

## BIOLOGICAL RESOURCES REPORT & FOCUSED SURVEY FOR AGASSIZ'S DESERT TORTOISE & HABITAT ASSESSMENT FOR BURROWING OWL

800 ECKENBERG ROAD, SANDY VALLEY, INYO COUNTY, CA 40-ACRE± SITE APN 048-350-25-00



APRIL 2021

# **BIOLOGICAL RESOURCES REPORT**

## & FOCUSED SURVEY FOR AGASSIZ'S DESERT TORTOISE, & HABITAT ASSESSMENT FOR BURROWING OWL

#### 800 ECKENBERG ROAD, SANDY VALLEY, INYO COUNTY, CALIFORNIA 40-ACRE± SITE APN 048-350-25-00

U.S. GEOLOGICAL SURVEY 7.5' WEST OF SHENANDOAH PEAK QUADRANGLE, TOWNSHIP 20 NORTH, RANGE 12 EAST, A PORTION OF THE NORTHEAST ¼ OF SECTION 33, S.B.B.&M

#### PREPARED BY:

## GEŌDE ENVIRONMENTAL INC. ESSRA MOSTAFAVI, MA AUTHOR AND FIELD INVESTIGATOR: EDWARD L. LARUE, JR.,

## 684 AUTUMN LEAVES CIRCLE BISHOP, CALIFORNIA 93514 760.428.8068 EMAIL: INFO@GEODEENVIRONMENTAL.COM

I hereby certify that the statements furnished herein, including 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 under my direct supervision. I certify that I have not signed a nondisclosure or consultant confidentiality agreement with the project applicant or applicant's representative and that I have no financial interest in the project.

(1012R)



# TABLE OF CONTENTS

EXECUTIVE SUMMARY	4
FIGURE 1. VICINITY MAP	6
FIGURE 2. SITE MAP WITH TRANSECT LOCATIONS	7
FIGURE 3. AERIAL PHOTOGRAPH (©2021GOOGLETM EARTH)	8
FIGURE 4. KNOWN MOHAVE GROUND SQUIRREL LOCATIONS	9
1.0. INTRODUCTION	10
1.1. PURPOSE AND NEED FOR STUDY	10
1.2. PROJECT DESCRIPTION	10
2.0. METHODS	10
2.1. LITERATURE REVIEW	10
2.2. FIELD SURVEY	11
2.2.1. SURVEY AND HABITAT ASSESSMENT PROTOCOLS	11
2.2.2. FIELD SURVEY METHODS	12
3.0. RESULTS	13
3.1. COMMON BIOLOGICAL RESOURCES	13
3.1.1. COMMON FLORA	13
3.1.2. COMMON FAUNA	14
3.2. UNCOMMON BIOLOGICAL RESOURCES	14
3.2.1. AGASSIZ'S DESERT TORTOISE	14
3.2.2. OTHER SPECIAL STATUS SPECIES	15
3.3. OTHER PROTECTED BIOLOGICAL RESOURCES	20
3.3.1. STREAM COURSES	20
3.3.2. PROTECTED PLANT SPECIES	20
4.0. CONCLUSIONS AND RECOMMENDATIONS	21
4.1. IMPACTS TO AGASSIZ'S DESERT TORTOISE AND PROPOSED MITIGATION	21
4.2. IMPACTS TO OTHER BIOLOGICAL RESOURCES AND PROPOSED MITIGATION	22
4.2.1. OTHER SPECIAL STATUS SPECIES	22



4.2.1.a. PROTECTED PLANTS	22
4.2.1.b. BIRD NESTS	23
5.0. LITERATURE REFERENCES	24
APPENDIX A. PLANT SPECIES DETECTED	28
APPENDIX B. ANIMAL SPECIES DETECTED	30
APPENDIX C. FIELD DATA SHEET COMPLETED ON 2 MARCH 2021	32
APPENDIX D. PHOTOGRAPHIC EXHIBITS (SEE FIGURE 5 FOR EXHIBIT LOCATIONS)	35



## EXECUTIVE SUMMARY

This Biological Resources Report has been prepared to support Inyo County's California Environmental Quality Act (CEQA) environmental document findings related to biological resources for the Tree Farm project. In addition to a general biological resource assessment, this report includes a focused survey for Agassiz's desert tortoise (DT), and habitat assessments for burrowing owls.

The Tree Farm project is located on a 40-acre± segment of Inyo County APN 048-350-25-00, located at 800 Eckenberg Road, Sandy Valley, CA (see Figures 1 and 2). The project area is located southeast of the junction of West Nickel Avenue and an Eckenberg Road, in Inyo County, California. The legal description for the subject property is Township 20 North, Range 12 East, a portion of the Northeast ¼ of Section 33, S.B.B.&M.

For a total of 8.5 hours, between 08:00 and 16:30 on March 9th, 2021, Ed LaRuesurveyed the site and adjacent areas as described herein. This entailed a survey of 27 transects, spaced at 10-meter (30-foot) intervals throughout vegetated portions of the parcel. Three specific areas were not surveyed, a  $\pm$ 6.5-acre "Recently-bladed" area; a  $\pm$ 32,000-ft2 "Fenced animal feedlot;" and the occupied residential area located on the east-central part of the site where native habitats have been eliminated. The  $\pm$ 19 acres of relatively intact saltbush scrub and even the  $\pm$ 3.4-acre "vacant, bladed lot" on the northeastern part of the site were surveyed.

Based on DeLorme Topo USA® 10.0 software, elevations throughout the subject property are approximately 805 meters (2,640 feet), as such, terrain is essentially flat. Soils range from being sandy to firmly sunbaked and are compacted in many places from continued exposure to heavy equipment. No USGS-designated blueline streams occur on-site. The 27 common plant species identified during the survey, including 25 onsite and 2 in adjacent areas, are listed in Appendix A. The 1 reptile, 14 bird, and 7 common mammal species identified during the survey are listed in Appendix B.

Based on the absence of tortoise sign onsite and in adjacent areas, and available information reviewed for this habitat assessment, it is concluded that tortoises are absent from the subject property. As such, no impacts are anticipated and no mitigation measures are recommended.

Based on the field survey and habitat assessment, it is concluded that none of the following special status species reported from the region will be adversely affected by site development: Amargosa beardtongue, Gilman's cymopterus, Ripley's aliciella,



three-awned grama, Utah beardtongue, burrowing owl, and banded Gila monster. Those species either identified during the current survey or for which suitable habitats are present include merlin, American badger, forked buckwheat, Goodding's phacelia, and Preuss' milk-vetch. For reasons given herein, no adverse impacts have been identified and no mitigation measures are recommended for any of these species.

Herein, we have emphasized the importance of the mesquite thickets and bosques, which have so far been protected, even during recent blading. This report will serve as an indicator of the special nature of these resources and the current landowner, like the previous one(s), will continue to protect the mesquite hummocks. The County will need to determine if there are prohibitions against removing the mesquite hummocks and to determine if individual trees warrant protection.













# Figure 4. APN 048-350-25-00: Aerial Photograph (<sup>©2021</sup>Google Earth)



Enlarged aerial view from approximately 4,600 feet altitude (Image date: 5/13/2019)



Regional aerial view from approximately 32,000 feet altitude, showing surveyed subject property inside the pink line.



