# General Biological Resources Assessment

**45101 Afton Canyon Road, Baker, CA 92309**
**APN 0542-131-54**

**SAN BERNARDINO COUNTY, CA**
**(USGS Dunn, CA Quad.; Township 11 N; Range 5 E; Section 1)**

***Prepared for:***

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**July 1, 2016**

# Table of Contents

## Executive Summary

The project applicant is proposing to develop 7 acres of a lot south of the I-15 Afton Road off-ramp, located in San Bernardino County, CA (Township 11 N, Range 5 E, Section 1) (Figure 1). Plans are to develop a truck stop, including a 7,000 sq ft convenience store and 2,950 sq ft automotive repair and towing facility (Figure 2). No blue line channels are shown in the proposed project area on the USGS Dunn, CA Quadrant map (Figure 3; USGS 2011).

The proposed project site is within the known range of the desert tortoise Gopherus agassizii, an endangered and federally protected species (USFWS 1994). A focused desert tortoise survey was performed on the property on June 1, 2016. Data on the existing biological conditions of the property was collected at that time. The site was also evaluated for presence of potential habitat for sensitive species known to occur in the area (Table 1). Field biologist Tanessa Hartwig performed the surveys following the standard survey protocol for the listed species as required by the California Department of Fish and Wildlife (CDFW) and the US Fish and Wildlife Service (USFWS). Survey methods and results are presented in this report.

**Desert tortoises were not observed on the property. No sign of desert tortoise activity was observed on the property.**

**Small-flowered androstephium is known to occur on the property (Figure 4). Agency consultation or a follow up study during *Androstephium* blooming period (March-April) is recommended.**

## 1.0 Property and Project Description

The property is located at 45101 Afton Canyon Road, Baker, CA 92309 in San Bernardino County, CA (Township 11 N, Range 5 E, Section 1) (Figure 1). The proposed project site is adjacent to the I-15 north Afton Road off-ramp, at the intersection of Afton Road and 20866 County Road (Figure 2). The property supports a native plant community primarily composed of creosote bush, four-wing salt bush and desert holly (Appendix B). The USGS Dunn, CA Quadrangle does not show any blueline channels on the property (Figure 3; USGS 2011).

The area surrounding the property is composed of mostly open space. However, Desert Star Ranch and Jimbo's Bar and Grill are just north of the proposed project site, opposite I-15. Afton Canyon Campground is approximately two and a half miles southeast of the property. The province of Dunn, CA is approximately two miles southwest of the property.

The proposed project includes development of approximately seven acres on the southeast quadrant of the lot (APN: 0542-131-54) (Figure 2). Development plans include a truck stop, automotive repair shop, a towing business, and parking spaces. Two buildings are planned for development; a 7,000 sq ft convenience store and restaurant with a dining area, as well as a 2,950 sq ft automotive repair and towing facility.

## 2.0 Literature Review- Species of Special Concern

Threatened and Endangered species are protected under the Federal Endangered Species Act (FESA) as well as the California Endangered Species Act (CESA). FESA outlines procedures to be followed for each listed species, while CESA leaves the CDFW responsible for evaluating projects in terms of biological impacts.

Prior to the biological surveys conducted, CDFW and USFWS data sources were reviewed to determine which species of special concern may occur on or near the property. Using the California Natural Diversity Database (CNDDB) eleven special status species were identified as having the potential to occur within 5 miles of the property (Table 1; CNDDB 2016). Endangered species include the least Bell's vireo Vireo bellii pusillus and Mohave tui chub Gila bicolor mohavensis. Other sensitive wildlife species include vermillion flycatcher Pyrocephalus rubinus, summer tanager Piranga rubra, gray-headed junco Junco hyemalis caniceps, fringed myotis Myotis thysanodes, pallid bat Antrozous pallidus, desert bighorn sheep Ovis canadensis nelsoni, and western pond turtle Actinemys marmorat. Sensitive plant species include Emory's crucifixion thorn Castela emoryi and small-flowered androstephium Androstephium breviflorum. Species and life history accounts were reviewed for each of the above listed species in order to gather the required information (physical descriptions, range, habitat requirements etc.) to determine their presence/absence on the proposed project site.

