in loose soil and open areas	The site does support suitable habitat, and no Booth's evening-primrose were observed.
Beaver Dam breadroot (*Pediomelum castoreum*)	Federal: None State: None CNPS: 1B.2	Sandy soils alongside roads and sandy washes.	The site does support suitable habitat, and no Beaver Dam breadroot were observed.
San Bernardino aster (*Symphyotrichum defoliatum*)	Federal: None State: None CNPS: 1B.2	Grassland and meadow habitats, and can occur in disturbed areas.	The site does not support suitable habitat, and no San Bernardino aster were observed.
Southern mountains skullcap (*Scutellaria bolanderi ssp. austromontana*)	Federal: None State: None CNPS: 1B.2	Usually occurs in areas where there are wetlands.	The does not support suitable habitat, and no Southern mountains skullcap were observed.

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)

Table 4-2: Special status wildlife and insects documented in the region (Source: CNDDB, 2022) or likely to occur in the region

NAME	STATUS	HABITAT REQUIREMENTS	PRESENCE/ABSENCE ON PROPERTY
ANIMAL			
Within Victorville Quadrangle			
Desert tortoise (*Gopherus agassizii)*	Federal: Threatened State: Threatened	Desert shrub	No tortoises or signs observed on-site.
Yellow warbler (*Setophaga petechia*)	Federal: None State: None CDFW: SSC	Dense riparian vegetation.	The site does not support suitable habitat for the species and will not occur on the site.
Burrowing owl (*Athene cunicularia*)	Federal: None State: None CDFW: SSC	Open grassland areas where the owls utilize abandoned mammal burrows.	Minimal suitable habitat for the species but no owls or potential burrows observed. Species is not expected to occur on site.
Coast horned lizard (*Phrynosoma blainvillii*)	Federal: None State: None CDFW: SSC	Inhabits open areas of sandy soils and low vegetation in valleys, foothills, and semiarid mountains	Suitable habitat, none observed on site
Mohave ground squirrel (*Xerospermophilus mohavensis*)	Federal: None State: Threatened	Desert scrub	The site supports suitable habitat for the species. None observed on site.

Loggerhead shrike (*Lanius ludovicianus*)	Federal: None State: None CDFW: SSC	Open country with scattered shrubs and trees	The site does provide suitable habitat, however none observed on site
Cooper's hawk (*Accipiter cooperii*)	Federal: None State: None	Mature forests, open woodland, wood edges, river groves, mixed woods, suburbs	The site does not contain suitable habitat for the Cooper's hawk, none were observed on site.
Le Conte's thrasher (*Toxostoma lecontei*)	Federal: None State: None CDFW: SSC	Desert scrub, open washes, desert shrub habitats, Joshua tree scrub, common in saltbush and cholla vegetation	The site has suitable habitat for the Le Conte's thrasher, and is not expected to occur on the site.
Mohave tui chub (*Siphateles bicolor mohavensis*)	Federal: Endangered State: Endangered CDFW: Fully protected	Three populations exist at Soda Springs, China Lake Naval Weapons Station, and Camp Cady Wildlife Area	The site does not contain suitable habitat for the species. A fully protected species, there are only three populations being maintained with the nearest population in Camp Cady, with an introducing population being carried in the Mojave River. This species will not occur on site.
Least bell's vireo (*Vireo bellii pusillus*)	Federal: Endangered State: Endangered CDFW: Near Threatened	Dense shrubs and small trees along rivers and streams.	The site has no suitable habitat for the Least bell's vireo, and is not expected to occur on the site.
Tricolored blackbird (*Agelaius tricolor*)	Federal: None State: Threatened CDFW: SSC	Lives around marshes and on farmland.	The site has no suitable habitat for the Tricolored blackbird, and is not expected to occur on the site.
Arroyo toad (*Anaxyrus californicus*)	Federal: Endangered State: None CDFW: SSC	Sandy washes, usually associated with riparian habitats.	The site has no suitable habitat for the Arroyo toad, and is not expected to occur on the site.
Golden Eagle (*Aquila chrysaetos*)	Federal: None State: None CDFW: Fully protected	Grasslands, deserts, and open country.	The site does provide suitable habitat, however none observed on site.
Swainson's hawk (*Buteo swainsoni*)	Federal: None State: Threatened	Open habitats with mixed grassland or transition areas between habitats with scattered trees.	The site has no suitable habitat, and the species is not expected to occur on the site.