# **1.0 INTRODUCTION**

# 1.1. Purpose and Need for Study

This Biological Resources Report has been prepared to support Inyo County's California Environmental Quality Act (CEQA) environmental document findings related to biological resources for the Tree Farm project. In addition to a general biological resource assessment, this report includes a focused survey for Agassiz's desert tortoise (*Gopherus agassizii*), habitat assessment for burrowing owl (*Athene cunicularia*), and a general biological resource assessment on a 40-acre site located in Inyo County, California (see Figures 1 and 2). Given the location of the site in an unincorporated portion of the county and because Inyo County does not have specific guidelines for biological reports, this report has been prepared, in part, according to County of San Bernardino's *Report Protocol for Biological Assessment Reports* (County of San Bernardino 2006).

As the California Environmental Quality Act (CEQA) Lead Agency, Inyo County Planning Department is required to complete an Initial Study to determine if site development will result in any adverse impacts to rare biological resources. The information may also be useful to federal and state regulatory agencies, including U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), respectively, if the Lead Agency asks them to assess impacts associated with proposed development. Results of the focused tortoise survey, burrowing owl habitat assessment, and general biological resource assessment are intended to provide sufficient baseline information to these agencies to determine if significant impacts will occur and to identify mitigation measures, if any, to offset those impacts.

#### 1.2. Project Description

The Tree Farm project is located on a 40-acre± parcel in Inyo County APN 048-350-25-00, located at 800 Eckenberg Road, Sandy Valley, CA. The project area is located southwest of the junction of West Nickel Avenue and Eckenberg Road. The legal description for the subject property is Township 20 North, Range 12 East, a portion of the Northeast ¼ of Section 33, S.B.B.&M.

## 2.0 METHODS

#### 2.1. Literature Review

Biological data repositories like the California Natural Diversity Database (CNDDB), an inventory of the status and locations of rare plants and animals in California, was consulted to determine the nearest tortoise locations and other special status plant and animal species that



have been reported from the vicinity of the subject property. The primary source of information was taken from the March 2021 version of the CNDDB (CNDDB; CDFW 2021a). This and other materials used in the completion of this report are listed in Section 5.0, below.

## 2.2. Field Survey

#### 2.2.1. Survey and Habitat Assessment Protocols

A significant paper was published in June 2011 (Murphy et al. 2011) whereby the "desert tortoise" of the Mojave Desert was split into two species, including *Gopherus agassizii*, referred to as "Agassiz's desert tortoise," and a newly described species, *G. morafkai*, referred to as "Morafka's desert tortoise," which occurs in the Sonoran Desert. According to Murphy et al. (2011), "...this action reduces the distribution of *G. agassizii* to only 30% of its former range. This reduction has important implications for the conservation and protection of *G. agassizii*, which may deserve a higher level of protection." Then in 2016 (Edwards et al. 2016), a third species of tortoise was described, referred to as the "Goode's Thornscrub Tortoise" (*Gopherus evgoodei*), which further reduced the perceived range of Morafka's desert tortoise. Agassiz's desert tortoise is the threatened species that occurs in the region surrounding the subject property.

For Agassiz's desert tortoise, Ed LaRue followed the presence-absence survey protocol first developed by the USFWS in 1992 and recently revised in 2019. USFWS (2019) protocol recommends surveying transects at 10-meter (30-foot) intervals throughout all portions of a given parcel and its associated action area. The *action area* is defined by regulation as all areas to be affected directly or indirectly by proposed development and not merely the immediate area involved in the action (50 CFR §402.02). For this site, the action area is the same as the subject property. Since the site is smaller than 500 acres, it may be surveyed year-round, but there is no opportunity to estimate the density of tortoises on the 40-acre± subject property (USFWS 2019), as tortoises are deemed to be absent.

For burrowing owl, although the formal habitat assessment does not specify a given interval to survey a site (Appendix C in CDFG 2012), subsequent breeding and nonbreeding studies identify that transects are surveyed at 7 to 20 meters (23 to 65 feet) apart, with five additional transects surveyed at 30-meter intervals out to 150 meters (500 feet) in adjacent areas in potential habitat (i.e., excluding areas substantially developed for commercial, residential, and/or industrial purposes) (Appendix D in CDFG 2012). With its narrower transect intervals, the tortoise survey is sufficient to cover the site for burrowing owls. The focus of the survey is to find and inspect all burrows sufficiently large to be used by burrowing owls. UTM coordinates were collected for all such burrows, which are mapped in Figure 2. Importantly, this methodology is considered a formal *habitat assessment* for the presence of burrowing owls, which can be conducted any time of the year. Had burrowing owl signs been found, which it was not, it would have then been necessary to



perform breeding burrowing owl surveys during the spring and summer as outlined in CDFG (2012).

## 2.2.2. Field Survey Methods

For a total of 8.5 hours, between 08:00 and 16:30 on March 9th, 2021, Ed LaRue surveyed the site and adjacent areas as described herein. This entailed a survey of 27 transects, spaced at 10-meter (30-foot) intervals throughout vegetated portions of the parcel. Three specific areas were not surveyed, listed in Figure 2: ±6.5-acre "Recently-bladed" area, which is devoid of vegetation, apparently recently bladed, and according to the owner was historically used to grow cantaloupes (see Exhibit 4 in Appendix D); ±32,000-ft2 "Fenced animal feedlot," which is vegetated but also fenced and occupied by cows and goats (see Exhibit 5); and the occupied residential area located on the east-central part of the site where native habitats have been eliminated. The ±19 acres of relatively intact saltbush scrub and even the ±3.4-acre "vacant, bladed lot" on the northeastern part of the site were surveyed.

As depicted in Figure 2, 20 zone of influence transects were surveyed for detection of burrowing owls at 30-meter (100-foot) intervals to the north, south, west, and east. Areas to the east are occupied by barren agricultural crop circles (see Figure 4), so transects were shortened in that area. Copies of data sheets completed in the field and USFWS' (2019) pre-project survey data sheet are included in this report (see Appendix C).

As vegetated portions of the site and the northeastern vacant lot were surveyed, Ed LaRue kept tallies of observable human disturbances encountered on each of the transects he surveyed. The results of this method provide encounter rates for observable human disturbances. For example, two roads observed on each of 10 transects would yield a tally of 20 roads (i.e., two roads encountered 10 times). Habitat quality, adjacent land uses, and this disturbance information are discussed below in Section 3.2 relative to the potential occurrence of Agassiz's desert tortoise and other special status species on and adjacent to the subject property.

Weather conditions recorded at the beginning and ending of the survey included temperatures measured approximately 5 centimeters (2 inches) above the ground, percent cloud cover, and wind speeds measured by a hand-held Kestrel® weather and wind speed meter, as reported in Table 1.

	Table 1.	Weather Summary Data for the S	urvey
Date	Begin to End =	Weather C	onditions
2021	Total hours	Beginning	Ending
3/9	08:00 to 16:30 = 8.5 hrs	55°F, 14 ↑ 18 mph, 100% cloud	58°F, 11 ↑ 14 mph, 10% cloud



All plant and animal species identified during the survey were recorded in field notes. A Garmin hand-held, global positioning system (GPS) unit was used to survey straight transects and record Universal Transverse Mercator (UTM) coordinates (North American Datum – NAD 83) for property boundaries, rare species locations, and other pertinent information (Appendix C). A digital camera was used to take representative photographs (Appendix D), with locations and directions of exhibits shown in Figure 5. ©2021GoogleTM Earth was accessed via the internet to provide recent aerial photographs of the subject property and surrounding areas (Figure 4).

