GENERAL BIOLOGICAL RESOURCES ASSESSMENT

TENTATIVE TRACT MAP 20083

ADELANTO, SAN BERNADINO COUNTY, CALIFORNIA

(Township 5 North, Range 5 West, Section 18)

Prepared for:

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1.0 INTRODUCTION

Following the data review, surveys were performed on the site during which the biological resources on the property and in the surrounding areas were documented by biologists from RCA Associates, Inc. As part of the surveys, the property site and the adjoining lands were also evaluated for the presence of native habitats which could potentially support populations of sensitive wildlife species. Focused surveys were also conducted for the desert tortoise and burrowing owl. The property was also evaluated for the presence of sensitive habitats including wetlands, vernal pools, riparian habitats, and potential jurisdictional areas. Based on data from USFWS, CDFW, and a search of the California Natural Diversity Database (CNDDB, 2021), there are five sensitive species that have been documented in the region within approximately five miles of the project site. Sensitive wildlife species include desert tortoise (*Gopherus agassizii*), burrowing owl (*Athene cunicularia*), Mohave ground squirrel (*Xerospermophilus mohavensis*), Le Conte's thrasher (*Toxostoma lecontei*), and Swainson's hawk (*Buteo swainsoni*). Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2000) and Whitaker (1980). Table 4-1 provides information on the various special status plants and animal species which occur in the area.

1.0 Property Description

General biological surveys were conducted on April 28, 2021 on the 25-acre parcel (approximate) located north of Seneca Road and east of Calendula Street in the City of Adelanto, California (Township 5 North, Range 5 West, Section 18, USGS Adelanto, California Quadrangle, 1956) (Appendix A: Figures 1, 2, and 3). 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.

1.1 Project Description

The project proponent is proposing to construct a residential development on the property. The site was previously disturbed approximately 15 years ago and supports minimal vegetation. A few creosote bushes (*Larrea tridentata*), Russian thistle (*Salsola tragus*), matchweed (*Gutierrezia sarothrae*) and rabbitbrush (*Chrysothamnus depressus*) were observed.

2.0 EXISTING CONDITIONS

The property is approximately 25-acres in size and is located north of Seneca Road and east of Calendula Road in the City of Adelanto, California (Township 5 North, Range 5 West, Section 18, USGS Adelanto, California Quadrangle 1956) (Appendix A: Figures 1 and 2). The site is bordered on the south by Seneca Road and on the north and west by vacant lands. An existing single-family development is located to the east.

As noted above, the site was previously cleared of vegetation about years ago and only supports a few plant species including creosote bush (*Larrea tridentata*), matchweed (*Gutierrezia sarothrae*), Russian thistle (Salsola tragus), rabbit brush (*Chrysothamnus depressus*), fiddleneck (*Amsinckia tessellata*), erodium (*Erodium cicutarium*), and schismus (*Schismus barbatus*). Table 1 provides a list of all plants occurring on the site and in the immediate surrounding area.

The site is expected to support a few wildlife species and those species observed during the field investigations included jackrabbits (*Lepus californicus*) and California ground squirrel Atospermophilus beecheyi), antelope ground squirrel (*Ammospermophilus leucurus*). Birds observed included ravens (*Corvus corax*), mourning dove (*Zenaida macroura*), and sage sparrow (*Amphispiza bellii*). Reptiles that likely inhabit the site and are species known to be common in the area, include desert spiny lizard (*Sceloporus magister*), side-blotched lizard (*Uta stansburiana*), and western whiptail lizard (*Cnemidophorus tigris*). Table 2 provides a compendium of wildlife species. An intermittent blueline stream bisects the eastern portion of the site and is oriented in a north-south direction.

3.0 METHODOLOGIES

General biological surveys were conducted on April 28, 2021 during which biologists from RCA Associates, Inc. initially walked meandering transects throughout the site to collect data on the plant and wildlife communities. Following completion of the initial reconnaissance survey, comprehensive surveys were performed throughout the site to document the vegetation present on the property and the wildlife species which inhabit the area. In addition to the general biological investigations, focused surveys were conducted for the desert tortoise and burrowing owl. The applicable methodologies for the various field investigations performed are summarized below.

