

GENERAL BIOLOGICAL RESOURCES ASSESSMENT

**TENTATIVE PARCEL MAP 19621
APN 3064-231-28**

SAN BERNARDINO COUNTY, CALIFORNIA
(USGS Baldy Mesa, CA Quad.; Township 4 North, Range 5 West, Section 19)

Prepared for:

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Prepared by:

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Project No: RCA#2015-38**

Report Prepared by Randall C. Arnold, Jr

June 23, 2015

Table of Contents

Section	Page
Executive Summary	1
1.0 Project and Property Description	2
2.0 Literature & Records Review - Species of Special Concern	7
3.0 Methodologies	9
4.0 General Biological Survey Results	10
5.0 Impacts and Recommendations	12
5.1 General Biological Resources	12
5.2 Sensitive Species	12
6.0 Proposed Mitigation Measures	14
7.0 Bibliography	15
Tables	
Figures	
Site Photographs	
Appendix A – CNDDDB Table & Flora and Fauna Compendium Tables	
Appendix B – Certification	

EXECUTIVE SUMMARY

The project proponent is proposing to subdivide a 13.81-acre (gross) parcel located in San Bernardino County (Township 4 North, Range 5 West, Section 19) (Figures 1, 2, and 3). The property would be divided into four lots ranging from 2.6-acres (Parcels 4), 2.7-acres (parcels 2-3), and 3.4-acres (Parcel 1) (Figure 1). The site currently supports a relatively undisturbed juniper (*Juniperus Californica*) community typical of this portion of the Mojave Desert. In addition to California junipers, ephedra (*Ephedra nevadensis*), and paperbag plants (*Salazaria mexicana*) were the co-dominant perennials (Figure 3). No blueline channels are shown on the USGS quadrangle although one desert wash was noted during the field investigations and is shown as a County drainage easement on Figure 1. No distinct wildlife movement corridors were observed on the property.

1.0 PROJECT AND PROPERTY DESCRIPTION

The property is located at the southeast corner of Nelson Road and Braceo Road encompassing the northeast corner of Section 19, Township 4 North, Range 5 West, San Bernardino Base and Meridian (Figures 1 and Figure 2). The site is approximately 13.81-acres (gross) in size and currently supports an undisturbed native plant community (i.e., juniper woodland community). General biological surveys were conducted on the property on June 9, 2015 during which data on the existing biological conditions was recorded, and the results of the survey are presented in this report. The site was also evaluated for the potential presence of habitat which may support sensitive species that are known to occur in the region. Currently, the site supports a juniper community dominated by California juniper (*Juniperus Californica*) with ephedra (*Ephedra nevadensis*), paperbag plant (*Salazaria mexicana*), Whipple's yucca (*Yucca whipplei*), bunchgrass (*Phleum sp.*), buckwheat (*Eriogonum fasciculatum*), sage (*salvia sp*), and brome grass (*Bromus sp.*) also common throughout the site (Figure 3). See Section 4.0 for a more detailed discussion of the biological resources.

The proposed project would consist of subdividing the property into 4 parcels as shown in Figure 1. The site is relatively flat with elevations ranging from 3,700 to 3,800 feet (MSL) with slopes to the east and west as shown in Figure 1. Soils consisted of sandy loam. The site is bordered by vacant land to the east and west, and by single family dwellings to the north and south (Figure 4).

The USGS Baldy Mesa Quadrangle does not show any blue line channels on the site, although a small desert wash does bisect the site from south to north, and is designated as a County drainage easement (Figure 1). The site supports a native plant community (i.e., juniper woodland). Weather conditions during the field investigations consisted of winds of 0 to 5 mph from the south, with temperatures in the low 70's (°F), with about 75 percent cloud coverage.