# 3.0 RESULTS

## 3.1. Common Biological Resources

The common plant and animal species identified during the survey are listed in Appendices A and B, respectively. Based on DeLorme Topo USA 10.0 software, elevations throughout the subject property are approximately 805 meters (2,640 feet), as such, terrain is essentially flat. Soils range from being sandy to firmly sunbaked and are compacted in many places from continued exposure to heavy equipment. No USGS-designated blueline streams occur on-site.

# 3.1.1. Common Flora

The 27 common plant species identified during the survey, including 25 onsite and 2 in adjacent areas, are listed in Appendix A. As depicted in Figure 2, most of the site has been significantly altered by past agricultural uses, so that only about 19 of the 40 acres are still somewhat intact, comprised of degraded saltbush scrub. The dominant species in this community are in the chenopod family and include four-winged saltbush (Atriplex canescens), spiny saltbush (Atriplex confertifolia), allscale (Atriplex polycarpa), and Indian plume (Stanleya pinnata), which is often associated with degraded habitats. Less abundant species include winterfat (Krascheninnikovia lanata), two species of joint-fir (Ephedra nevadensis and californica), desert mallow (Sphaeralcea ambigua), bush peppergrass (Lepidium fremontii), burrobush (Ambrosia dumosa), and a half dozen creosote bushes (Larrea tridentata).

Given the prevalent and historical human uses of the site for agriculture, more than half of the native resources have been eliminated. Even residual scrub communities are heavily impacted, and the presence of the following non-native species are indicative of degraded habitats and would not be found in pristine habitats: tumble mustard (Sisymbrium altissimum), London rocket (Sisymbrium irio), flixweed (Descurainia sophia), saltlover (Halogeton glomeratus), horehound (Marrubium vulgare), and Russian thistle (Salsola tragus). In fact, 7 of the 25 species identified (28%) onsite are not native to California. Several of the native species, including little trumpet



(*Eriogonum trichopes*), desert skeleton weed (*Eriogonum deflexum*), and telegraph weed (*Heterotheca grandiflora*), are also associated with degraded habitats.

## 3.1.2. Common Fauna

The 1 reptile, 14 bird, and 7 common mammal species identified during the survey are listed in Appendix B. Habitat degradation and particularly cooler temperatures are likely responsible for the detection of only one reptile species, which was common side-blotched lizard (*Uta stansburiana*). Other locally common reptile species that may occur include zebra-tailed lizard (*Callisaurus draconoides*), long-nosed leopard lizard (*Gambelia wislizenii*), desert horned lizard (*Phrynosoma platyrhinos*), red racer (*Masticophis flagellum*), glossy snake (*Arizona elegans*), gopher snake (*Pituophis melanoleucus*), long-nosed snake (*Rhinocheilus lecontei*), and various rattlesnake species (*Crotalus* ssp.).

Most of the bird species observed include those that are tolerant of or benefitted by human development, including house sparrow (*Passer domesticus*), Eurasian collared-dove (*Streptopelia decaocto*), and house finch (*Carpodacus mexicanus*). Others may be found equally in pristine and degraded habitats, but are often more common in urbanizing areas, including red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), mourning dove (*Zenaida macroura*), horned lark (*Eremophila alpestris*), northern mockingbird (*Mimus polyglottos*), and Say's phoebe (*Sayornis saya*). Several species are migratory and likely incidental to the site as they were passing through, including mountain bluebird (*Sialia currucoides*), white-crowned sparrow (*Zonotrichia leucophrys*), Brewer's sparrow (*Spizella breweri*), and northern rough-winged swallow (*Stelgidopteryx serripennis*).

Small mammal species that were detected included kangaroo rat (*Dipodomys* sp.), antelope ground squirrel (*Ammospermophilus leucurus*), and Botta pocket gopher (*Thomomys bottae*). Medium-sized mammals included Audubon cottontail (*Sylvilagus audubonii*) and black-tailed hare (*Lepus californicus*). Common predators included coyote (*Canis latrans*) and bobcat (*Lynx rufus*). All these species are commonly found in even degraded habitats.

### 3.2. Uncommon Biological Resources

### 3.2.1. Agassiz's Desert Tortoise

No tortoise sign was found either onsite or in adjacent areas during this focused, protocol survey for the species (USFWS 2019). Based on the absence of tortoise sign on the subject property, in adjacent areas, and reported from the region (see Figure 3), Ed LaRue concludes that Agassiz's desert tortoise is absent from the subject property and action area. Also, there is no likelihood of



wild tortoises entering the site from adjacent areas, either to pass through the site or establish residency.

About half of the site is devoid of native biological resources, so the tallies of observable human disturbances pertain only to the saltbush scrub and northeastern vacant lot. In these two areas, encounter rates for observable human disturbances included (in descending order of prevalence) 219 domestic dog signs, 100 cross-country vehicle tracks, 2 dump sites, and 1 shotgun shell. The current residents have four or five dogs that visited me during surveys, and appear to be wide-ranging throughout the site, diminishing a bit in the most western areas.

With the publication of the BLM's (2016) Record of Decision, the Desert Renewable Energy Conservation Plan (DRECP) revised the 1980 California Desert Conservation Area Plan (CDCA Plan; BLM 1980) in significant ways for the conservation and recovery of desert tortoises in the California Deserts. Although desert tortoise critical habitat was not changed (USFWS 1994a), Desert Wildlife Management Areas (DWMAs; USFWS 1994b) and Multiple Use Classes on BLM lands were eliminated. In addition to critical habitat, the two main designated areas under the DRECP CDCA Plan amendment that provide for tortoise conservation and recovery are Areas of Critical Environmental Concern (ACECs) and California Desert National Conservation Lands (CDNCLs). The subject property is not found within any of these conservation areas.

#### 3.2.2. Other Special Status Species

U.S. Fish and Wildlife Service (2008), California Department of Fish and Wildlife [CDFW 2021a for California Natural Diversity Database; 2021b for Special Plant Species list; 2020a for Special Animal Species list; and California Native Plant Society (CNPS 2021)] maintain lists of animals and/or plants considered rare, threatened, or endangered, which are herein collectively referred to as "special status species." Regulatory agency-designated special status species that were identified during the current survey included merlin and American badger. Life history and occurrence information for these two rare species observed during the survey and those reported to the CNDDB (CDFW 2021a) are given in the next few subsections.

### <u>REPTILES</u>

Banded Gila monster (*Heloderma suspectum cinctum*) is not designated as "sensitive species" by the USFWS, is considered a California Species of Special Concern by CDFW, and is designated as Sensitive by the Bureau of Land Management (BLM). CDFW (2021a) describes its habitats as lower slopes of rocky canyons and arroyos, and found on desert flats among scrub and succulents. Eggs are laid in soil in excavated nests; thus, soil must be sandy or friable; and found in areas moister than surroundings. This 1980 observation is the only one reported in all of Inyo County, there are



problems associated with the reported location and associated elevation, which do not match, so there is some likelihood that this observation is erroneous.

#### PLANT COMMUNITIES

Mesquite bosque/thickets, once considered a Community of Highest Inventory Priority (CHIP; CDFW 2010), the latest list of California State Sensitive Natural Communities (CDFW 2020b) lists nine forms of Mesquite Thickets (CA code 61.514.00), including one that is dominated by honey mesquite (*Prosopis glandulosa* var. torreyana), which is the species that occurs onsite. "Bosque" and "thicket" seem to be interchangeable terms that imply a forest or significant accumulation of mesquite trees. CDFW considers it imprudent to remove the Holland (1986)-based elements from the CNDDB before assessing them and reclassifying them in terms of the currently accepted state and national standards for vegetation classification. Their existence should be addressed in the environmental review processes of CEQA and its equivalents, along with occurrences of plants and animals tracked by the CNDDB.