Using the CNDDB BIOS mapping system, it was determined that small-flowered androstephium is known to occur on the property, occ. 79 (Figure 4; 2016). Androstephium breviflorum is listed as 2B.2 by the California Native Plant Society, Rare Plant Program (CNDDB 2016). The 2B ranking meets the definition of CESA, making these species eligible to be listed as endangered in the state of California (CNPS 2016). Impacts to these species and their habitats are required to be analyzed during pre-construction surveys and preparation of documentation relating to CEQA.

The property falls within the known range of the desert tortoise Gopherus agassizii (Figure 5;

USFWS 1994). Desert tortoises are listed as threatened and are protected by FESA as well as CESA. The property is also within the Western Majove Recovery Unit, part of the Desert Tortoise Recovery Plan (Figure 5). The closest recorded observation to the property of the desert tortoise found in the CNDDB is approximately 8 miles west, occ. number 214 (2016). CNDDB is a positive detection database, and may lack data for rural areas with little development pressure.

The property also falls within the range of the western burrowing owl Athene cunicularia (Shuford and Gardali 2008). Nesting burrowing owls are federally protected under the Migratory Bird Treaty Act and are listed by the USFWS as a National Bird of Conservation Concern (USFWS 2003). Additionally, the state of California considers burrowing owls to be a Species of Special Concern.

A biological assessment was conducted June 1, 2016 by field biologist Tanessa Hartwig. Biological resources were documented and the property was evaluated for suitable habitat for the above listed species.

## 3.0 Methodologies

The property was surveyed on June 1, 2016 by field biologist Tanessa Hartwig. Observations took place between 0645 and 0720 hours. Skies were clear. A light breeze persisted from the west. Temperatures ranged from 83.6 to 84.7 degrees Fahrenheit. Data was recorded on field observation sheets, which included burrow details and GPS coordinates, signs of desert tortoise activity (tracks, scat, etc.), vegetation and habitat type, and other wildlife and vegetation observed.

Protocols set forth by USFWS and CDFW were followed. The property was divided into ten meter parallel east-west belt transects. Each transect was inspected carefully for burrows and other signs of desert tortoise activity. Survey results as well as information collected on habitat type will provide data needed to determine desert tortoise presence/absence at the potential project site.

Burrowing owl transects were surveyed concurrently with desert tortoise transects. Using binoculars, the biologist scanned the project area for burrowing owls at the start of each transect and the approximate mid-point of each transect. Any potential burrows were examined for burrowing owl presence or sign (pellets, prey remains, whitewash, or decorations).

Small-flowered androstephium was not surveyed for at this time. A focused botanical survey should take place during the appropriate season in order for annual species to be detected (CNPS 1983). The blooming period for small-flowered androstephium is March through April (Sandars).

The zone of influence (ZOI) was also surveyed for biological resources. Approximately 100 meters outside of the property boundaries were included in the surveys. The east ZOI was not included, as Afton Canyon Road serves as a physical barrier for habitat and wildlife.

## 4.0 General Biological Survey Results

The property contained few biological resources at the time the survey was conducted. Only a handful of wildlife species were observed during the survey. Vegetation was limited, likely due to timing. Vegetation consisted of creosote bush with four-winged saltbush and desert holly intermitted.

Desert tortoises were not observed on the property during the focused survey conducted on June 1, 2016. No evidence of the desert tortoise was observed on the property during that time. The property is within the known range of the species, with the closet observation recorded just 8 miles from the property (CNDDB 2016).

No burrowing owls or burrowing owl sign were observed during the survey. Many kangaroo rat burrows and several burrows of unknown origin were observed; however no active burrowing owl burrows or burrows dug by host burrowers (e.g. California ground squirrel, badger, coyote, fox) of burrowing owl were observed.