Surveys were performed on the site and in the surrounding area from about 0700 to 1230 hours on April 28, 2021. Weather conditions during the surveys consisted of winds 0 to 5 mph, temperatures from 75 (°F) to 80 (°F) with cloud cover ranging from 0 to 5 percent. All plants and wildlife detected during the field investigations were recorded and are provided in Tables 1 & 2 along with other species that have been documented in the area (Appendix A).

General Plant and Animal Surveys: Meandering transects were walked throughout the site and in the surrounding area (i.e., 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 protocol survey was conducted on the site for the desert tortoises and as part of the survey the site was evaluated 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) are also as part of the survey protocol requirements

and were performed during the field investigations in adjacent vacant areas. 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 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)(1)(b) incidental take permit from the USFWS and a Section 2081 permit from CDFW will be required to mitigate for impacts to the species.

Burrowing Owl: A focused survey was conducted for the burrowing owl in conjunction with the general biological surveys to determine if the site supports suitable habitat for the species. As part of the burrow survey, 30-meter 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.) 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, zone of influence (ZOI) surveys were performed in the areas north, south, and west of the site. If present on a site, CDFW typically requires the owls to be passively relocated during the non-breeding season.

Mohave Ground Squirrel: A general habitat assessment was performed for the Mohave ground squirrel 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 the immediate area of the Mojave Desert the likelihood of Mohave ground squirrels occurring on the proposed project site is relatively low. As noted above, the site was cleared of vegetation about 15 years ago and does not support prime habitat for the species.

4.0 LITERATURE SEARCH

As part of the environmental process, a search of the California Natural Diversity Database (CNDDB, 2019) was performed. Based on this review, it was determined that five special status species have been documented within approximately five (5) miles of the property. The following table 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.T = Threatened; E = Endangered; SSC = Species of special concern; CNDDB = California Natural Diversity Data Base

Name	Listing Status	Habitat Requirements	Presence/Absence	Comments
Desert tortoise (Gopherus agassizii)	Fed: T State: T	Desert scrub	Site is located within the known distribution of the species. Focused surveys conducted on site did not identify any tortoises.	Nearest documented observation within 4 miles southeast of the site (CNDDB, 2019).
Burrowing owl (Athene cunicularia)	Fed: None State: None	Grasslands and desert habitats	Site does not support suitable habitat for the species. Focused surveys did not identify any Owls.	Nearest documented observations within 3 miles east of the site (CNDDB, 2019).
Mohave ground squirrel (Xerospermophilus mohavensis)	Fed: None State: T	Desert scrub	Site supports marginal habitat for the species. Species is not expected to occur on the site.	Nearest documented observations within 3 miles northwest of the site (CNDDB, 2019).
Swainson's Hawk (Buteo swainsoni)	Fed: None State: T	Dense riparian vegetation.	Site does not support suitable habitat for the species.	Nearest documented observations within 2 miles east of the site (CNDDB, 2019).
LeConte's thrasher (Toxostoma lecontei)	Fed: None State: None	Desert scrub	Site does support suitable habitat for the species; however, no thrashers observed during field surveys.	Nearest documented observations within two miles northeast of the site (CNDDB, 2019).

5.0 RESULTS

5.1 General Biological Resources

The site supports a sparse plant community due to past disturbance with only a few creosote bush (Larrea tridentata), matchweed (Gutierrezia sarothrae), Russian thistle (Salsola tragus), and rabbitbrush (Chrysothamnus depressus) observed during the field investigations. Other species noted throughtout the site included fiddleneck (Amsinckia tessellata), erodium (Erodium cictarium), and schismus (Schismus barbatus). A few other plants noted during the field investigations included burrobush (Ambrosia dumosa) and matchweed (Gutierrezia sarothrae). Table 1 provides a compendium of all plants occurring on the site and/or in the immediate surrounding area.

Wildlife species typically found in the area and which were observed on the site and/or are common in the region, included jackrabbits (*Lepus californicus*), desert cottontails (*Sylvilagus auduboni*), California ground squirrel (*Otospermophilus beecheyi*), and antelope ground squirrel (*Ammospermophilus leucurus*). Coyotes (*Canis latrans*) also regularly occur in the area based on the presence of scats in adjacent areas. Birds observed included ravens (*Corvus corax*), mourning dove (*Zenaida macroura*), and sage sparrow (*Amphispiza belli*).