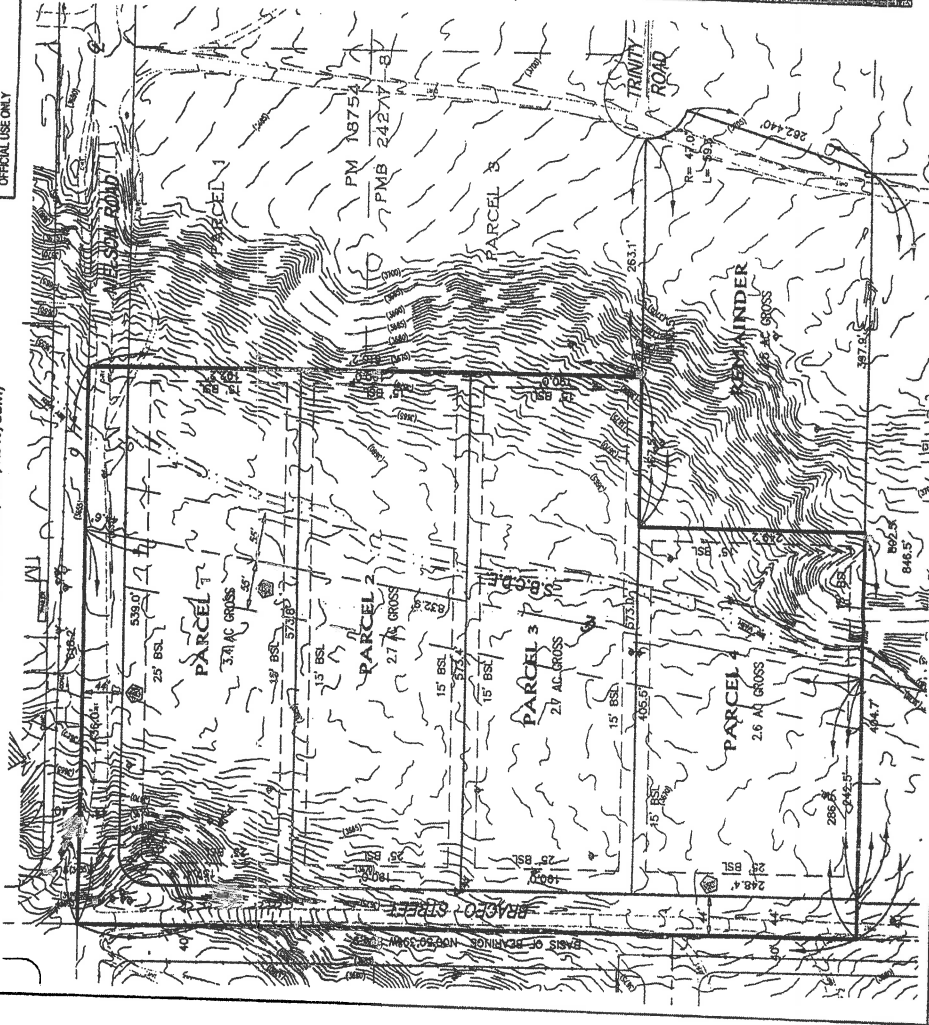
IN THE UNINCORPORATED AREA
OF THE COUNTY OF SAN BERNARDINO

TENTATIVE PARCEL MAP NO. 19621

APN: 3064-231-28

BEING A SUBDIVISION OF A PORTION OF PARCEL 1 OF PARCEL MAP NO. 10232, PARCEL
MAP BOOK 117, PAGES 92 AND 93, RECORDS OF SAN BERNARDINO COUNTY,
CALIFORNIA (IN THE NW 1/4 OF THE SE 1/4 OF SEC 19, T4N, R5W, S8M)

OFFICIAL USE ONLY



OWNER / APPLICANT

DOUG ADLAND
22351 SAINT ANNA COURT
VAN NUYS, CA 91324
(818) 783-8467

PUBLIC UTILITIES

ELECTRICITY: SOUTHERN CALIFORNIA EDISON
15000 WILSON ROAD
VICTORVILLE, CA 92392
(760) 241-3605

GAS: INDIVIDUAL PROPANE

WATER: C&G 70 ZONE J
15000 WILSON ROAD
VICTORVILLE, CA 92392
(760) 955-9885

SEWER: INDIVIDUAL SEPTIC TANK

NOTES

- 0 LF. NEW STREETS.
- 4 NUMBERED LOTS AND A REMAINDER - 2.5 ACRE MINIMUM
- 13.01 ACRE GROSS AREA BEING DIVIDED.
- AVERAGE SLOPE OF BOTH FEASIBLE ACCESS ROUTES AND FEASIBLE BUILDING SITES DOES NOT EXCEED TEN PERCENT (10%).
- NO STRUCTURES EXIST WITHIN 15 FEET OF THE PROPERTY LINES. NO STRUCTURES EXIST ON THE SITE.
- NO GRADING IS PROPOSED AT THIS TIME.
- INDICATES JOSHUA TREE.
- CONTOUR INTERVAL IS ONE (1) FOOT.

ZONING & LAND USE

PRESENT ON SITE: CH/RL
PROPOSED ON SITE: CH/RL
NORTH: CH/RL
SOUTH: CH/RL
EAST: CH/RL
WEST: CH/RL

VACANT
SINGLE FAMILY RESIDENCE
SINGLE FAMILY RESIDENCE
SINGLE FAMILY RESIDENCE
VACANT
SINGLE FAMILY RESIDENCE

BUILDING SETBACK LINES

FRONT: 25'
REAR: 15'
SIDE STREET: 15'
SIDE LOT LINE: 15'

EASEMENTS

- EASEMENT(S) IN FAVOR OF THE COUNTY OF SAN BERNARDINO COUNTY FOR HIGHWAY AND ROADWAY PURPOSES AS RECORDED IN INSTRUMENT NO. 204-008643, O.R.
- EASEMENT IN FAVOR OF THE COUNTY OF SAN BERNARDINO COUNTY FOR DRAINAGE AS RECORDED IN PARCEL MAP NO. 10232, P.M.B. 11/7/92-93, O.R.