No federal or state listed species were observed on the property at the time surveys were conducted. However, Small flower androstephium, a CNPS 2B.2 ranked species, is known to occur on the property (2016). No signs of Androstephium breviflorum were identified on site at the time of the surveys. This is likely due to surveys taking place outside of the species blooming period (March-April) (CNPS 2016).

## 5.0 Impacts and Recommendations

The property currently experiences relative disturbance due to its proximity to the I-15 freeway. Noise, light pollution and human presence are all factors that can contribute to the low numbers of wildlife individuals found on the property.

No wildlife corridors are expected to be disturbed by the proposed project.

Desert tortoises are not expected to migrate onto the property. No further desert tortoise surveys are needed at this time.

Burrowing owls are not expected to be impacted by this project. No further burrowing owl surveys are needed at this time.

There is, however, a potential for small-flowered androstephium to be impacted by the proposed project. Follow up surveys are needed to determine its location on the proposed project site. The CNDDB has record of the species occurring on the property as recent as 2008 (occ. 79) (2016). CNPS Botanical Survey Guidelines must be followed.

## 6.0 Proposed Mitigation Measures

No signs of desert tortoise were observed on the property. Therefore, no mitigation measures are required for the species. Under the circumstance that desert tortoise or any other federal or state listed species are detected on the property in the future, CDFW and USFWS must be contacted immediately to discuss the next steps of action.

Focused surveys are recommended for small-flowered androstephium Androstephium breviflorum which has the potential to occur in the area. The survey should follow the CNPS Botanical Survey Guidelines (CNPS 1983) and be conducted during the blooming period, March through April (CNPS 2016). Alternatively, CDFW can be consulted regarding mitigation and other options.

Please note:

This report does not permit the take* of any federally or state listed species, including desert tortoise. Focused surveys for listed plant and animal species were not conducted during our general field visit, with the exception of desert tortoise and burrowing owl.

* "Take", as defined by the Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA), of any protected species is a violation of federal and state law.

