GENERAL BIOLOGICAL RESOURCES ASSESSMENT

APN 0583-271-10 MORONGO VALLEY, CALIFORNIA

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1.0 INTRODUCTION AND SUMMARY

Biological surveys were conducted on June 30, 2016 on a 1.32-acre (+/-) parcel located north of the intersection of Vale Drive and Highway 62 in the City of Morongo Valley, County of San Bernardino, California (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.

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, LLC (Randy Arnold and Parker Smith). As part of the surveys, the property site and the adjoining lands were evaluated for the presence of native habitats which could potentially support populations of the desert tortoise. A focused survey was conducted for the desert tortoise (*Gopherus agassizii*) and burrowing owl (*Athene cunicularia*) as per State and Federal survey protocol. The property was also evaluated for the presence of sensitive habitats including wetlands, vernal pools, riparian habitats, and jurisdictional areas.

Based on data from USFWS, CDFW, and a search of the California Natural Diversity Database (CNDDB, 2016), the nearest populations of the desert tortoise and burrowing owl are within approximately five miles of the property. 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 1.32-acres in size and is located north of the intersection of Vale Drive and Highway 62 in the City of Morongo Valley, California (Appendix A: Figures 1, 2, and 3). The site supports a disturbed desert scrub community with signs of past human disturbance (e.g., walking trails, off-road vehicle tracks, etc.) (Figure 3).

Perennials observed on the site included creosote bush (*Larrea tridentata*), ephedra (*Ephedra nevadensis*), buckwheat (*Eriogonum fasiculatum*), and mesquite (*Proposis* sp.). Other species observed included erodium (*Erodium sp.*), yellow-green matchweed (*Gutierrezia sarothrae*), brome grass (*Bromus sp.*), and schismus (*Schismus sp.*). Vacant land borders the site to the west and single family dwellings are located to the north and south. A commercial business is also located to the northeast. No sensitive habitats (e.g., wetlands, critical habitats for sensitive species, etc.) have been documented in the area (CNDDB, 2016).

3.0 METHODOLOGIES

Biological surveys were conducted on June 30, 2016 during which biologists from RCA Associates, LLC initially walked meandering transects throughout the site to collect data on the plant and animal communities. Following completion of the initial reconnaissance survey, focused surveys were conducted for the burrowing owl and desert tortoise. The applicable methodologies are summarized below. Surveys were performed on the site and in the surrounding area from about 0730 to about 1000 hours. Weather conditions during the June 30, 2016 survey consisted of winds 0 to 5 mph, temperatures in the mid-60's to mid-80's (AM) (°F) with clear skies. All plants and animals 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).

Desert Tortoise: The site was surveyed for desert tortoises by Randall Arnold and Parker Smith, and as required by the CDFW and USFWS survey protocol, 10 meter, parallel belt transects were walked in a north-south direction until the entire property had been checked for tortoises and/or tortoise sign (burrows, tracks, scats, etc.). Surveys in the zone of influence (ZOI) were also conducted in the surrounding area, where possible. 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 affects in order to determine the presence or absence of suitable tortoise foraging habitat.

Burrowing Owl: A habitat assessment was conducted for the burrowing owl in conjunction with the general biological surveys to determine if the site supports suitable habitat for the species. Following completion of the habitat assessment, it was determined that the site does support marginal suitable habitat for the burrowing owl; therefore, a focused survey was conducted for burrowing owls and for occupiable (i.e., suitable) burrows which could potentially be utilized by owls. As part of the burrow survey, 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 cannot dig their own burrows. CDFW protocol also requires surveys be conducted in the surrounding area out to a distance of about 500 feet; therefore, surveys were performed in the surrounding area, where possible.

4.0 LITERATURE SEARCH

As part of the environmental process, a search of the California Natural Diversity Database (CNDDB, 2016) was performed. Based on this review, it was determined that desert tortoises and burrowing owls have been documented in the surrounding area. The following table provides data on the desert tortoise and burrowing owl within five miles of the site.

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.	Nearest documented populations about 3-miles to north of site. (CNDDB, 2016).
Burrowing owl (Athene cunicularia)	Fed: None State: SSC	Grasslands and desert habitats	Owls not observed on the site however, occupiable burrows identified on site.	Suitable habitat present on the site. Nearest observation about 2-miles north of the site. (CNDDB, 2016).