Pallid San Diego pocket mouse (*Chaetodipus fallax pallidus*)	Federal: None State: None CDFW: SSC	Chaparral and grasslands to scrub forests and deserts.	The site does provide suitable habitat, however none observed on site and the species is not expected to occur on the site.
Western yellow-billed cuckoo (*Coccyzus americanus occidentalis*)	Federal: Threatened State: Endangered	Occur in large areas of riparian habitats.	The site has no suitable habitat, and the species is not expected to occur on the site.
Townsend's big-eared bat (*Corynorhinus townsendii*)	Federal: None State: None CDFW: SSC	Large open areas near pine forests and desert scrub habitats.	The site does provide suitable habitat, however none observed on site and the species is not expected to occur on the site.
Southwestern willow flycatcher (*Empidonax traillii extimus*)	Federal: Endangered State: Endangered	Dense riparian tree and shrub habitat along swamps and rivers.	The site has no suitable habitat, and the species is not expected to occur on the site.
Western pond turtle (*Emys marmorata*)	Federal: None State: None CDFW: SSC	Found in intermittent waters of small creeks, ponds, irrigation ditches, and other wetland habitats.	The site has no suitable habitat, and the species is not expected to occur on the site.
Victorville shoulderband (*Helminthoglypta mohaveana*)	Federal: None State: None	Creosote bush scrub habitat with rocks.	The site has no suitable habitat, and the species is not expected to occur on the site.
Yellow-breasted chat (*Icteria virens*)	Federal: None State: None CDFW: SSC	Impenetrable vegetation along woods edges and riparian habitats.	The site has no suitable habitat, and the species is not expected to occur on the site.
Hoary bat (*Lasiurus cinereus*)	Federal: None State: None	Arid open deserts with habitat edges.	The site does provide suitable habitat, however none observed on site and the species is not expected to occur on the site.
Mohave River vole (*Microtus californicus mahavensis*)	Federal: None State: None CDFW: SSC	Moist areas including meadows, marshes, and irrigated pastures.	The site has no suitable habitat, and the species is not expected to occur on the site.
Summer tanager (*Piranga rubra*)	Federal: None State: None CDFW: SSC	Mature riparian cottonwood forests.	The site has no suitable habitat, and the species is not expected to occur on the site.

San Emigdio blue butterfly (*Plebulina emigdionis*)	Federal: None State: None	Montane desert regions.	The site has no suitable habitat, and the species is not expected to occur on the site.
California red-legged frog (*Rana draytonii*)	Federal: Threatened State: None CDFW: SSC	Aquatic habitats including backwaters of streams, creeks, marshes, and ponds.	The site has no suitable habitat, and the species is not expected to occur on the site.

5.0 RESULTS

5.1 General Biological Resources

The site supports a sparse desert scrub community (Figure 3). Vegetation present on the site included rubber rabbitbrush (*Chrysothamnus nauseosus*), western Joshua tree (*Yucca brevifolia*), ephedra (*Ephedra nevadensis*), water jacket (*Lycium andersonii*), creosote bush (*Larrea tridentata*), white bursage (*Ambrosia dumosa*), cheatgrass (*Bromus tectorum*) and desert willow (*Chilopsis linearis*). Table 1 provides a compendium of all plants occurring on the site and/or in the immediate surrounding area.

Birds observed included ravens (*Corvus corax*), white-crowned sparrow (*Zonotrichia leucophrys*), mourning dove (*Zenaida macroura*), belted kingfisher (*Megaceryle alcyon*), and California gull (*Larus californicus*).