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## Appendix A- Figures

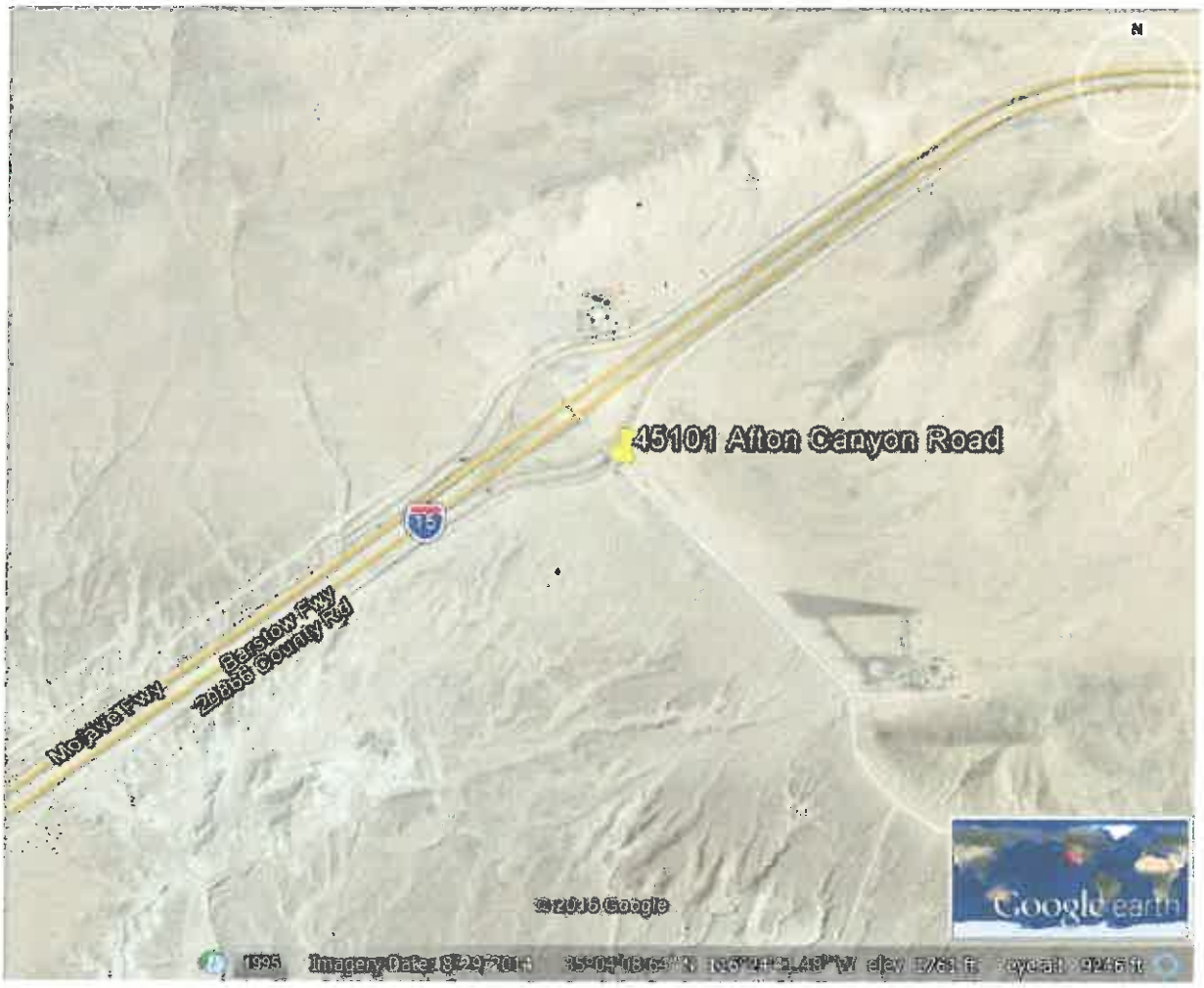


Figure 1. Property location- 45101 Afton Canyon Road., Baker, CA 92309. Satellite Image.