PREPARED: APRIL 2015
REVISED:

FIGURE 1

CUBIT ENGINEERING INCORPORATED
15000 WILSON ROAD
VICTORVILLE, CA 92392
(760) 244-2547
cubiteing@verizon.net

COMMUNITY MAP
NOT TO SCALE

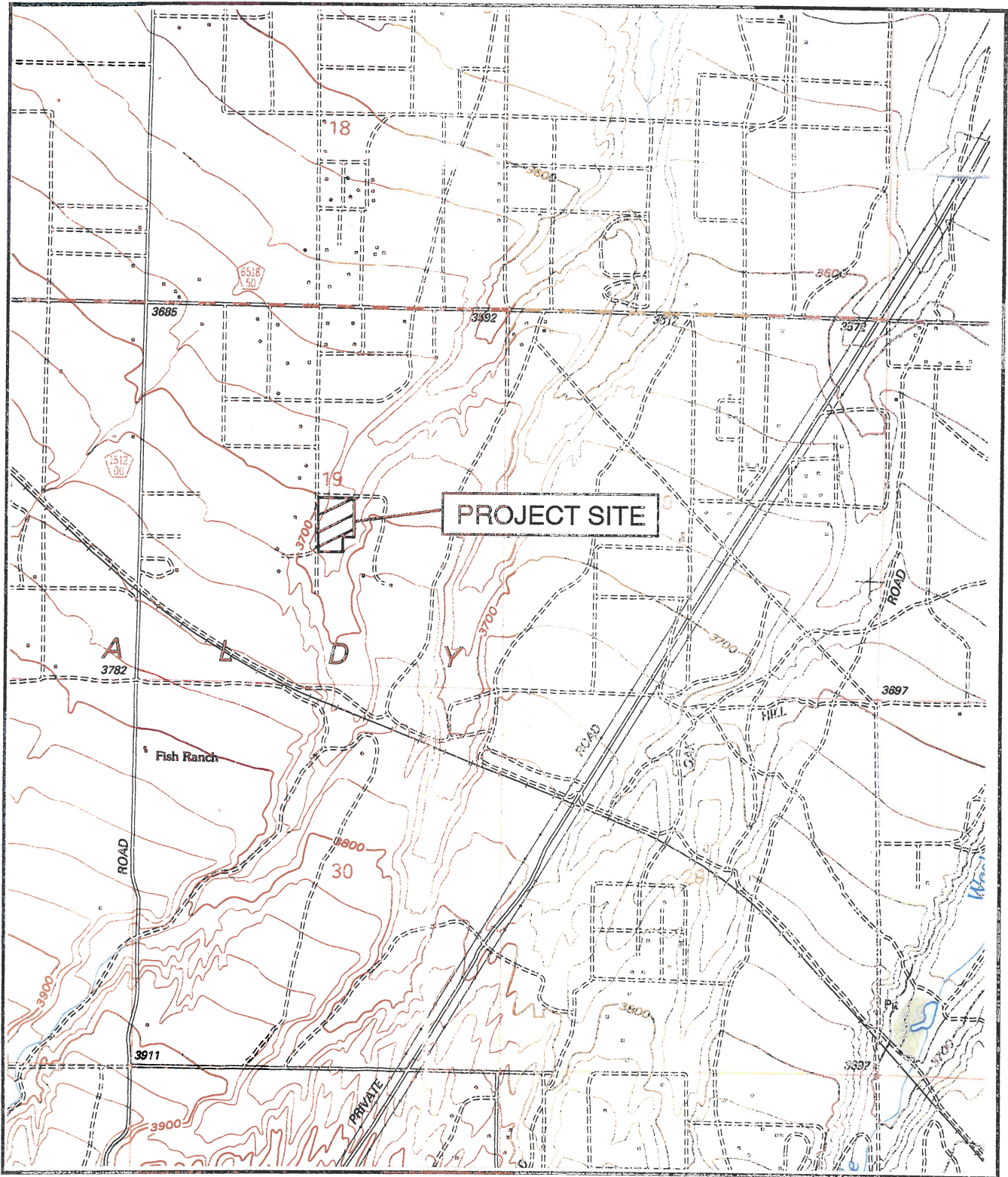


FIGURE 2
LOCATION OF SITE
N.T.S.
 (Source: USGS Baldy Mesa, CA Quad., 1996)





CENTER OF SITE LOOKING EAST



CENTER OF SITE LOOKING NORTH

FIGURE 3
PHOTOGRAPHS OF SITE
(TPM 19621)



CENTER OF SITE LOOKING WEST



CENTER OF SITE LOOKING SOUTH

FIGURE 3, cont.
PHOTOGRAPHS OF SITE
(TPM 19621)

2.0 LITERATURE & RECORD REVIEW - SPECIES OF SPECIAL CONCERN

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 to determine if any listed and/or sensitive species have been documented in the area surrounding the site. The Federal Endangered Species Act provides protection for species of fish, wildlife, and plants that are listed by the US Government as threatened or endangered in the U.S., and the Act outlines procedures for Federal agencies to follow when evaluating projects which may jeopardize any listed species. In addition, the California Endangered Species Act (CESA) provides protection to those species which are deemed to be threatened with a significant decline or extinction within California and the CESA provides CDFW with the responsibility of evaluating projects which may affect sensitive species.