Mesquite plants occur in several forms including individual trees (Exhibit 1), a sparse grove of trees located just west of the northeastern vacant lot (point #1 in Figures 2 and 4, Exhibit 3) that may have been planted, and naturally occurring, elevated hummocks that comprise mesquite bosques/thickets. As shown in Figures 2 and 4, there are five such mesquite thickets, numbered 2 through 6. The one, labeled #3 that occurs just west of the main residence, is 300 feet across, and impossibly dense in many places. Some distant views of these thickets are visible in Exhibits 1, 2, 4, and 5.

#### PLANTS

Gilman's cymopterus (Cymopterus gilmanii) is designated as a List 2B.3 plant, meaning it is

rare, threatened, or endangered in California but more common elsewhere; but not very threatened in California (low degree/immediacy of threats or no threats known). This perennial herb blooms from April to May, often on carbonate soils in Mojavean desert scrub, located between 915 and 2000 meters (3,000 to 6,560 feet). An occurrence was reported to the CNDDB (CDFW 2021a) approximately 3.5 miles west on silty clefts of dolomite rock, and all images are shown on rocky substrates. The subject property may be slightly too low in elevation and substrates are lacking, so this plant is presumed to be absent.





Goodding's phacelia (*Phacelia pulchella* var. *gooddingii*) is a List 2B.2 plant, meaning the species is rare, threatened, or endangered in California but more common elsewhere; and, specifically, fairly threatened in California (moderate degree/immediacy of threat) (CNPS 2021). An annual herb that blooms from April to June in Mojave desert scrub, on clay soils that are often alkaline, between 765 and 1000 meters (2,510 and 3,280 feet), it has been reported 3.5 miles west in 1980 and 3,300 feet in 1941 (CDFW 2021a). Habitats are reported as dry, fine silt in alkaline flats with *Atriplex confertifolia* and *Atriplex polycarpa*, which is like the subject property. There is some



potential for it to occur but would not have been detectable during the March surveys.

Preuss' milk-vetch (*Astragalus preussii* var. *preussi*) is designated as a List 2B.1 plant, which is rare, threatened, or endangered in California but more common elsewhere; and, specifically, seriously threatened in California (high degree/immediacy of threat). This perennial herb blooms from April to June, is found on clay soils in chenopod scrub and Mojavean desert scrub, between 750 and 805 meters (2,460 and 2,640 feet). In 2012, the species was reported to the CNDDB (CDFW 2021a) in nine



locations between 4,100 feet east and 4.6 miles south of the site (see Figure 2). The substrate descriptions and associated plant species are like conditions on the subject property, and given the proximities of occurrences, there is some potential that this plant may occur and was not detectable at this time of year.

Forked buckwheat (*Eriogonum bifurcatum*) is considered by CNPS (2021) to be a List 1B.2 plant, which means it is rare, threatened, or endangered in California and elsewhere; and, specifically, fairly threatened in California (moderate degree/immediacy of threat), is not designated by either CDFW or USFWS, and is considered a BLM-Sensitive species (CDFW 2021a). This annual herb, which blooms from April to June and occurs on sandy soils in chenopod scrub, between 645 and 810 meters (2,115 and 2,660 feet), has been reported to the CNDDB (CDFW 2021a) from five locations



between 1,400 feet and 2.7 miles southeast of the subject property (see Figure 2). All descriptions are like the subject property, and given the proximities, it is likely the plant occurs but would not have been detectable during the current survey.



Ripley's aliciella (Aliciella ripleyi) is designated as a List 2B.3 species, meaning it is rare, threatened, or endangered in California but more common elsewhere; but not very threatened in California (low degree/immediacy of threats or no threats known). The CNDDB (CDFW 2021a) indicates that the species is associated with limestone, rocky slopes, rock/cliff bases, and rock crevices, between 300 and 1950 meters (985 and 6,400 feet). CNPS (2021) indicates it blooms May to July, is associated with limestone, in Mojavean desert

scrub. CDFW (2021a) reports it was observed 3.5 miles west in 1980, which was an estimate given poor location information. The species is presumed to be absent for lack of suitable substrates.

Amargosa beardtongue (Penstemon fruticiformis var. amargosae) is designated as a BLM Sensitive species (CDFW 2021a) and is considered a List 1B.3 species by CNPS (2021), which means it is rare, threatened, or endangered in California and elsewhere; but not very threatened in California (low degree/immediacy of threats or no threats known). Reported from Mojavean desert scrub in sandy or gravelly washes and drainages, between 940 and 1890

meters (3,085 and 6,200 feet) (CDFW 2021a), it is a perennial herb that blooms from April through June, reported from only 18 known locations (CNPS 2021). CDFW (2021a) reports an occurrence from 4.3 miles west, where it was found on gravel and cobble-sized dolomite rubble in 1980. It is presumed to be absent from the site for lack of suitable habitats.

Utah beardtongue (Penstemon utahensis) is designated as a List 2B.3 species, meaning it is rare, threatened, or endangered in California but more common elsewhere; but not very threatened in California (low degree/immediacy of threats or no threats known). The species is a perennial herb, blooming from April to May, in Mojavean desert scrub, chenopod scrub, Great Basin scrub, and pinyon-juniper woodland, on rocky substrates, at elevations between 1,065 and 1,915 meters (3,495 and 6,280 feet) (CNPS 2021). CDFW (2021a) reports an occurrence from 1940 approximately 5.5 miles northwest, although the exact location was not reported. It is presumed to be absent for lack of suitable habitats.









Three-awned grama (*Bouteloua trifida*) is designated as a List 2B.3 species, meaning it is rare, threatened, or endangered in California but more common elsewhere; but not very threatened in California (low degree/immediacy of threats or no threats known). A perennial herb that blooms from late April through September, it grows on rocky, carbonate substrates, between 700 and 2,000 meters (2,300 and 6,560 feet) (CNPS 2021). CDFW (2021a) reports an occurrence from approximately 4.3 miles west of the site, in 1980, where it was found in crevices, in dolomite rock outcrops, on south-facing slopes. It is presumed to be absent for lack of suitable habitats.



#### <u>BIRDS</u>

Merlin (*Falco columbarius*) is designated as a Watch List species by CDFW (2020) and does not have a federal status. Only slightly larger than the more common American kestrel (*Falco sparverius*), it is heavier and in flight often appears considerably larger and is a year-round resident of California. Primarily monogamous, the merlin raises one brood each breeding season, laying its eggs in the abandoned nests of crows or hawks. It feeds predominantly on small birds, which it generally catches in short, quick flights. They are often associated with feedlots, stables, and corrals, which are common in Sandy Valley. One was observed during the current survey, flying north-to-south, as mapped in Figure 2. They may forage onsite but would not nest there.

Burrowing owl is designated as a California Species of Special Concern by CDFW (2020a), as a Bird of Conservation Concern by the USFWS (2008), and is considered "sensitive species" by the BLM (CDFW 2021a). It is one of the focal species specifically sought during field surveys, and is usually detected by distinctive feathers, zygodactyl (x-shaped) tracks, and whitewash (fecal material deposited away from burrows may be from other bird species). Although pellets and feathers are sufficiently distinctive that they may be identified away from burrows, it is one or more of these signs at sufficiently large burrows that are the most definitive means of determining burrowing owl use of a given site.