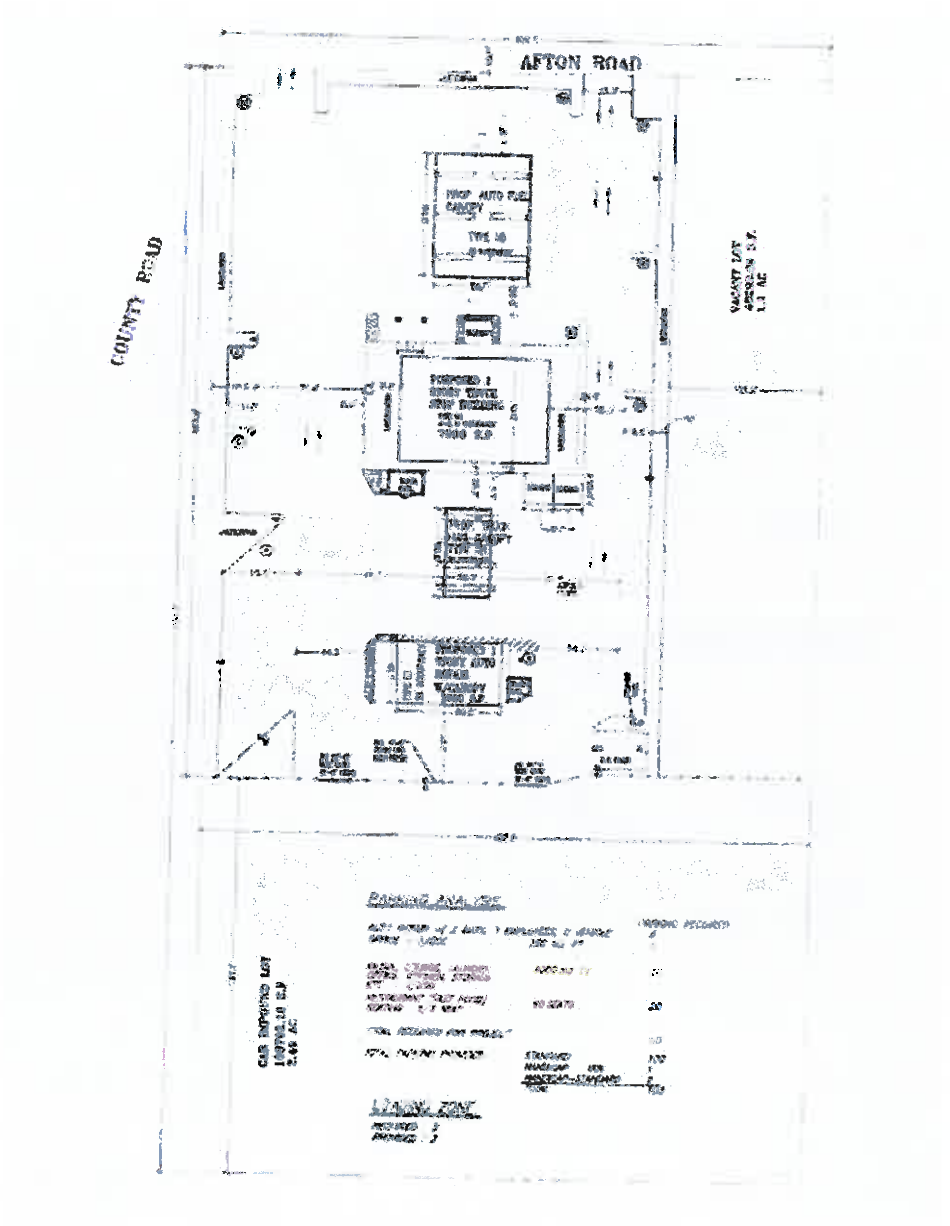


Figure 2. Proposed project plans- 45101 Afton Canyon Road., Baker, CA 92309.