Based on a general literature review, a search of USFWS and CDFW data bases, and a search of the California Natural Diversity Database (CNDDDB), it was determined that there are four sensitive wildlife species and two sensitive plant species that have been documented in the surrounding region within approximately five miles of the site (CNDDDB, 2015). Sensitive wildlife species include desert tortoise (*Gopherus agassizii*), Mohave ground squirrel (*Spermophilus mohavensis*), burrowing owl (*Athene cunicularia*), and loggerhead shrike (*Lanius ludovicianus*). Sensitive plants in the area include short-joint beavertail (*Opuntia basilaris* var. *brachyclada*), and sagebrush loeflingia (*Loeflingia squarrosa* var. *artemisiarum*). Scientific nomenclature for this report is based on the following references: Hickman (1993), Munz (1974), Stebbins (2003), Sibley (2000) and Whitaker (1980). Table 1 (Appendix A) provides a detailed summary of the sensitive species listed above.

Following the data review, general biological surveys were performed on the site on June 9, 2015 during which the biological resources on the site, and in the surrounding areas were documented by Randall C. Arnold, Jr. and Parker Smith (biologists from RCA Associates, LLC) from 0700 to 1330 hours. As part of the surveys, the project site and the adjoining lands were evaluated for the presence of native habitats which could potentially support populations of sensitive species. The results are also summarized in Section 5.2.

3.0 METHODOLOGIES

General Vegetation and Wildlife

General biological surveys were conducted on June 9, 2015 during which Randall C. Arnold, Jr. and Parker Smith from RCA Associates, LLC walked meandering transects (i.e., “transects of opportunity”) throughout the site from about 0700 to 1330 hours. During the general surveys, data was collected on the plant species present on the site and in the immediate surrounding area and the wildlife species observed were also documented.

Birds which use the site and adjacent areas were identified by visual observations and sound; whereas, mammals were identified by scats, tracks, burrows, or direct observations. All plants and animals detected during the field investigations were recorded and are provided in compendium Tables 2 & 3 (Appendix A). The site was also evaluated for the presence of any sensitive habitats (e.g., wetlands, streams, etc.) and any native habitats which could potentially support sensitive species.

4.0 GENERAL BIOLOGICAL SURVEY RESULTS

A juniper community (*Juniperus Californica*) covers most of the site and is relatively undisturbed. Most of the vegetation throughout the site consists of moderately tall shrubs (4 to 10 feet) with annuals typically found in juniper communities also observed. In addition to juniper, other perennials noted included ephedra (*Ephedra nevadensis*), paperbag plant (*Salazaria mexicana*), Joshua tree (*Yucca brevifloia*), Whipple's yucca (*Yucca whipplei*), yellow-green matchweed (*Gutierrezia sarothrae*), chamise (*adenostoma sp*), and sage (*salvia sp*) (Figure 3). Annuals consisted primarily of brome grasses (*Bromus sp.*), schsimus (*Schismus barbatus*), bunchgrass (*Phleum sp*), fiddleneck (*Amisinckia tessellata*), and buckwheat (*Eriogonum fasciculatum*). Figure 4 depicts the general biological resources present on the site and in the surrounding area.

Ravens (*Corvus corax*), sage sparrows (*Amphispiza belli*), and western scrub jays (*Aphelocoma californica*) were the only birds observed during the field investigations. Desert cottontail (*Sylvilagus audubonii*), black tailed jackrabbit (*Lepus californica*) and California ground squirrel (*Spermophilus beecheyi*) were also seen on the property. Likewise, coyotes (*Canis latrans*), which are the most common carnivore in the desert, occasionally traverse the site during hunting activities as indicated by the presence of numerous scats and tracks. Other common species which have been observed in the area during other recent surveys performed by RCA Associates, LLC, included side-blotched lizards (*Uta stansburiana*), western whiptail lizards (*Cnemidophorus tigris*), and desert spiny lizards (*Sceloporus magister*) (Appendix A, Table 2). These species likely inhabit the site and/or adjacent areas. No distinct wildlife corridors were identified on the site or in the immediate surrounding area, and no breeding activities were observed among any of the wildlife observed.