Mammals observed include one black-tailed jackrabbits (*Lepus californicus*) during the January 11, 2022 survey. Mammals that are expected to occur on the site include coyote (*Canis latrans)*, desert cottontails (*Sylvilagus audubonii*), and California ground squirrel (*Spermophilus beecheyi*). Merriam's kangaroo rats (*Dipodomys merriamii*) may also occur on the site given their wide-spread distribution in the region. 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 reptiles were observed on site during the field investigations due to current conditions. Reptiles that are expected to occur on site and occur in the surrounding areas include the western fence lizard (*Sceloporus occidentalis*), western whiptail lizard (*Cnemidophorus tigris*) and common side-blotched lizard (*Uta stansburiana*). Table 2 provides a compendium of wildlife species observed during the various surveys and those likely to occur in the area.

A potential jurisdictional channel was located within the project's projected scope of work specifically along the western portion of the site boundary. Due to the observation of a potential jurisdictional channel in the southern portion of the property a comprehensive jurisdictional delineation may need to be performed at a future date.

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

The following are the listed and special status species that have the ability to occur on the project site. It is not a comprehensive list of all the species in the quad. This information has been taken from the California Natural Diversity Database and is using the most current version.

5.2 Federal and State Listed Species

Ten of the twenty-six species are classified as threatened or endangered federally and or by the state, these species are:

Desert Tortoise: The desert tortoise is a federally and state threatened species that 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, although it is also located within the documented tortoise habitat according to CNDDB. As per the USFWS desert tortoise protocol, ten meter transects were walked during the January 11, 2022 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. 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.

Mohave Ground Squirrel: The Mohave ground squirrel is a state threatened species that occurs within the known distribution. There is no recent observation of Mohave ground squirrels within the area, and it is the opinion of RCA Associates, Inc. that the habitat is not prime Mohave ground squirrel habitat and is very unlikely to support populations of the species based on the following criteria:

1. No recent documented observations in the general region.
2. No connectivity with habitat which may support the species.

Mohave Tui Chub: The Mohave Tui Chub is a federally and state endangered species that is fully protected. The site is located within the documented Victorville quad habitat according to CNDDB (2022). There are only three populations of Mohave tui chub, with a fourth population

having been recently introduced to the Mojave river. The site however, does not contain or is not connected to the Mojave River, and no Mohave tui chub will occur on site.

Swainson's Hawk: The site is located within documented Swainson's hawk habitat, a state threatened raptor, according to CNDDB (2022). No hawks were seen on the property during the survey, and no suitable habitat was observed due to previous grading of the site. Swainson's hawks occupy grasslands and breed in trees that are the only ones seen for miles. Swainson's hawks are not expected to occur on the site due to lack of habitat and prime vegetation.

Tricolored Blackbird: The site is located within documented tricolored blackbird habitat, a state threatened avian species, according to CNDDB (2022). No tricolored blackbirds were seen on the property during the survey, and no suitable habitat was observed. Tricolored blackbirds occupy wetland and marsh habitats near creeks and rivers. Tricolored blackbirds are not expected to occur on the site due to lack of habitat and prime vegetation.

Arroyo Toad: The Arroyo toad is a federally endangered amphibian, according to CNDDB (2022). No Arroyo toads were seen on the property during the survey, and no suitable habitat was observed on site or in the immediate surrounding area. Arroyo toads occupy wetland and marsh habitats near creeks and rivers. The species is not expected to occur on the site due to lack of suitable habitat and wetland areas.

Southwestern willow flycatcher: The southwestern willow flycatcher is a state and federally endangered avian species, according to CNDDB (2022). No southwestern willow flycatchers were observed on the property or in the immediate surrounding area during the survey, and no suitable habitat was observed on site or in the immediate surrounding area. Southwestern willow flycatchers occupy dense riparian tree and shrub habitat along rivers, ponds, marshes, creeks and other wetland habitats. This species is not expected to occur on the site due to lack of suitable habitat and wetland areas.

Western yellow-billed cuckoo: The western yellow-billed cuckoo is a state endangered and federally threatened avian species, according to CNDDB (2022). No western yellow-billed cuckoos were observed on the property during the survey, and no suitable habitat was observed

on site or in the immediate surrounding area. western yellow-billed cuckoos occupy wetland and marsh habitats near creeks and rivers. The species is not expected to occur on the site due to lack of suitable habitat and wetland areas.