In the case of the subject property, there was no evidence of burrowing owls. No habitats occur in the recently bladed area, the active residential areas, or the northeastern vacant lot but the saltbush scrub is sufficiently sparse onsite and in adjacent areas as to be suitable for the species. Burrowing owls do not create their own burrows; rather they find existing burrows, which they may slightly modify in order to occupy. Typical existing burrows used by burrowing owls include abandoned kit fox dens, both active and inactive tortoise burrows, deeper badger digs, and inactive California ground squirrel burrows. The 18 badger digs mapped in Figure 2 were inspected for burrowing owl signs, but none was found. There are no reports from the



CNDDB database (CDFW 2021a). At the time of this survey, burrowing owls are absent from the subject property and adjacent survey areas.

### MAMMALS

American badger (*Taxidea taxus*) is listed as a California Species of Special Concern and has no federal designation (CDFW 2021a). This widespread species is found throughout California, except for the very northwestern corner of the state (Zeiner et al. 1990). However, Ed LaRue has observed that badgers are typically absent from urbanizing portions of the desert; so, absence of diagnostic digs from recently-bladed and more developed, eastern portions of the site is considered an indicator of relatively degraded habitat quality in those areas. During the survey, 18 diagnostic badger digs were found (see Exhibit 6), including 2 onsite and 16 west of the southwestern portions of the site, which are mapped in Figure 2. This is a highly mobile species, no primary badger dens were found, and development of the site would not be considered a significant impact to the species.

### 3.3. Other Protected Biological Resources

#### 3.3.1. Stream Courses

Stream courses provide relatively important resources to animals and plants. In dry years, and particularly during prolonged drought, annual plants may only germinate in the vicinity of washes where the water table is relatively near the surface. Perennial shrubs adjacent to washes are often the only plants that produce flowers and fruit, which in turn are important to insects and the avian predators that feed on them. Shrubs also tend to be somewhat taller and denser alongside washes, which provides cover for medium and larger sized animals that may use them as travel corridors. Biodiversity is generally enhanced by washes, and there are often both annual and perennial plants that are either restricted to or mostly associated with wash margins. There are both anecdotal accounts and published literature on washes being important to tortoises, which use them as travel corridors and access to nearby annual forage. No such streams occur onsite.

### 3.3.2. Protected Plant Species

At the State level, the 1998 Food and Agricultural Code, Division 23: California Desert Native Plants Act, Chapter 3: Regulated Native Plants, Section 80073 states: The following native plants, or any parts thereof, may not be harvested except under a permit issued by the commissioner or the sheriff of the county in which the native plants are growing:

(a) All species of the family Agavaceae (century plants, nolinas, yuccas).





(b) All species of the family Cactaceae (cacti), except for the plants listed in subdivisions (b) and (c) of Section 80072 (i.e., saguaro and barrel cacti), which may be harvested under a permit obtained pursuant to that section.

- (c) All species of the family Fouquieriaceae (ocotillo, candlewood).
- (d) All species of the genus *Prosopis* (mesquites).
- (e) All species of the genus *Cercidium* (palo verdes).
- (f) Senegalia (Acacia) greggii (catclaw acacia).
- (g) Atriplex hymenelytra (desert holly).
- (h) Dalea (Psorothamnus) spinosa (smoke tree).
- (i) Olneya tesota (desert ironwood), including both dead and live desert ironwood.

Among these plants, mesquite in the genus, *Prosopis*, is the one plant species included in the above list that was observed on the subject property. As per this list, had the mesquite trees occurred as individuals, they may receive protection under this statute, but because they occur in the form of a "thicket/bosque," their protection is elevated, as they are also identified as a California Sensitive Plant Community by the CDFW (2020b)

# 4.0 CONCLUSIONS AND RECOMMENDATIONS

# 4.1. Impacts to Agassiz's Desert Tortoise and Proposed Mitigation

Based on the absence of tortoise sign onsite and in adjacent areas, and available information reviewed for this habitat assessment, Ed LaRue concludes that tortoises are absent from the subject property. As such, no impacts are anticipated and no mitigation measures are recommended.

It is unclear what the tortoise distribution is in the immediate area. The lower half of Figure 4 shows that extensive agriculture to the southeast has eliminated tortoise habitats in that direction, and that the subject property is in the light-colored, sandy areas extending northwest from the lakebed. The darker areas to the southwest in the lower half of Figure 4 are vegetated by creosote bush scrub and likely support tortoise populations. Given these observations, we are not sure if there is any potential for tortoises to immigrate onto the site from the north, south, or west. The landowner is cautioned to watch for them to avoid crushing any that may enter onto the site. If tortoises are observed more than several times a year and the property owner is concerned about crushing them, it is advisable to install a tortoise-proof fence around operations (see Chapter 8 in USFWS 2009).



Whereas USFWS survey protocols historically indicated that the results of a given survey were valid for the period of only one year (USFWS 2010 and 2018), according to the revised, 2019 USFWS pre-project survey protocol,

"If the survey data are more than a year old, we encourage project proponents to contact us at the earliest possible time to allow us to assess the specific circumstances under which the data were collected (e.g., time of year, drought/rainfall conditions, size and location of the site, etc.) and to discuss whether additional surveys would be appropriate. Spatial information can be provided in pdf and GIS formats."

At the time of this writing, the Palm Springs office of the USFWS would be the appropriate office to contact [(760) 322-2070] to determine if another survey should be performed prior to ground disturbance, if it does not occur before March 2022.

Regardless of survey results and conclusions given herein, tortoises are protected by applicable State and federal laws, including the California Endangered Species Act and Federal Endangered Species Act, respectively. As such, if a tortoise is found onsite at the time of construction, all activities likely to affect that animal(s) should cease and the County contacted to determine appropriate steps.

Importantly, nothing given in this report, including recommended mitigation measures, is intended to authorize the incidental take of Agassiz's desert tortoises during site development. Such authorization must come from the appropriate regulatory agencies, including CDFW (i.e., authorization under section 2081 of the Fish and Game Code) and USFWS [i.e., authorization under section 10(a)(1)(B) of the Federal Endangered Species Act].

### 4.2. Impacts to Other Biological Resources and Proposed Mitigation

### 4.2.1. Other Special Status Species

Based on the field survey and habitat assessment, it has been concluded that none of the following special status species reported from the region will be adversely affected by site development: Amargosa beardtongue, Gilman's cymopterus, Ripley's aliciella, three-awned grama, Utah beardtongue, burrowing owl, and banded Gila monster. As such, no adverse impacts have been identified and no mitigation measures are recommended.

Those species either identified during the current survey or for which suitable habitats are present include Merlin, American badger, forked buckwheat, Goodding's phacelia, and Preuss' milk-vetch. Both Merlin and American badger are similar in that they are highly mobile, may continue to utilize adjacent areas, and will therefore not likely be affected by site development.



The assessment indicates that there is some potential for the three plant species to be present. Their presence could be ascertained between late April and mid-May. However, the owner indicated that new development would only occur in areas already bladed and in existing greenhouses, so the need to perform additional surveys may not be warranted if the saltbush scrub community is not developed.

### 4.2.1.a. Protected Plants

This focused survey and general resource assessment should be considered to provide necessary baseline data to minimize impacts to protected mesquite trees and groves. Herein, we have emphasized the importance of the mesquite thickets and bosques, which have so far been protected, even during recent blading. Hopefully, this report will serve as an indicator of the special nature of these resources and the current landowner, like the previous one(s), will continue to protect the mesquite hummocks. The County will need to determine if there are prohibitions against removing the mesquite hummocks and to determine if individual trees warrant protection.