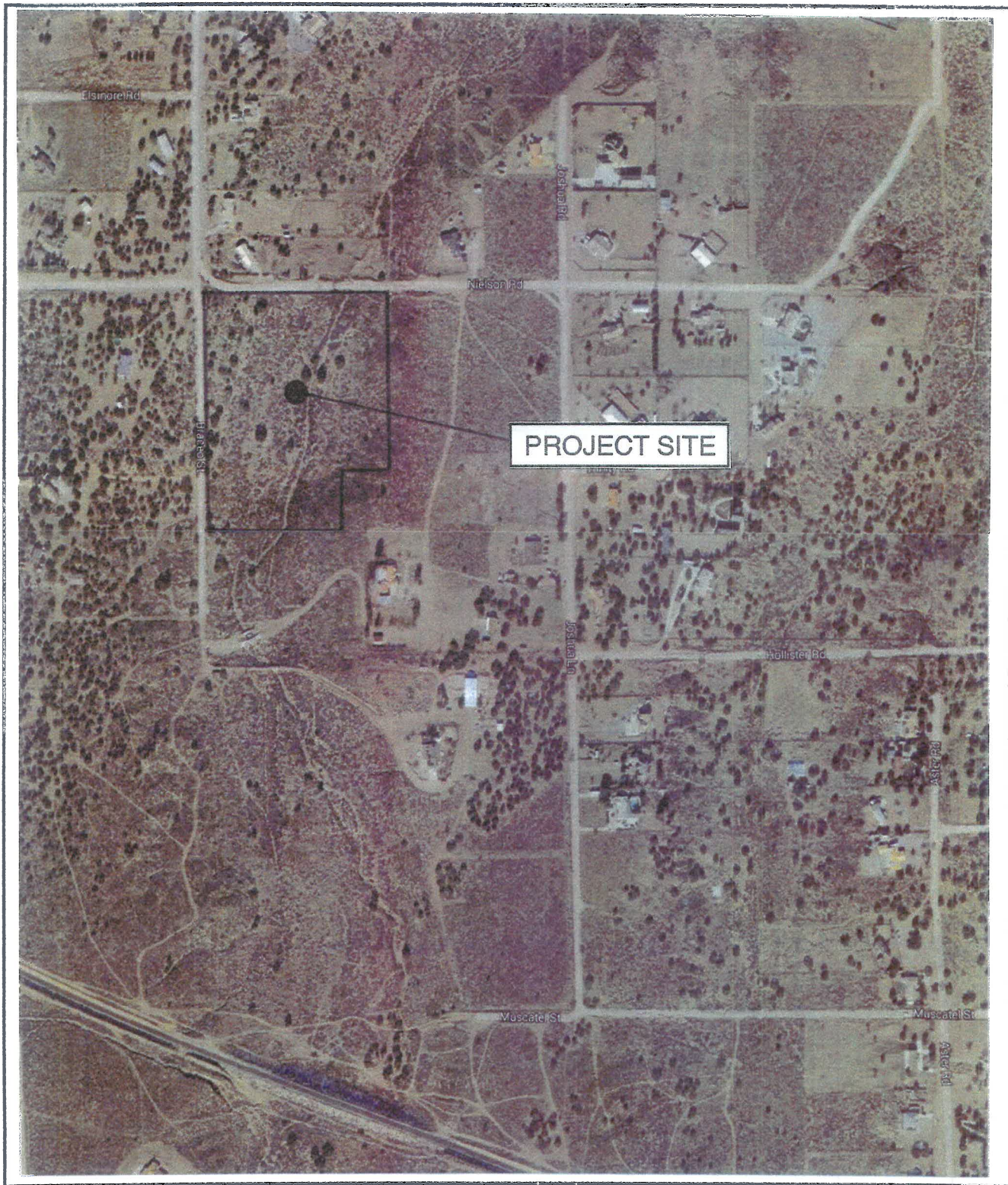


FIGURE 4
AERIAL VIEW OF BIOLOGICAL RESOURCES
N.T.S.
(Source: Google Maps, 2015)



5.0 IMPACTS AND RECOMMENDATIONS

5.1 General Biological Resources

Future development activities of the proposed subdivided property would result in the removal of some of the vegetation present on the property; although, the exact amount cannot be determined at this time. Wildlife species would be displaced into adjacent areas, and wildlife such as small mammals and reptiles would experience an increased mortality due to their limited mobility. Birds would be able to disperse over larger areas; consequently, birds would likely experience only a slight increase in mortality assuming adjacent areas are not at carrying capacity at the time of displacement. Therefore, cumulative impacts to the general biological resources are not expected to be significant, and no recommendations are proposed at this time.

5.2 Sensitive Species

Five special status wildlife species have been documented in the surrounding region and include desert tortoise, Mohave ground squirrel, burrowing owl, loggerhead shrike, and coast horned lizard. Special status plants include short-joint beavertail cactus, and sagebrush loeflingia. Each of these species is summarized below.

Desert Tortoise: Desert tortoises are common in the region according to the numerous observations documented in the CNDDDB (2015) with the nearest observation about 1-mile southeast of the site (Observation # 66 [2000], CNDDDB 2015). No tortoises or tortoise sign (i.e. burrows, scats) were observed during the field investigations; furthermore, the species is not typically associated with juniper woodland communities.

Mohave Ground Squirrel: Mohave ground squirrels have been identified in the region with the nearest sighting (Observation # 318 [2005], CNDDDB, 2015) about 2-miles northeast of the site. The species is not typically associated with juniper woodland communities; furthermore, the site is located about 0.5-miles south of the known distribution of the species (Figure 7).