Reptiles that are common in the region which are expected to inhabit the site and surrounding area include desert spiny lizard (*Sceloporus magister*), side-blotched lizard (*Uta stansburiana*), western whiptail lizard (*Cnemidophorus tigris*), and Mohave rattlesnake (*Crotolus cerastes*). Table 2 provides a compendium of wildlife species observed during the various surveys and those likely to occur in the area.

A small intermittent channel bisects the site along the eastern boundary and a few salt cedar (*Tamarix chimensis*), cottonwood (*Populus fremonti*), and willow (*Salix lasiandra*) were observed.

5.2 Federal and State Listed Species

Mohave Ground Squirrel: Mohave ground squirrel populations have been documented in the area (Occurrence #372, Adelanto Quad., California quad., CNDDB, 2021), and the nearest observation was recorded in 2011 about three miles northwest of the property (CNDDB, 2021). No Mohave ground squirrels were observed during field investigations, and it is the opinion of RCA Associates, Inc. that the site is unlikely to be inhabited by the species based on the very low population levels in the area, previous disturbance which occurred on the site, and the absence of prime habitat on the site,

Desert Tortoise: Desert Tortoise have been documented in the area (Occurrence #51, Adelanto quad., Victorville quad, California quad., CNDDB, 2021), and the nearest observation was recorded in 2007 about four miles southeast of the property (CNDDB, 2021). Although the site does support some vegetation associated with the species, the site is not expected to support a population of the species given the absence of any tortoise sign (e.g., scats, burrows, tracks, etc.) as documented during the investigations conducted by RCA Associates, Inc. on April 28, 2021.

Swainson's Hawk: Swainson's hawks have been observed in the area (Occurrence #2544, Adelanto quad., California quad., CNDDB, 2021), with the nearest occurrence approximately 2-miles east of the site (CNDDB, 2021). The species is occasionally observed in the area hunting for its primary prey (e.g., small mammals), and may infrequently utilize the site for hunting

5.3 Wildlife Species of Special Concern and Special Status Plants

Burrowing Owl: Eight owl colonies have been observed in the region (Occurrence #1606, Adelanto quad, California Quad) with the nearest observation about 3 miles east of the site. This sighting was recorded in 2007 (CNDDB 2021). The focused survey for owls conducted on the site did not detect any burrowing owls, owl burrows, or any signs of the species (e.g., casting, whitewash, etc.). Therefore, the site is not expected to support any burrowing owls at the present time.

Le Conte's Thrasher: Le Conte's thrashers have been documented in the region (Occurrence # 2544, Adelanto, California Quad), with the most recent observation (in 1986) about two miles northeast of the property. Thrashers are not expected to occur on the site based on the sparse vegetation present on the site.

5.4 Jurisdictional Waters and Riparian Habitat

As previously noted, there is a small intermittent channel which bisects the eastern boundary of the site (Figure 3). Vegetation observed along the channel included salt cedar, cottonwood, and willows which are typically found along channels in the High Desert. A jurisdictional delineation was not conducted; however, based on a preliminary analysis the channel may be jurisdictional and be considered "Waters of the State and "Waters of the U.S." However, based on the proposed site plan, the channel will not be developed and has been designated as "Lot B' as depicted on the site plan (Figure 3).

5.5 Protected Plants

No protected plants, including Joshua trees, were observed on the site during the April 28, 2021 field investigations,

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 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 25-acre of disturbed 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.

6.2 Federal and State Listed and Species of Special Concern

No Federal or State-listed species were observed on the site during the field investigations including the Mohave ground squirrel, desert tortoise, or Swainson's hawk. In addition, there are no documented observations of these species either on the site or in the immediate adjacent areas. 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.) during the protocol survey. As noted above, Swainson's hawks may infrequently occur over the site during hunting forays; although, the species is not expected to use the site for nesting activities given the absence of suitable nesting trees. No burrowing owls or owl sign were observed on the project site, however, a 30-day pre-construction survey may be required prior to the start of site clearing activities to ensure no owls have moved onto the site.