#### 4.2.1.b. Bird Nests

Sections 3503, 3503.5, and 3513 of the California Fish and Game Code prohibit the taking of all birds and their active nests, including raptors and other migratory nongame birds (As listed under the Migratory Bird Treaty Act). Typically, CDFW requires that vegetation not be removed from a project site between March 15 and September 15 to avoid impacts to nesting birds. If it is necessary to commence project construction between March 15 and September 15, a qualified biologist should survey all shrubs and structures within the project site for nesting birds, prior to project activities (including construction and/or site preparation).

Surveys should be conducted at the appropriate time of day during the breeding season, and surveys would end no more than three days prior to clearing. CDFW is typically notified in writing prior to the start of the surveys. Documentation of surveys and findings should be submitted to the CDFW within ten days of the last survey. If no nesting birds were observed project activities may begin. If an active bird nest is located, the plant in which it occurs should be left in place until the birds leave the nest. No construction is allowed near active bird nests of threatened or endangered species.



## 5.0 LITERATURE REFERENCES

- Beauchamp, R. 1986. *A Flora of San Diego County, California.* Sweetwater River Press. National City, CA.
- California Department of Fish and Game (CDFG). 2009. Protocols for surveying and evaluating impacts to special status native plant populations and natural communities. California Natural Resources Agency, Department of Fish and Game, 24 November 2009. Sacramento, CA.
- California Department of Fish and Game. 2010. List of Vegetation Alliances and Associations. Vegetation Classification and Mapping Program, California Department of Fish and Game. Sacramento, CA. September 2010.
- California Department of Fish and Game. 2012. Staff report on burrowing owl mitigation. 7 March 2012 memo replacing 1995 staff report, State of California Natural resources Agency, Department of Fish and Game. Sacramento, CA.
- California Department of Fish and Wildlife (CDFW), Natural Diversity Database. 2020a. Special Animals. Animal species list published and updated by State of California, The Resources Agency, Department of Fish and Wildlife, Biogeographic Data Branch, California Natural Diversity Data Base. Dated July 2020. Sacramento, CA.
- California Department of Fish and Wildlife. 2020b. California Sensitive Natural Communities. Dated September 9, 2020. Available at: https://www.dropbox.com/s/cm2dvn1q378ah96/California%20Sensitive%20Natural%20Com munities%20Sept%202020.pdf?dl=0. 63 pp.
- California Department of Fish and Wildlife. 2021a. Electronic database of rare plant and animal species reported to The State Resources Agency, Natural Heritage Division, California Natural Diversity Data Base. Updated monthly. Sacramento, CA.
- California Department of Fish and Wildlife, Natural Diversity Database. 2021b. Special Vascular Plants, Bryophytes, and Lichens List. Plant species list published and updated quarterly by State of California, The Resources Agency, Department of Fish and Wildlife, Biogeographic Data Branch, California Natural Diversity Data Base. Dated January 2020. Sacramento, CA.
- California Native Plant Society (CNPS). 2021. Inventory of Rare and Endangered Plants (online edition, v8-02). California Native Plant Society. Sacramento, CA.



- County of San Bernardino. 2004. Standards for assessing impacts to the desert tortoise and Mohave ground squirrel. Unpublished protocol provided by the County of San Bernardino, Public and Support Services Group, Land Use Services Department, Advance Planning Division, dated December 2004. San Bernardino, CA.
- County of San Bernardino. 2006. Report protocol for biological assessment reports. Unpublished protocol provided by the County of San Bernardino, Public and Support Services Group, Land Use Services Department, Advance Planning Division, dated 31 August 2006. San Bernardino, CA.
- eBird. 2021. An online database of bird distribution and abundance [web application]. Version 2. eBird, Ithaca, New York. Available: http://www.ebird.org
- Edwards, T., A. Karl, M. Vaughn, P. Rosen, C. Melendez Torres, and R. Murphy. 2016. The desert tortoise trichotomy: Mexico hosts a third, new sister-species of tortoise in the *Gopherus morafkai-G. agassizii* group. ZooKeys 563: 131-158.
- Hickman, J. Editor. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press. Berkeley, CA.
- Holland, R. 1986. Preliminary descriptions of the terrestrial natural communities of California. California Department of Fish and Game. Sacramento, CA.
- Ingles, L. 1965. *Mammals of the Pacific States: California, Oregon, Washington.* Stanford University Press. Stanford, CA.
- Jaeger, E. 1969. *Desert Wild Flowers.* Stanford University Press. Stanford, CA.
- Munz, P. 1974. A Flora of Southern California. University of California Press. Berkeley, CA.
- Murphy, R. W., K. H. Berry, T. Edwards, A. E. Leviton, A. Lathrop, and J. D. Riedle. 2011. The dazed and confused identity of Agassiz's desert tortoise, *Gopherus agassizii* (Testudines, Testudinidae) with the description of a new species, and its consequences for conservation. ZooKeys 113: 39–71.
- Sawyer, J. and T. Keeler-Wolf. 1995. *A Manual of California Vegetation.* California Native Plant Society. Sacramento, CA.
- Sibley, D. 2000. National Audubon Society, the Sibley Guide to Birds. First Edition. New York, N.Y.



- Stebbins, R. 2003. *A Field Guide to Western Reptiles and Amphibians.* Third Edition. The Peterson Field Guide Series. Houghton Mifflin Company. New York, NY.
- U.S. Bureau of Land Management (BLM). 2005. Final Environmental Impact Report and Statement for the West Mojave Plan, a Habitat Conservation Plan and California Desert Conservation Area Plan Amendment. Moreno Valley, CA.
- U.S. Bureau of Land Management. 2006. Record of Decision: West Mojave Plan, Amendment to the California Desert Conservation Area Plan, dated March 2006. Sacramento, CA.
- U.S. Bureau of Land Management. 2016. Record of Decision for the Land Use Plan Amendment to the California Desert Conservation Plan, Bishop Resource Management Plan, and Bakersfield Resource Management Plan for the Desert Renewable Energy Conservation Plan (DRECP). Dated September 2016. Sacramento, CA.
- U.S. Fish and Wildlife Service (USFWS). 1992. Field survey protocol for any nonfederal action that may occur within the range of the desert tortoise. Ventura, CA.
- U.S. Fish and Wildlife Service. 1994a. Endangered and threatened wildlife and plants; determination of critical habitat for the Mojave population of the desert tortoise. Federal Register 55(26):5820-5866. Washington, D.C.
- U.S. Fish and Wildlife Service. 1994b. Desert Tortoise (Mojave Population) Recovery Plan. U.S. Fish and Wildlife Service, Portland, OR. Pp. 73, plus appendices.
- U.S. Fish and Wildlife Service. 2008. Birds of Conservation Concern. Division of Migratory Bird Management. Arlington, VA.
- U.S. Fish and Wildlife Service. 2009. Desert Tortoise (Mojave Population) Field Manual: (*Gopherus agassizii*). Region 8, Sacramento, California.
- U.S. Fish and Wildlife Service. 2010. Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*). USFWS Desert Tortoise Recovery Office. Reno, NV.
- U.S. Fish and Wildlife Service. 2019. Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*). USFWS Desert Tortoise Recovery Office. Reno, NV.