5.0 RESULTS

5.1 General Biological Resources

A relatively sparse desert scrub community is located throughout the site with creosote bush, ephedra, buckwheat, yellow-green matchweed, and mesquite the perennial spies observed. Most of the bushes were from 4 to 6 feet in height and the property showed some signs of past human disturbance (e.g., trash piles, off-road vehicle tracks, etc.). Annuals observed included brome grass (*Bromus sp.*), schismus (*Schismus sp.*) and erodium (*Erodium texanum*). Wildlife observed was limited to song sparrows (*Melospiza melodia*) and ravens (*Corvus corax*). A few small mammal burrows were also noted and some of these may be utilized by Merriam's kangaroo rats (*Dipodomys merriami*) which are common in the area. No distinct wildlife corridors were identified on the site or in the surrounding area.

5.2 Federal and State Listed Species

Desert Tortoise: Desert tortoises have been documented in the area with the nearest observation about three miles north of the property and this observation was recorded in 2007 (CNDDB, 2016). There are no recent observations of this species in the immediate vicinity of the site, and no tortoises or tortoise sign (i.e., burrows, scats, tracks, etc.) were observed on the site during the protocol surveys conducted on June 30, 2016.

5.3 Wildlife Species of Special Concern and Special Status Plants

Burrowing Owl: There are numerous owl colonies that have been observed in the region with the closest colony about two miles north of the site and this observation was recorded in 2007 (CNDDB 2016). No suitable burrows were observed on the site during the field investigations. Furthermore, no owl sign (whitewash, castings, etc.) were observed on the site. Based on the results of the field investigations and the absence of owl sign, the species is not expected to inhabit the property in the near future.

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. The vegetation and habitats observed on the site in June 2016 is similar to that in the surrounding area and is not unique in any way. Wildlife on the site is somewhat limited and future activities will generate minimal impacts on wildlife species known to occur in the area. Species with limited mobility (i.e., small mammals and reptiles) will experience some increases in mortality during the construction phase; although, more mobile species (i.e., birds, large mammals) will be displaced into adjacent areas and will experience negligible impacts. Loss of about 1.32-acres of 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 region.

6.2 Federal and State Listed and Species of Special Concern

Development of the property is not expected to impact any special status plants or animal species that have been documented in the area (CNDDB, 2016). As noted in Section 5.3, no desert tortoises or tortoise sign were observed on the site or zone of influence, nor were any burrowing owls observed on the property. In addition, no suitable owl burrows were observed on the site, and no owl sign (whitewash, castings, etc.) were noted on the site.

7.0 CONCLUSIONS AND RECOMMENDATIONS

Future development activities will result in the removal of about 1.32 acres of disturbed desert scrub vegetation; however, any future development activities are not expected to have a significant overall impact on the general biological resources in the surrounding region. In addition, future development of the site is not expected to have an impact on any State or federal listed wildlife species including the desert tortoise. In addition, no other special status plant or animal species (i.e., burrowing owl) are expected to be impacted. However, if any sensitive species are observed on the property during future development 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.

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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. Field work 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: 10-31-2016 Signed:

Field Work Performed By:

Randall Arnold

Senior Biologist

Field Work Performed By:

Parker Smith

Biological Field Technician

Appendix A

Tables and Figures

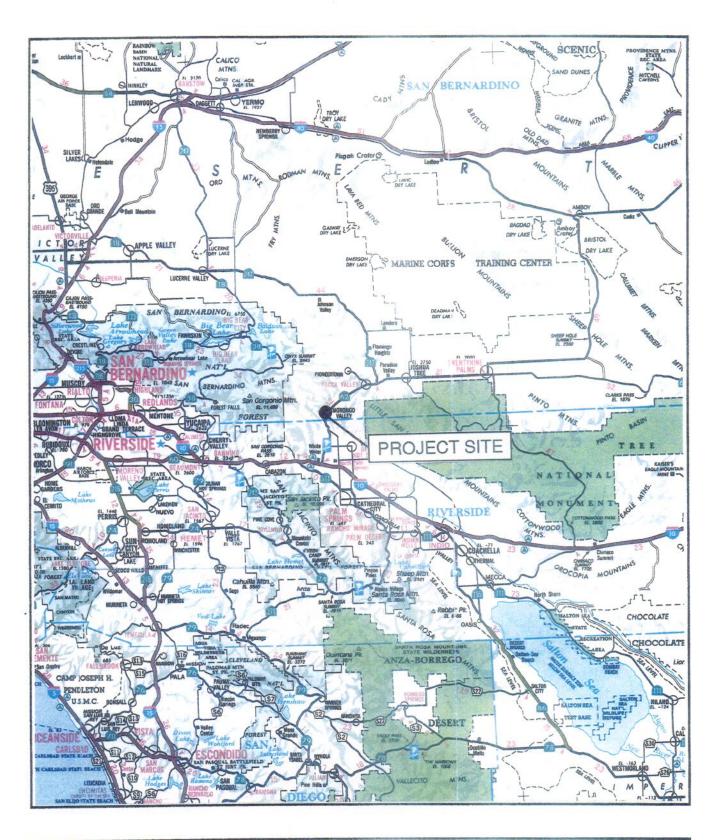
Table 1 - Plants observed on the site and known to occur in the immediate surrounding area.

Common Name	Scientific Name	Location	
Creosote bush	Larrea tridentata	On-site & Off-site	
Schismus	Schismus barbatus	"	
Brome grass	Bromus ps.	44	
Buckwheat	Eriogonum fasiculatum	"	
Ephedra	Ephedra nevadensis	"	
Yellow-green matchweed	Gutierrezia sarothrae	"	
Mesquite	Proposis.sp.	"	
Erodium	Erodium texanum	66	

Table 2 - Wildlife observed on the site and those species expected to occur in surrounding area.

Common Name	Scientific Name	Location	
Common raven	Corvus corax	On-site and in the surrounding area.	
Sage sparrow	Amphispiza belli	Surrounding area	
Song sparrow	Melospiza melodia	On-site and surrounding area	
Side-blotched lizard	Uta stansburiana	Known to occur in area.	
Western whiptail lizard	Cnemidophorus tigris	44	
Desert spiny lizard	Sceloporus magister	44	
Morning dove	Zenaida macroura	Surrounding area	
Cactus wren	Campylorhynchus brunneicapillus	Known to occur in area.	
Gambel's quail	Callipepla gambelii	66	
Horned lark	Eremophila alpestris	44	
Antelope ground squirrel	Ammospermophilus leucurus	- 46	
Jackrabbit	Lepus Californicus	66	
Desert cottontail	Sylvilagus auduboni	66	
Coyotes	Canis latrans	Known to occur in area.	
California ground squirrel	Spermophilus beecheyi	On-site and in the surrounding area.	