Burrowing Owls: No owls or owl sign (i.e., whitewash, castings, etc.) were observed on the site, and no suitable burrows (i.e., “occupiable”) were observed on the site during the general field investigations. In addition, burrowing owls are typically associated with more open habitats, and not dense stands of junipers. Therefore, focused surveys for burrowing owls were deemed unnecessary. However, CDFW will require a “pre-construction” survey be performed 30 days prior to the start of any future grading and clearing activities to ensure no owls have moved onto the site since the original survey conducted in May 2015.

Loggerhead shrike: The nearest recorded observation of loggerhead shrike is about 3-mile northwest of the site (Observation # 53 [2007], CNDDDB, 2015). No loggerhead shrikes were observed during the June 2015 field investigations.

Short-Joint Beavertail: The short-joint beavertail species, which is relatively easily identified if present on a site, was not observed during the field surveys. The nearest observation is about 1-mile south of the site (Observation # 93 [2006], CNDDDB, 2015).

Sagebrush loeflingia: This species was not observed during the field investigations, and the nearest recorded observation is about 4-miles northwest of the site (Observation # 20 [2005], CNDDDB, 2015).

6.0 MITIGATION MEASURES

Future development activities are not expected to have any direct impact on any State and federal listed species. As noted above in Section 5.2, desert tortoises and Mohave ground squirrels are not expected to occur on the site given the presence of a juniper woodland community. In addition, no other special status species were observed on the site and there is very low probability of burrowing owls or loggerhead shrikes from inhabiting the site. The site is also unlikely to support any sensitive plant species. However, if any of these species are observed on the site or in the surrounding area during future site 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 special status species.

