Appendix C

Desert Tortoise Survey Report

Rincon Consultants, Inc.
8825 Aero Drive, Suite 120
San Diego, California 92123
760-918-9444

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Rincon Project No: 23-15079
Kimley-Horn Project No: 099997004

Jessie Fan, Project Manager
Kimley-Horn and Associates, Inc.
660 South Figueroa Street, Suite 2050
Los Angeles, California 90017
Via email: Jessie.Fan@kimley-horn.com

Subject: Desert Tortoise Survey Report for RPCA Sunrise Street Project
San Bernardino County, California

Dear Ms. Fan:

Rincon Consultants, Incorporated (Rincon) conducted a focused survey for Mojave Desert tortoise (*Gopherus agassizii*) for the RPCA Sunrise Street Project (project) at the request of Kimley-Horn and Associates, Inc. (Kimley-Horn) and RPCA Solar 13, LLC (Applicant). The study area included an approximately 80-acre project site and a 100-foot buffer along 20 Mule Team Road in unincorporated San Bernardino County east of Boron, California (Figure 1, Figure 2). Rincon understands a solar project is planned for a portion of the project site. The desert tortoise focused survey was conducted to ensure proper analysis of potential impacts to the species from project activities. The report herein describes the results of the focused desert tortoise survey.

Desert Tortoise

Status and Natural History

Desert tortoises reach 8 to 15 inches in length and 4 to 6 inches in shell height. Hatchlings emerge from eggs at about 2 inches in length. Adults have a domed carapace and relatively flat, lower shell. Their shells are high-domed and greenish-tan to dark brown in color. Adult desert tortoises weigh 8 to 15 pounds. The forelimbs have heavy, claw-like scales and are flattened for digging (Ernst et al. 1994).

Desert tortoises occupy a variety of desert habitats from flats and slopes dominated by creosote bush scrub at lower elevations to rocky slopes and juniper woodlands at higher elevations (Germano et al. 1994). Throughout most of the Mojave Desert, tortoises are most often found on gently sloping terrain with sandy-gravel soils and where there is sparse cover of low-growing shrubs, with sufficient grasses and forbs for foraging (United States Fish and Wildlife Service [USFWS] 1994).

Desert tortoises are burrowing reptiles and spend much of their time underground. Peak activity is in the relatively moderate temperatures of the spring and fall when mating occurs (Rostal et al. 1994). They are long-lived and require 13 to 20 years to reach sexual maturity, in addition to having low reproductive rates.

Home ranges can vary greatly between years and locations. Typical home ranges for males extend 80 hectares (0.3 square mile) or more with females occupying half that area or less (Burge 1977, Berry 1986). Desert tortoises occur from below sea level and have been observed up to 7,300 feet.

The desert tortoise was listed as threatened under the California Endangered Species Act in 1989 and under the federal Endangered Species Act in 1980. Threats to desert tortoise include habitat loss, habitat degradation, disease, and predation. Loss of suitable desert habitat to urban expansion is the primary means of habitat loss. Off-highway vehicle use has resulted in degradation of habitat. The most common disease affecting desert tortoise is Upper Respiratory Tract Disease likely contracted from captive tortoises released into the wild. In addition, increased predation by ravens, following human expansion, has severely impacted the species.

Historical and Known Occurrences

Prior to the survey, a review of the Sunrise Road Solar Project Biological Resources Assessment (Kleinfelder 2023) prepared for the project site and other available literature was conducted to determine whether desert tortoise have been previously reported within the study area and the surrounding USGS 7.5-minute topographic quadrangles: *Boron, Leuhman Ridge, Saddleback Mountain, Kramer Junction, Red Buttes, Jackrabbit Hill, Rogers Lake South, Rogers Lake North, North Edwards, Galileo Hill, Boron NW, and Boron NE, California*. The California Department of Fish and Wildlife (CDFW) California Natural Diversity Database (CNDDB; CDFW 2023a), and Biogeographic Information and Observation System (BIOS; CDFW 2023b) were reviewed, in addition to the *Preparing For Any Action That May Occur Within The Range Of The Mojave Desert Tortoise* (Gopherus agassizii) (USFWS 2019).