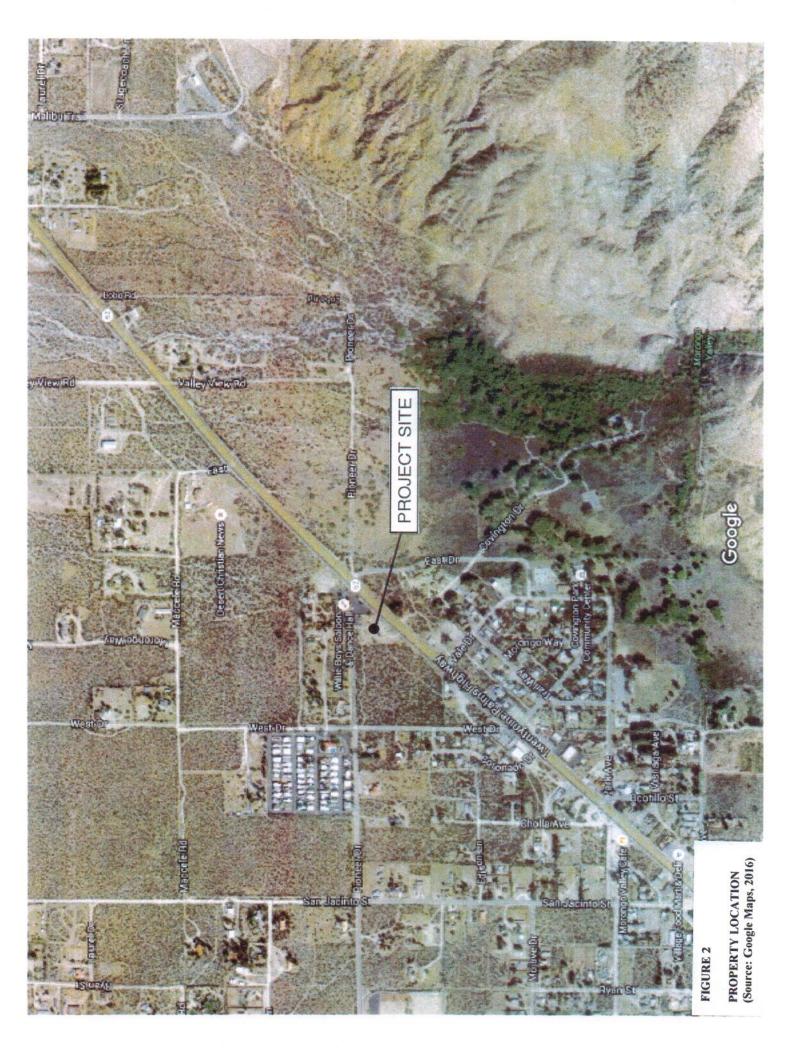
Note: The above Tables are not comprehensive lists of every plant or animal species which may occur in the area, but are a list of those common species which have been identified on the site or in the region by biologists from RCA Associates, LLC.

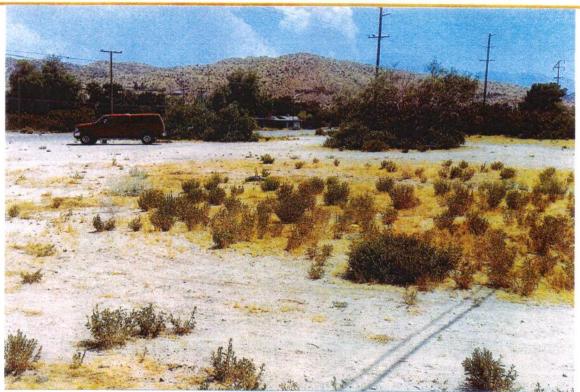




VICINITY LOCATION (Source: ACSC Map Source, 2016)

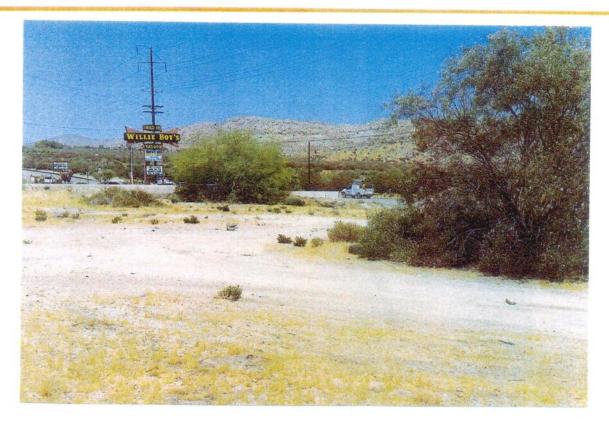








FIGURES SITE PHOTOGRAPHS



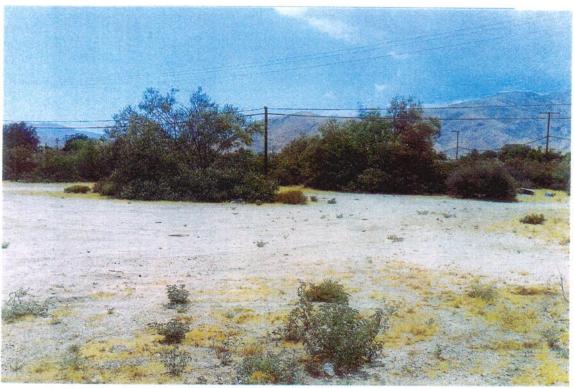


FIGURE 3, cont.