7.0 BIBLIOGRAPHY

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TABLES

**(Note: See Appendix A for CNDDDB Table
&
Flora and Fauna Compendium Tables)**

FIGURES

Vicinity Map

Site Photographs

Mohave Ground Squirrel Distribution Map

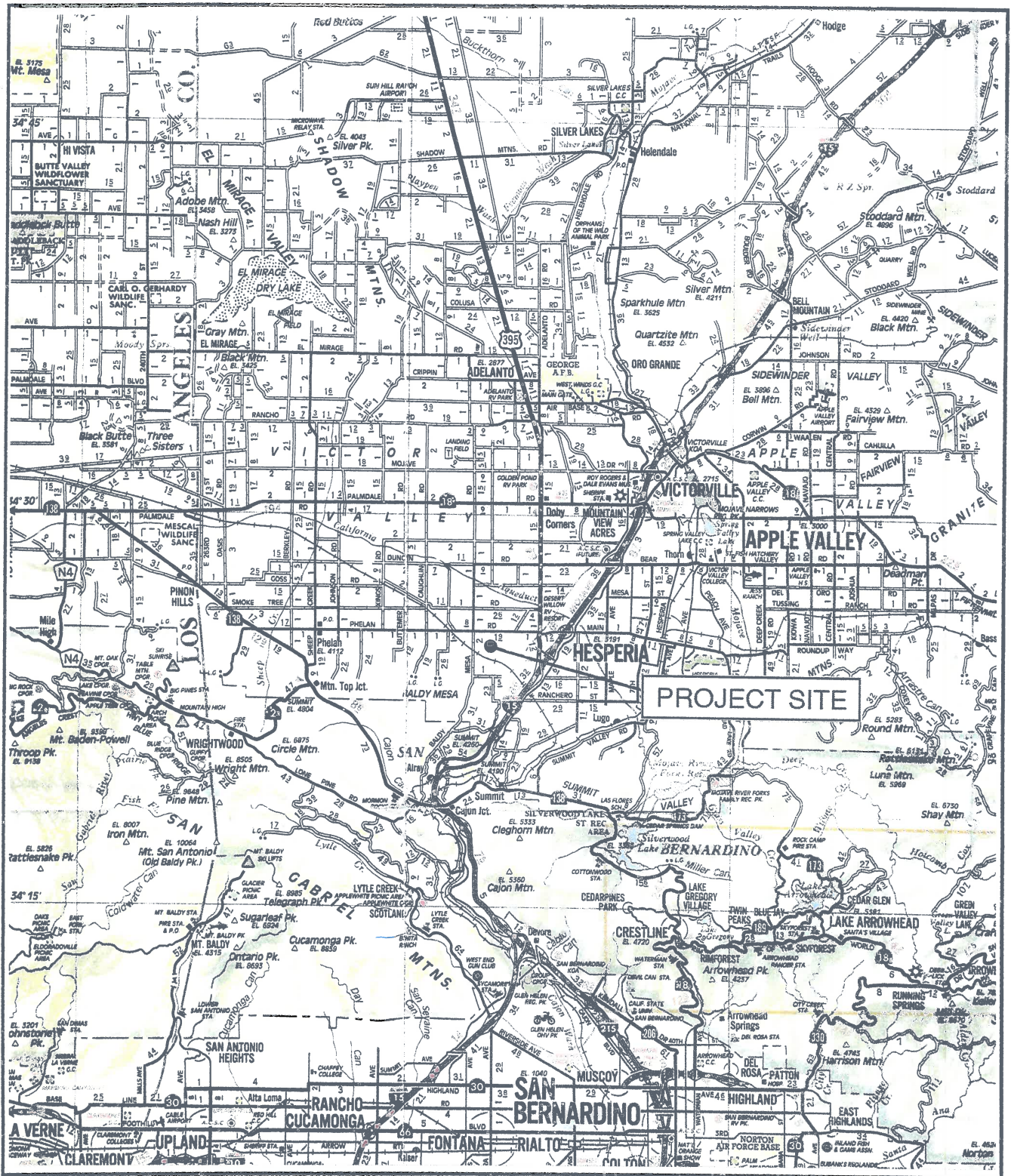


FIGURE 5
VICINITY MAP
N.T.S.
(Source: ACSC Map Source, 2015)





NORTHEAST CORNER LOOKING SWHVEST



NORTHWEST CORNER LOOKING SOUTHEAST

FIGURE 6
PHOTOGRAPHS OF SITE
(TPM 19621)

Southern Range of the Mohave Ground Squirrel

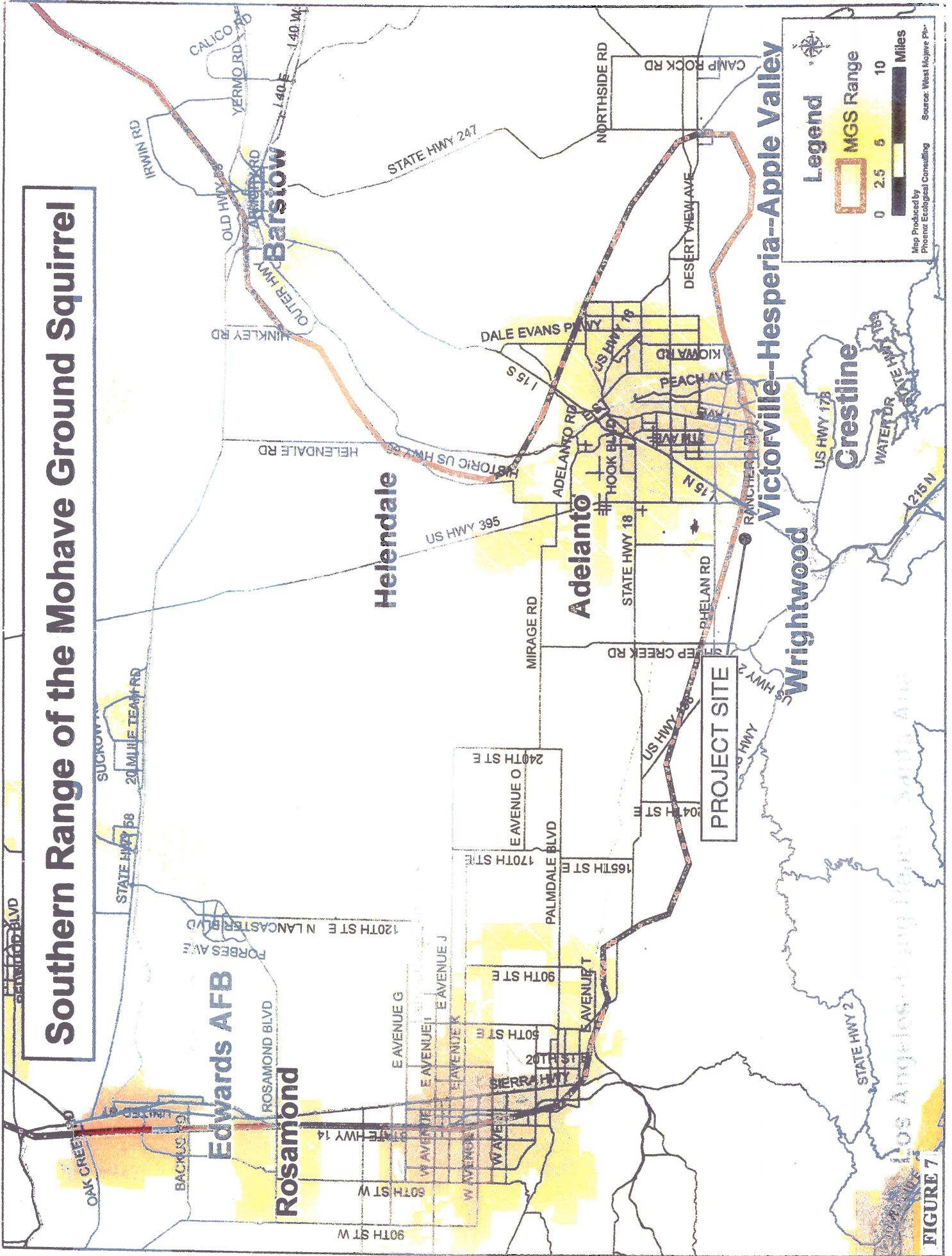


FIGURE 7

Los Angeles-Santa Ana Mountains

Map Produced by Phoenix Ecological Consulting Source: West Mojave Ph...