Zeiner, D.C., W.F. Laudenslayer, Jr., K.E. Mayer, and M. White (Editors). 1990. California's Wildlife. Volume III. Mammals. California Statewide Wildlife Habitat Relationships System. State of California. The Resources Agency. Department of Fish and Game. Sacramento, California.



#### APPENDIX A. PLANT SPECIES DETECTED

The following plant species were identified on-site during the focused floral inventory described in this report. Protected plant species are highlighted in red and signified by "(PPS)" following the common names. The two species found only in adjacent areas are signified by "+."

#### **GNETAE**

# Ephedraceae

Ephedra californica Ephedra nevadensis

#### ANGIOSPERMAE: DICOTYLEDONES

#### Asteraceae

Ambrosia dumosa +*Gutierrezia sarothrae* Heterotheca grandiflora Pectis papposa

#### **Brassicaceae**

Descurainia pinnata \*Descurainia sophia Lepidium fremontii \*Sisymbrium altissimum \*Sisymbrium irio Stanleya pinnata

#### Chenopodiaceae

Atriplex canescens Atriplex confertifolia Atriplex polycarpa \*Halogeton glomeratus Krascheninnikovia lanata \*Salsola tragus

Fabaceae Prosopis glandulosa

Lamiaceae \*Marrubium vulgare

Malvaceae Sphaeralcea ambigua

#### **GNETAE**

Joint-fir family Desert tea Nevada joint-fir

#### DICOT FLOWERING PLANTS

#### **Sunflower family**

Burrobush Matchweed Telegraph weed Chinch weed

#### **Mustard family**

Tansy Flixweed Bush peppergrass Tumble mustard London rocket Prince's plume

#### **Goosefoot family**

Four-winged saltbush Spiny saltbush Allscale Saltlover Winterfat Russian thistle

Pea family Honey mesquite (PPS)

Mint family Horehound

**Mallow family** Desert mallow



Polygonaceae Chorizanthe rigida Eriogonum deflexum Eriogonum trichopes

Viscaceae Phorodendron californicum

Zygophyllaceae Larrea tridentata **Buckwheat family** Rigid spineflower Desert skeleton weed Little trumpet

Mistletoe family Mesquite mistletoe

Caltrop family Creosote bush

ANGIOSPERMAE: MONOCOTYLEDONES

Poaceae \*Schismus sp. MONOCOT FLOWERING PLANTS

Grass family Split-grass

\* - indicates a non-native (introduced) species.

c.f. - compares favorably to a given species when the actual species is unknown.

Some species may not have been detected because of the seasonal nature of their occurrence. Common names are taken from Beauchamp (1986), Hickman (1993), Jaeger (1969), and Munz (1974).



#### APPENDIX B. ANIMAL SPECIES DETECTED

The following animal species were detected during the general biological inventory described in this report. Special status animal species are highlighted in red and signified by "(SSA)" following the common names. Those only found in adjacent areas are signified by "+."

#### REPTILIA

Iguanidae

#### REPTILES

Iguanids Common side-blotched lizard

AVES

Accipitridae Buteo jamaicensis

Uta stansburiana

Falconidae Falco columbarius

Columbidae Streptopelia decaocto Zenaida macroura

Tyrannidae Sayornis saya

Alaudidae Eremophila alpestris

Hirundinidae Stelgidopteryx serripennis

Corvidae Corvus corax

Remizidae Auriparus flavipes

Muscicapidae Sialia currucoides

Mimidae Mimus polyglottos BIRDS

Hawks, eagles, harriers Red-tailed hawk

Falcons Merlin (SSA)

**Pigeons and doves** Eurasian collared-dove Mourning dove

**Tyrant flycatchers** Say's phoebe

Larks Horned lark

**Swallows** Northern rough-winged swallow

**Crows and jays** Common raven

Verdins Verdin

Thrushes and allies Mountain bluebird

**Mockingbirds and thrashers** Northern mockingbird



Emberizidae Spizella breweri Zonotrichia leucophrys

Fringillidae Carpodacus mexicanus

Passeridae Passer domesticus

MAMMALIA

Leporidae Lepus californicus Sylvilagus audubonii

Sciuridae Ammospermophilus leucurus

Geomyidae Thomomys bottae

Heteromyidae Dipodomys sp.

Canidae Canis latrans

Mustelidae Taxidea taxus

Felidae Lynx rufus Sparrows, warblers, tanagers Brewer's sparrow White-crowned sparrow

Finches House finch

Weavers House sparrow

#### MAMMALS

Hares and rabbits Black-tailed hare Audubon cottontail

Squirrels Antelope ground squirrel

**Pocket** gophers Botta pocket gopher

**Pocket mice** Kangaroo rat

Foxes, wolves and coyotes Coyote

Weasels and skunks American badger (SSA)

Cats Bobcat

Nomenclature follows Stebbins, A Field Guide to Western Reptiles and Amphibians (2003), third edition; Sibley, National Audubon Society, the Sibley Guide to Birds (2000), first edition; and Ingles, Mammals of the Pacific States (1965), second edition.



# APPENDIX C. FIELD DATA SHEETS

The USFWS recommends that consultants include copies of the data collected in the field from which the results and conclusions given in their reports are derived. As such, below and on the following page are copies of the data sheets completed by Ed LaRue on 9 March 2021.

Si Ci Gi Gi Sta En	te description: bunty: ansect #: 2 PS Start-point: (eesting, non PS End-point: ant Temp: d Temp:	131221 Sun 	rey biologist(s): (opplot name and s st: Wot Sternandow (Type of survey): S200 (2600 (2600 (360 (melan)) (1- 18	EQ (A) Teach Loca Constant (Anton) Teach Loca Constant to be at FA) Constant to be at FA) mph, 10	tion: <u>C B 680</u> <u>C B 680</u> <u>C B 680</u> <u>C B 680</u> <u>C B 680</u> <u>C B 680</u> <u>S Start time:</u> <u>End time:</u> <u>to 1 5 8 C</u>	/36570 dog TRS: mag calum) NEW (allo Debos a (bBO) a (bBO) a audry	WAD 63) tets m/pm m/pm
			Live To	rtoises		1. 1	
Detection number	GPS Eastin	location g Northing	Time	Torto (in burrow: all of burrow oper	ise location tortoise beneath plane of ing, or not in burrow)	Approx MCL >160-mm? (Yes, No or Unknown)	Existing tag # and color, if present
1					100		
2				A			
3	1. A			$\square$			
4					10°		
5			A.	1. J.		1.2.4	
6			1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	5			
7		ئەر	1 al hat				
8.	1		A AND A			0.1	
		Tortoise	Sign (burrows,	scats, card	asses, etc)		
Detection number	GPS Easting	location Northing	Type of (burrows, scals, c	sign arcass, etc)	Desc	ription and com	ments
1		1996 - 1997 -	i tu na s				
2	( Ho	and in		6		8	- 10 C
3			1	• )			
4				/			
5		· · ·	1				
6			1				
7							