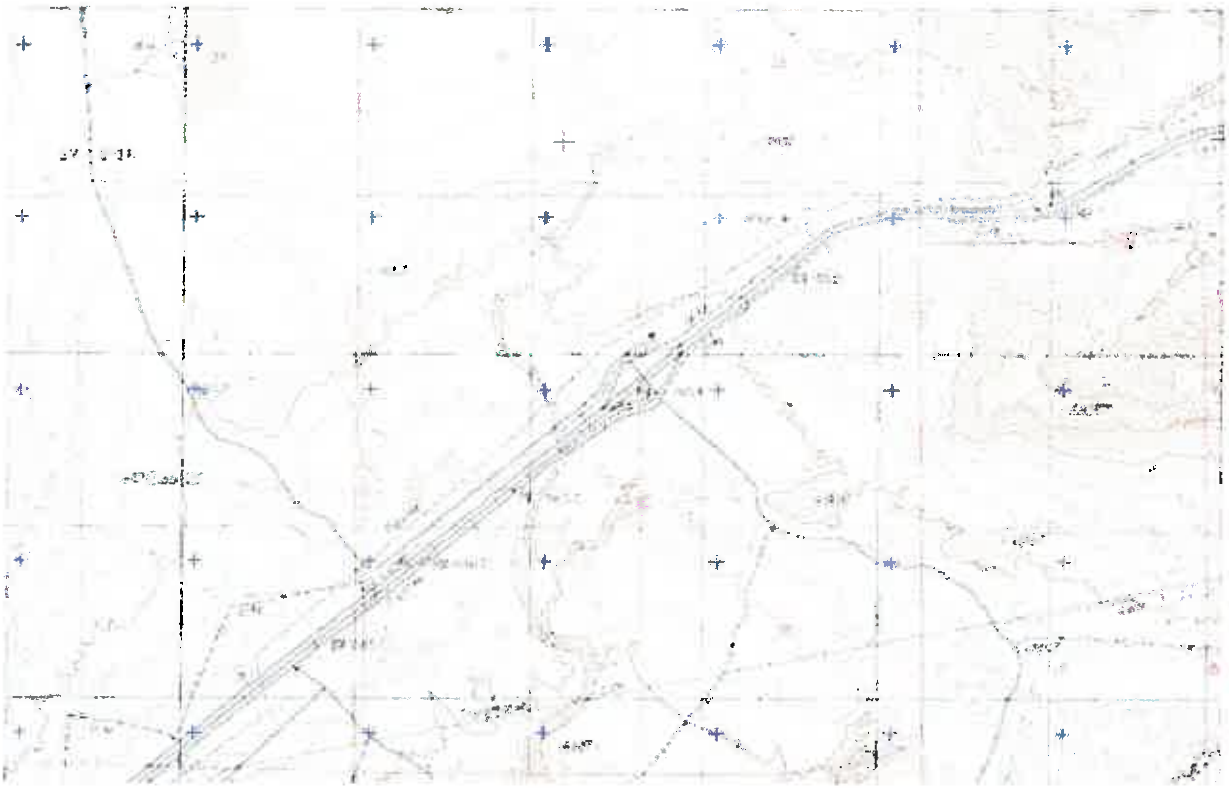

Figure 3. USGS Dunn CA, Quad., close-up map for proposed project location. (USGS 2011).