7.0 CONCLUSIONS AND RECOMMENDATIONS

The proposed project is not expected to have an impact on any special status species based on the April 28, 2021 surveys; furthermore, loss of about 25-acres of sparse desert habitat is not expected to cause a significant cumulative impact given the presence of this community throughout the Mojave Desert. In addition, loss of this habitat is not expected to have a significant impact on wildlife which may inhabit the site or on those species which may infrequently traverse the site. If any special status wildlife species are observed on the property in the future, 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.

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CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits, present 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 me or other biologists under my direct

supervision. 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: 6-30-2021

Randall Arnold

Field Work Performed By:

Randall Arnold

President and Senior Biologist

RCA ASSOCIATES INC

15

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
Creosote bush	Larrea tridentate	44
Brome grass	Bromus sp.	66
Sage	Salvia carduacea	Surrounding area
Schismus	Schismus barbatus	On-site
Brome grass	Bromus sp.	66
Paperbag plant	Salazaria mexicana	Surrounding area
Ephedra	Ephedra nevadensis	66
Yellow-green matchweed	Gutierrezia sarothrae	On-site
Lycium	Lycium cooperi	Surrounding area
Buckwheat	Eriogonum fasciculatum	66
Anderson's thornbush	Lycium andersonii	44
Burrobush	Ambrosia dumosa	66
Cheesebush	Hymenoclea salsola	66
Spiny hopsage	Graysia spinosa	66
Fiddleneck	Amsinckia tessellata	On-site
Rabbitbrush	Chrysothamnus depressus	On-site
Goldenbush	Ericamertia sp.	Surrounding area
Vinegar-weed	Lessingia lemmonii	44
Mustard	Descurainia pinnata	44
Cholla	Opuntia echinocarpa	66

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 in the
		surrounding area.
California ground squirrel	Spermophilus beecheyi	66
Sage sparrow	Amphispiza belli	cc
Song sparrow	Melospiza melodia	44
House sparrow	Passer domesticus	Surrounding area
House finch	Carpodacus mexicanus	44
Northern mockingbird	Mimus polyglottus	66
Mourning dove	Zenaida macroura	44
Cactus wren	Campylorhynchus	44
	brunneicapillus	
Gambel's quail	Callipepla californicus	44
Horned lark	Eremophila alpestris	66
Turkey vulture	Cathertes aura	44
Western flycatcher	Tyrannus verticalis	44
Western whiptail lizard	Cnemidophorus tigris	66
Side-blotched lizard	Uta stansburiana	44
Desert spiny lizard	Sceloporus magister	66
Antelope ground squirrel	Ammospermophilus	44
,	leucurus	
Desert cottontail	Sylvilagus auduboni	66
Jackrabbit	Lepus Californicus	On-site
Coyotes	Canis latrans	Surrounding area

Note: The above list is not intended to represent all species which may occur in the area.



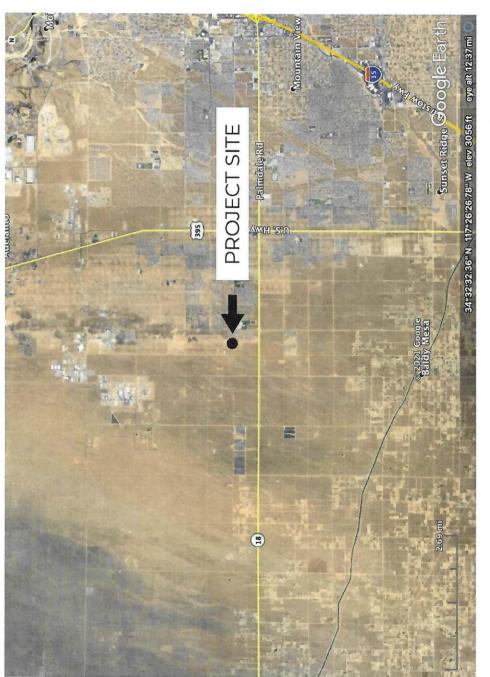


FIGURE 1: REGIONAL EXHIBIT

RCA ASSOCIATES, INC. SOURCE: GOOGLE EARTH

Google Chrome

PROJECT SITE