California red-legged frog: The California red-legged frog is a federally threatened amphibian, according to CNDDB (2022). No California red-legged frogs were seen on the property during the survey, and no suitable habitat was observed on site or in the immediate surrounding area. Arroyo toads occupy wetland and marsh habitats near creeks and rivers. The species is not expected to occur on the site due to lack of suitable habitat and wetland areas.

Least Bell's vireo: The least Bell's vireo is a federally endangered avian species, according to CNDDB (2022). No Least Bell's vireos were seen on the property during the survey, and no suitable habitat was observed on site or in the immediate surrounding area. Least Bell's vireos occupy areas with dense shrubs and small trees along rivers and streams. The species is not expected to occur on the site due to lack of suitable habitat.

5.3 Wildlife Species of Special Concern

Sensitive Plants: There are six plant species that have been documented in the Victorville quad, the white pygmy poppy, Mojave monkeyflower, Booth's evening-primrose, Beaver Dam breadroot, San Bernardino aster, and southern mountains skullcap. The site does support suitable habitat for the four of the six species listed above. These six species occur in areas of Joshua tree woodlands and creosote brush habitats with the exception of the southern mountains skullcap that occurs in wetland areas and the San Bernardino Aster that occurs in grassland and meadows areas. The site does not support habitats where San Bernardino aster and southern mountains skullcaps occur. None of the above species were observed on the site during the January 11, 2022 survey, and are not expected to occur in the foreseeable future. The project is not expected to impact any sensitive plant species.

Sensitive Wildlife: Within the Victorville quad, there are 4 species that are labeled as Species of Special Concern. These species are the burrowing owl, loggerhead shrike, coast horned lizard, and yellow warbler. The property does not contain suitable habitat for the yellow warbler, which

occupies riparian habitats, and is therefore not expected to occur on the site. The loggerhead shrike and coast horned lizard could potentially occur on the site, but no signs of these three species were observed during the field investigations. The site contains minimal suitable and no suitable burrows for burrowing owls, no owl signs (e.g. whitewash, feathers, castings) were found on the property, and no burrowing owls were observed. It is the professional opinion of RCA Associates, Inc., that there are no owls currently inhabiting the site and owls are not expected to inhabit the site in the future given the lack of suitable habitat for the species.

5.4 Jurisdictional Waters and Riparian Habitat

No riparian vegetation (e.g., cottonwoods, willows, etc.) exist on the site or in the adjacent habitats. During the field investigations one potential jurisdictional channel was noted to the west of the property and runs north within the property's western boundary until a portion of it runs through the northwestern section of the property line depicted in (Figures 2 and 4). It is the opinion of RCA Associates, Inc. that additional surveys such as a comprehensive jurisdictional delineation may be required pertaining to the jurisdictional channel that was observed on the western portion of the property.

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 until a final decision is made in 2022. Joshua trees both living and dead were observed on site during the January 11, 2022 field investigations. Moving forward a Protected Plant Preservation Plan or Joshua tree survey will need to be prepared before continuing land development. Any attempt to remove a Joshua tree from its current position will require an Incidental Take Permit (ITP).

6.0 IMPACTS AND MITIGATION MEASURES

6.1 General Biological Resources

Future development of the site will impact the general biological resources present on the site, and most, if not all, of the vegetation will likely be removed during future construction activities. Wildlife will also 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, loss of about 43-acres of sparse desert 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 desert region. No sensitive habitats (e.g. wetlands, vernal pools, critical habitats for sensitive species, etc.) were observed on site during the field surveys. A potential jurisdictional channel is located within the western boundary of the site and runs along the site in the northern portion.

6.2 Federal and State Listed and Species of Special Concern

No federal or State-listed wildlife species were observed on the site during the field investigations including the Mohave ground squirrel and desert tortoise. In addition, there are no documented observations of these species either on the site or in the immediate area. The site is not expected to support populations of the desert tortoise based on the absence of suitable habitat.