*zma	twe													
Proge	3						2021 Fiel	d Seeson				Pag	e of_	
0685/5	55	In				DBIVE	2021 FIC	MILE	S FU	ELD TIME		SURVEY	DRS	
3 stofex	245	Leste	HAM Fer	E D	ATE	O E	ROM	208	BEG	IN EN	DE	1 LaRe	re 1	
8693/50	2	2	108	31	1000 00	500-7 1	1930	XZ	080	2 16	30	0		
5101/5	23	-	WEA	THER C	ONDITIO	NS (Start/E		U	TM (NAL	0 83) (cir	cle start	ing corn	er)	
5770/0-	195	TEMP	: 65°F	WIND X:	14 1 18	NOVER	1000.100	<sup>™</sup> NE→	NN NN	0 D	$SE \rightarrow$	SW-	20	
816/20	×¢	TEMP	58 PF	WIND X:	11 + 14	NSE(W) C	LOUD: 10 9	101	0 61	8680	4000	06	80	
as Ka	*						ANNUAL	PLANTS	10 139	65000	490	HERP	MAM	
841/52	20		PERENI	NIAL PL	ANTS	6120	ANNUAL	TLANTS	1 (6)	VODA 1	n n	SELD	VOI	2
862/5	100	Lucion	9 924	2-		Smith				HOSP	- 01	00-4	AUD	9
503/52	n	Alca	1			Charlie				EICD			3144	
946/521	14	Kielen	1			G. Tru				NRWS			Side	
RSS/52	3	460	1	-		Prinef				HOLD			200	1
476/52	13	le Tri	4			Sch 5				West			ARS	
002/52	91	leffre	-			Deso	-			NOM			1579	
866/51	3	Senton	2	1 .		Hotth				MBB1			AMBA	
793/50		antou	/			Desin				SAPH	P	hotograp	hs	1
819/40	all	Hr21				Eimec				VERD	1	4W2	SE	1
17/487	F	PhCal				SISTY				BRSP	2	542	ME	1
17/00	5	mbRin				Periop				HOFI	(Pist)	8698	4955	1
	E	no fala	1			port				more	5	NES	a	The I
	n	I.hPt								Min	6	8183/	5037-	SE
_	Ē	urtsar								PTHA				1
	11	Soci"											1	1
	Г	-			OB	SERVAB	LE HUM	AN DIS	TURBAN	NCES			A-BA	- N
		T#	East	North	OHV	Road	Dog	Dump	SGun	Rifle	Target	1	I The state of the	-
			8680	5200	Z		5						860	UR60
		2	8690	4800	11		5						8753/	The last
15		3	8700	5200	11		5						10.000/	-pro
105	Г	4	8710	4800	11		6							-
21 ~		5	8720	5200	12		6		1				+	-
		6	8730	4800	2		5	Hume !!	88021	5.20	PROH	A Lament	11 20	1.
	-	7	8740	5200	2		12	8952 K	11 0019	672	Dais	15117	au	pan
		8	8752	4800	12		13	9619/0	at or	1100	Paulo	15166	+	-
		9	8760	5200	3		17	Vin	100 300	12010	010	1514	+	-
	T	0	8770	4801	4	+	in				0000	1 5109	+	_
		1	8780	5200	6+	1.1	019				3160	15103	-	_
	1:	2	8940	5190	416	1.1	4.7				040	ersizB		_
	(	3	878	5100	12	11	7+1				BATT	5145		
	1	4	9010	6170	10	11.	13	1			895	15162		
	-1	5	8780	5110	17	1	11	-		Aumole	- 382	24BB1	084	ANA
	1	-	9010	5160	+ +		13				362	1/ 4904		414
ł	- 19	-	010	2150	6	11	23			Kronale	905/	1940	9875/	Lat.
ŀ		12	6100	2140	11	14	2			8970/	4981	Rot	7500	1100
H	-	D	5720	5130	4	1.	4			9011/	5014	9007/0	17 0.	50 (1
· ·	_	7	8780	2190	3	3	B			gnel	1965	PTV -	201,40	228
Ľ	att	bush i	andy	8922	5215	89241	5097	2792	Venet	277	Vin			
-			7	/		1	61	10.00	1.500	10.00	1700			
Тор	ogra	aphy a	nd soils								20			
										;				

JOB	JOB #/NAME DATE			DRIVE TIME MIL				FIELD TIM	E	SURVEYORS		
			10		ROM		B	<u>EGIN</u>	ND			
TEMD	WEAT	HER CON	DITIONS	TIONS (Start/End) UTM				AD 83) (ci	starting corner) → SW→			
F WIND X: T			IN	SEW CI	.00D; %	° NE→	$NE \rightarrow NW \rightarrow SE$					
TEMP: °F WIND X: ↑				SEW CI	OUD: 9	6			4080	80		
	PERENNL	AL PLAN	TS	<b></b>	ANNUAL	PLANTS	<u> </u>	BI	1 400c	HERP	MAM	
Geh Ne 1	18900	14680	T T	Rector	Anticat		Í	meda	158m	5110	100ALM	
-1 11 -1		19900						C	1 and			
								RATA				
						-	-					
											L	
	+	+	+								<u> </u>	
			-									
halt	40	615/1	1896	Hammed	· 9024/	4810	102/0	RIL GOBS	14797PI	hotograp	hs	
Swelet	8553	URB3	* 90 (1/	LIBIR	. wait	pione,	10 Dr	1	17	SEA	NW	
2 ngus	101.2	100	1011	100,					Arrande	8777/	4680	
								(3)	SAMB	8651/	4921	
									Sage	8501/	5225	
	-											
								INCERC				
74	Fast	North	OBS.	ERVAB	LE HUM	AN DIS	TURB.	ANCES	Torget	1		
70	Galo	(LEGO		Road	bog	Dump	SGui	Kine	Target			
21	0770	4270	1 !	-	8			-				
22	9210	4860			6	•						
23	8110	4050	1		2							
24	9010	4840	3		2							
25	3720	4035	2		4							
26	9010	4820	2		3							
22	8000	4810	1		2							
			1.000		0100	11.000	210	-	64.4	0.0	Coor	
1005	<b>G080</b>	860	4710	1000	8650	4000	2190	MOCI	5220	6600	4000	
205		-	4740	2000	0000	-+	++	Jeon	5000		$\rightarrow$	
3005			4710	300 W	8540		++	10m	5260		+(-	
202			4600	40w	6520		++	- teri	2510	+		
202			TOD	Sun	0,50	-1		XOM	2210			
ODE	910	527	4940									
LOF	9140	5220	4985									
SOF	9170	5220	5091					1				
Der	9200	5220	5084									
	6230	5212	5120									
SOPE												

Г



## APPENDIX D. PHOTOGRAPHIC EXHIBITS

Locations of the seven photographic exhibits on the next four pages are depicted on Figure 5.





#### EXHIBIT 1.

## VIEW FROM THE NORTHWEST CORNER OF THE PARCEL, FACING SOUTHEAST (SEE FIGURE 5 FOR LOCATIONS AND DIRECTIONS OF PHOTOGRAPHS).



#### EXHIBIT 2.

#### VIEW FROM THE SOUTHWEST CORNER OF THE PARCEL, FACING NORTHEAST.





EXHIBIT 3. VIEW FROM THE NORTHEAST CORNER OF THE PARCEL, FACING SOUTHEAST.



EXHIBIT 4. VIEW FROM THE NORTHWEST CORNER OF THE BLADED AREA, FACING SOUTHEAST.





#### EXHIBIT 5.

# VIEW FROM THE SOUTHEAST CORNER OF THE PARCEL, FACING NORTHWEST INTO THE FENCED FEEDLOT.



#### EXHIBIT 6.

ONE OF THE DIAGNOSTIC BADGER DIGS, WITH CHARACTERISTIC CLAW MARKS INSIDE.







MOBILE 626.626.6186 OFFICE 760.428.8068

INFO@GEÓDEENVIRONMENTAL.COM WWW.GEÓDEENVIRONMENTAL.COM