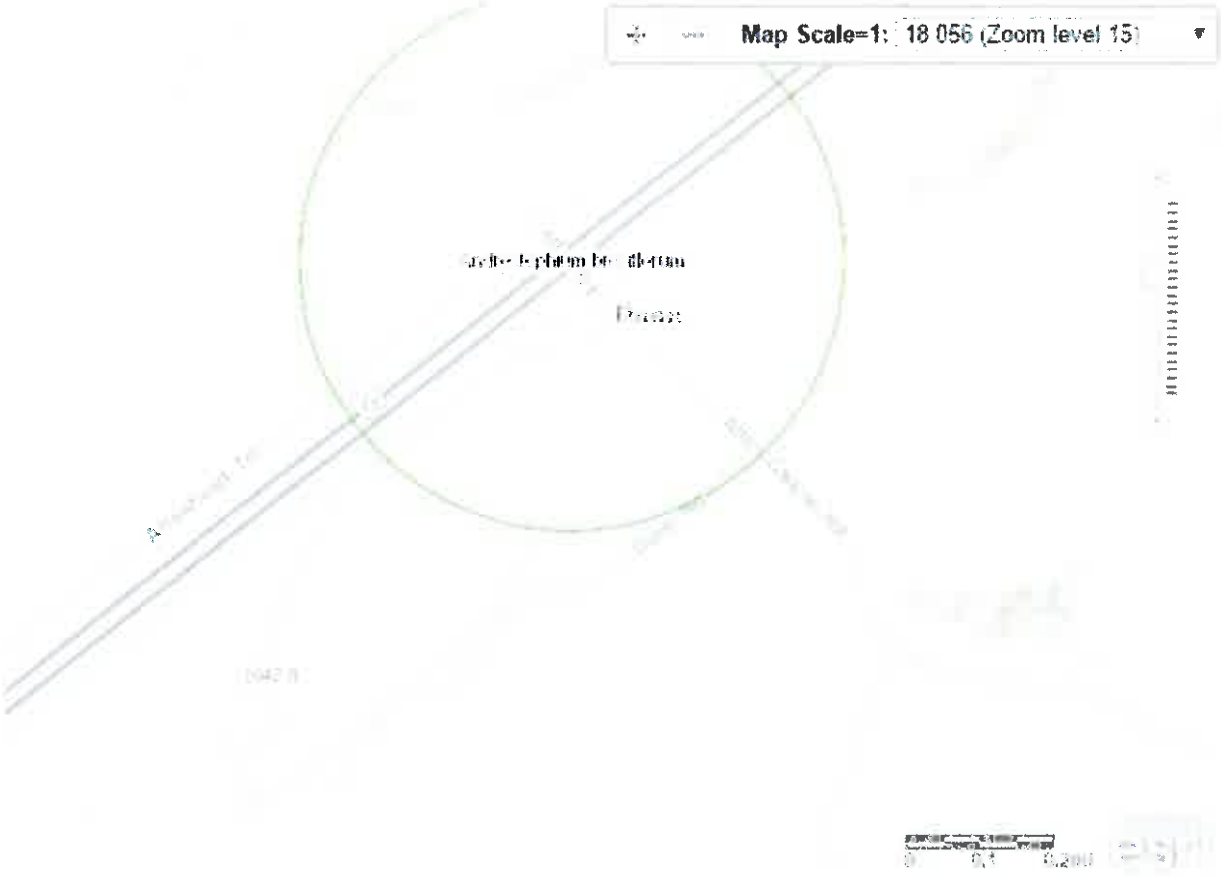


*Figure 4. CNDDB database map showing small-flowered androstephium* Androstephium breviflorum occurring on the proposed project site occ. 79 (2016).