As per CDFW protocol, the burrowing owl survey results are valid for only 30 days; therefore, CDFW may require a 30-day pre-construction survey be performed prior to any clearing/grading activities to determine if owls have moved on to the site since the January 11, 2022 surveys.

Joshua trees were the only listed plant species observed on site during the January 2022 field investigations. As per CDFW protocol, additional surveys may need to be performed as stated in section 5.5.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Future development activities are expected to result in the removal of vegetation from the 43-acre parcel; cumulative impacts to the general biological resources (plants and animals) in the surrounding area are expected to be negligible; however, impacts to the Joshua trees on the site will be considered significant given the recent listing of the species by the State of California as a "threatened species." 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. A comprehensive survey and evaluation of the Joshua trees on the site will need to be conducted and preparation of a Protected Plant Plan. The report shall identify methods, locations, and criteria for transplanting those trees that would be removed prior to ground disturbance activities and Project construction.
3. 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, Jessica Hensley, 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: 1/13/2022

Signed: Ryan Hunter

Signed: Brian Bunyi

Signed: Jessica Hensley

Field Work Performed By: Ryan Hunter
Environmental Scientist/Biologist

Field Work Performed By: Brian Bunyi
Environmental Scientist/Biologist

Field Work Performed By: Jessica Hensley
Environmental Scientist/Biologist

Appendix A
Tables and Figures

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

Common Name	Scientific Name	Location
Winterfat	*Krascheninnikovia lanata*	On site and Surrounding Area
Creosote bush	*Larrea tridentata*	“
Silver Cholla	*Cylindropuntia echinocarpa*	“
Cheatgrass	*Bromus tectorum*	”
Rubber rabbitbrush	*Chrysothamnus nauseosus*	”
Ephedra	*Ephedra nevadensis*	”
Waterjacket	*Lycium andersonii*	“
White bursage	*Ambrosia dumosa*	”
California Buckwheat	*Eriogonum fasciculatum*	“
Kelch grass	*Schismus barbatus*	“
Flatspine Bur Ragweed	*Ambrosia acanthicarpa*	“
Tumbleweed	*Kali tragus ssp. tragus*	“
Asian mustard	*Brassica tournefortii*	“
Shortpod mustard	*Hirschfeldia incana*	“
Western Joshua Tree	*Yucca brevifolia*	“
Common Burrobrush	*Ambrosia salsola*	“
Mojave Cottonthorn	*Tetradymia stenolepis*	“
White Ratany	*Krameria bicolor*	“
Silver Cholla	*Cylindropuntia echinocarpa*	“

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.

Common Name	Scientific Name	Location
Common raven	*Corvus corax*	On-site and surrounding area.
Rock Pigeon	*Columba livia*	"
California gull	*Larus californicus*	"
White-Crowned Sparrow	*Zonotrichia leucophrys*	"
Mourning dove	*Zenaida macroura*	"
Anna's humming bird	*Calypte anna*	"
Black tail jackrabbit	*Lepus californicus*	"
Belted king fisher	*Megaceryle alcyon*	"
Coyote (scat)	*Canis latrans*	"

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).

Section10(a) of the ESA establishes a process for obtaining an incidental take permit that authorizes non federal 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 insure 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 a 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 orders 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.

Protected Plants

The California Desert Native Plant Act was passed in 1981 to protect non-listed California desert native plants from unlawful harvesting on both public and privately-owned lands. Harvest, transport, sale, or possession of specific native desert plants is prohibited unless a person has a valid permit. The following plants are under the protection of the California Desert Native Plants Act:

- Dalea spinosa (smoketree)
- All species of the genus Prosopis (mesquites)
- All species of the family Agavaceae (century plants, nolinas, yuccas)
- All species of Cactus
- Creosote Rings, ten feet in diameter or greater
- All Joshua Trees

The project would be required to comply with the County of San Bernardino Desert Native Plant Protection Ordinance. The removal of any trees listed under Section 88.01.060 would be required to comply with Section 88.01.050, which requires the project applicant to apply for a Tree or Plant Removal Permit prior to removal from the project site.