Appendix A
CNDDDB Sensitive Species List
&
Flora and Fauna Compendium Tables

Table 1 – Special Status Species Occurring Within About Five Miles of the Site.

(T = Threatened; SSC = Species of special concern; CNDDDB = California Natural Diversity Data Base
CNPS: California Native Plant Society)

Name	Listing Status	Habitat Requirements	Presence/Absence	Comments
Desert tortoise (<i>Gopherus agassizii</i>)	Fed: T State: T	Desert scrub	Tortoises not expected to inhabit the site based on the presence of a juniper woodland community.	Closest observation (Occ. # 66, approx 1 miles southeast of site CNDDDB, 2015).
Mohave ground squirrel (<i>Spermophilus mohavensis</i>)	Fed: None State: T	Desert scrub	Site does not support suitable habitat for the species based on the presence of a juniper woodland community.	Nearest obs. (2005) within 2.5 miles northeast of site (Occ. #318, CNDDDB, 2015).
Burrowing owl (<i>Athene cunicularia</i>)	Fed: None State: None CDFW: SSC	Various habitats	Site supports potential habitat for the species; however, no suitable burrows were observed.	Nearest obs. (2006) 2 miles southeast of site (Occ. #255, CNDDDB, 2015)
Loggerhead shrike (<i>Lanius ludovicianu</i>)	Fed: None State: None CDFW: SSC	Desert scrub	Site supports suitable habitat; however, the species was not observed during the field investigations.	Nearest obs. (2007) 3 miles northwest of site (Occ.#53, CNDDDB, 2015)
Short-joint beavertail (<i>Oputnia basilaris</i> var. <i>brachyclada</i>)	Fed: None State: None CNPS: List 1B.2	Desert scrub	Species was not observed during the field investigations.	Nearest obs. (2006) 1 mile south of site (Occ. #93, CNDDDB, 2015)
Sagebrush loeflingia (<i>Loeflingia squarrosa</i> var. <i>artemisiarum</i>)	Fed: None State: None CNPS: 2.2	Desert scrub	Species was not observed during the field investigations.	Nearest obs. (2005) 4 miles northwest of site (Occ. #20, CNDDDB, 2015)

Table 2 - Plants observed on the site and in the immediate surrounding area.

Common Name	Scientific Name	Location
Yellow-green matchweed	<i>Gutierrezia sarothrae</i>	On-site & ZOI.
Fiddleneck	<i>Amsinckia tessellata</i>	“
Brome grasses	<i>Bromus sp.</i>	“
Paperbag plant	<i>Salazaria mexicana</i>	“
Our lords Candle	<i>Yucca whipplei</i>	“
Ephedra	<i>Ephedra nevadensis</i>	“
Schismus	<i>Schismus barbatus</i>	“
Joshua tree	<i>Yucca brevifolia</i>	“
Andersons thornbush	<i>Lycium andersonii</i>	“
Juniper	<i>Juniperus Californica</i>	“
Beavertail cactus	<i>Opuntia basilaris</i>	“
Bunchgrass	<i>Phleum</i>	“
Sage brush	<i>Salvia sp.</i>	“
Buckwheat	<i>Eriogonum fasciculatum</i>	“
Chamise	<i>Adenostoma fasciculatum</i>	“

ZOI = Zone of Influence (surrounding area)

Table 3 - Wildlife observed on the site and those species expected to occur in surrounding area.

Common Name	Scientific Name	Location
Common raven	<i>Corvus corax</i>	Observed on site
Sage sparrow	<i>Melospiza belli</i>	“
Mourning dove	<i>Zenaida macroura</i>	On-site & ZOI
Side-blotched lizard	<i>Uta stansburiana</i>	ZOI
Western whiptail lizard	<i>Cnemidophorus tigris</i>	“
Desert spiny lizard	<i>Sceloporus magister</i>	“
Desert cottontail rabbit	<i>Sylvilagus auduboni</i>	Observed on site
Coyotes	<i>Canis latrans</i>	May occur on-site
California ground squirrel	<i>Spermophilus beecheyi</i>	Observed on-site
Gambels quail	<i>Callipepla gambelii</i>	On-site & ZOI
Jackrabbit	<i>Lepus californica</i>	Observed on site
Western scrub jay	<i>Aphelocoma californica</i>	Observed on site
California thrasher	<i>Toxostoma redivivum</i>	May occur on-site

ZOI = Zone of Influence (surrounding area)


Note: The above Tables are not comprehensive lists of every plant or animal species which may occur on the site or in the area, but are a list of those common species which were identified on the site during the one-day survey or which are common in the region.

Appendix B

Certification

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 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: 6-23-2015 Signed: 
Report Author

Field Work Performed By: Randall Arnold
Senior Biologist

Field Work Performed By: Parker Smith
Biological Field Technician