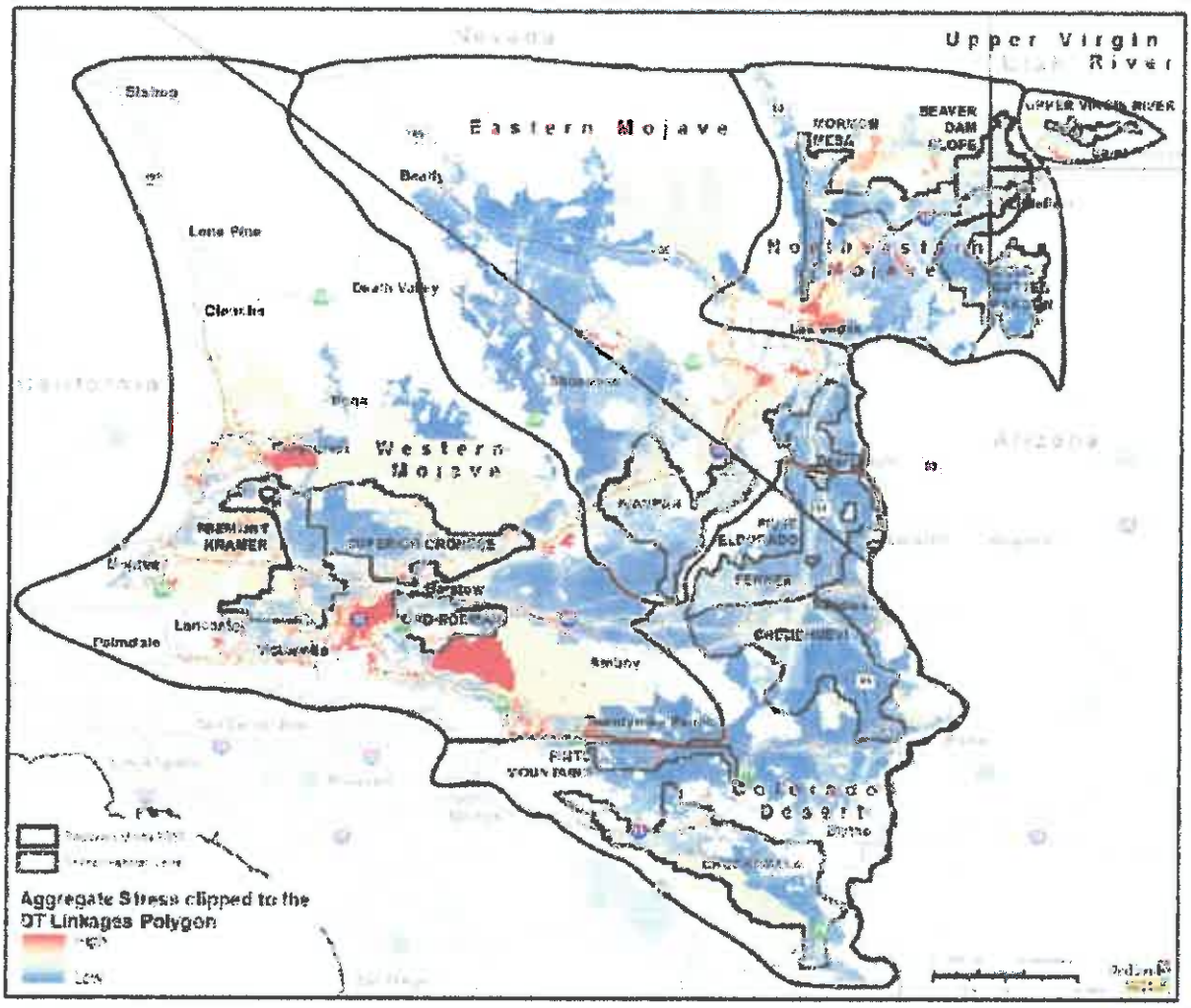


Figure 5. Critical habitat and recovery units for the desert tortoise (USFWS 1994).

## Appendix B- Tables

**Table 1. Special status species occurring within 5 miles of the proposed project site, CNDDB.**

| Name (common/*scientific*) | Listing Status | Habitat Requirements | Presence/ Absence | Comments |
|---|---|---|---|---|
| least Bell's vireo ***Vireo bellii pusillus*** | F/S: Endangered | riparian forest riparian scrub riparian woodland | No suitable habitat on site. | |
| Mohave tui chub ***Gila bicolor mohavensis*** | F/S: Endangered | Mohave river | No suitable habitat on site. | |
| pallid bat ***Antrozous pallidus*** | CDFW: SSC | Rocky outcrops, cliffs, crevices. Open space. | Potential to occur on site. | |
| vermillion flycatcher ***Pyrocephalus rubinus*** | CDFW: SSC | riparian forest riparian scrub riparian woodland | No suitable habitat on site. | |
| summer tanager ***Piranga rubra*** | CDFW: SSC | riparian forest riparian woodland | No suitable habitat on site. | |
| western pond turtle ***Actinemys marmorata*** | CDFW: SSC | Wide verity of wetland habitats | No suitable habitat on site. | |
| desert bighorn sheep ***Ovis canadensis nelsoni*** | CDFW: FP | Rocky slopes Mountainous terrain | No suitable habitat on site. | |
| gray-headed junco ***Junco hyemalis caniceps*** | CDFW: WL | Various habitats | No suitable habitat on site. | |
| Emory's crucifixion-thorn ***Castela emoryi*** | CNPS: 2B.2 | Washes, playas, drainage ways | No suitable habitat on site. | |
| Small-flowered androstephium ***Androstephium breviflorum*** | CNPS:2B.2 | Desert dunes Mojavean desert scrub (bajadas) | Potential to occur on site. | Known to occur within the proposed project site. |
| fringed myotis ***Myotis thysanodes*** | G: G4 S: S3 | Various habitats | Potential to occur on site. | |

**(F: federal, S: state, SSC: species of special concern, FP: fully protected, WL: watch list, G: global)**

**Table 2. Vegetation observed and those with the potential to occur on the proposed project site.**

| Common Name | Scientific Name | Location |
|---|---|---|
| creosote bush | Larrea tridentate | On site & surrounding area |
| four-wing saltbush | Atriplex canescens | On site & surrounding area |
| desert holly | Atriplex hymenelytra | On site & surrounding area |
| small-flowered androstephium | Androstephium breviflorum | On site & surrounding area |

**Table 3. Wildlife observed and those with the potential to occur on the proposed project site.**

| Common Name | Scientific Name | Location |
|---|---|---|
| kangaroo rat | Dipodomys | On site & surrounding area |
| common raven | Corvus corax | On site & surrounding area |
| coyote | Canis latrans | On site & surrounding area |
| desert iguana | Dipsosaurus dorsalis | On site & surrounding area |
| side-blotched lizard | Uta ssp. | On site & surrounding area |
| desert tortoise | Gopherus agassizii | On site & surrounding area |
| unidentified lizard | Unknown ssp. | On site & surrounding area |
| unidentified owl | Unknown ssp. | On site & surrounding area |

## Appendix C- Images

Image 1. Proposed project site (Northeast view)

Image 2. Proposed project site (southwest view).

Image 3. Small burrow.

Image 4. Small burrow.

Image 5. Unidentified tracks.

**Appendix D - List of Preparers**

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