The CNDDB search provided 23 documented desert tortoise occurrences within a 12-quadrangle search around the study area (CDFW 2023a). The occurrences range from 2002 to 2020. An occurrence from 2004 covers the project site. The occurrence covers a non-specified area of approximately 1,700 square miles and ends approximately 300 feet south of the project site. The next closest occurrences are both from 2006 and were located 1.7 and 1.9 miles northwest of the project site, but are separated from the project site by State Highway (SH) 58.

The study area does not include any designated critical habitat for desert tortoise. The closest critical habitat is located 1 mile south of the study area.

Survey Methods

Rincon biologists Amy Leigh Trost and Nicholas Fager conducted a focused desert tortoise survey of the study area on October 12, 2023, from 0900 to 1630 hours. Weather during the focused survey was favorable for finding desert tortoise and included temperatures of 54 to 76 degrees Fahrenheit, winds of 3 to 4 miles per hour, and clear skies. The study area included the 80-acre project site and a 100-foot buffer. The survey adhered to the methodology described in *Preparing For Any Action That May Occur Within The Range Of The Mojave Desert Tortoise* (Gopherus agassizii) (USFWS 2019). The biologists walked line transects spaced at 10 meters (approximately 30 feet) to ensure 100 percent visibility of the suitable habitat, where accessible. Desert tortoise or their sign were mapped using ArcGIS Field Maps.

Survey Results

Project Setting and Site Conditions

The study area consists entirely of spinescale (*Atriplex spinifera*) Shrubland Alliance intermixed with Joshua tree (*Yucca brevifolia*) Woodland Aliance (Sawyer et al. 2009). Several plant species that desert tortoises forage on were observed in the study area including rattlesnake weed (*Euphorbia albomarginata*), redstem filaree (*Erodium cicutarium*), and fiddleneck (*Amsinckia tesselatta*).

Disturbance on site was minimal with some windblown trash. A travel trailer was present on site along a dirt road in the southwest portion of the project site. Trash associated with the travel trailer was restricted to the area immediately around the trailer. Elevation on site ranges from approximately 2,486 to 2,505 feet above mean sea level (msl). The study area is cut off from other areas of suitable habitat by the Burlington Northern and Santa Fe Railroad line, located approximately 300 feet south of the study area, SH-58. located approximately 0.5 mile north of the study area, and the town of Boron, located approximately 0.5 mile west of the study area. A bottleneck occurs approximately 3 miles east of the study area where the distance between SH-58 and the railroad narrows to approximately 650 feet.

Pre-Project Desert Tortoise Survey

No desert tortoises and no sign of tortoise (tracks, scat) were observed in the study area during the focused survey. Four burrows were documented during the survey, one of which was the approximate size and shape for a coyote and the other three were the appropriate size and shape for desert kit fox (Figure 2). Site photographs are provided in Attachment 1.

Species observed during the survey included black-tailed jackrabbit (*Lepus californicus*), deer mouse (*Peromyscus maniculatus*), horned lark (*Eremophila alpestris*), rock wren (*Salpinctes obsoletus*), turkey vulture (*Cathartes aura*), Mojave green rattlesnake (*Crotalus scutulatus*), and western whiptail (*Aspidoscelis tigris*). No federally or State listed species were observed during the desert tortoise survey.

Summary and Conclusions

The project site contains suitable habitat for desert tortoise but no desert tortoise or their sign were observed during the survey. Four burrows were discovered during the survey; however, each of the burrows was the appropriate size and shape for canid species. Given the physical barriers to desert tortoise surrounding the study area (i.e., railroad, SH-58, town of Boron, and bottleneck) the project site is generally cut off from desert tortoise populations in the area. However, tortoise could still utilize bridges and culverts under SH-58 to access the project site. With recent recorded occurrences of desert tortoise near the site and proximity to desert tortoise critical habitat, the project site has a low to moderate potential to support desert tortoise. Specific recommended mitigation measures (MM) for desert tortoise are outlined below:

BIO-1 Biological Monitoring

Prior to the issuance of grading or building permits, the project proponent should retain a Qualified Biologist, with experience and expertise in desert species to oversee compliance with protection measures for all listed and other special-status species that may occur on site. If State or Federally listed species or other special-status biological resources are identified in the project site during protocol and/or preconstruction surveys, then the Qualified Biologist may need to be approved by USFWS and/or CDFW as an authorized biologist for handling listed species. The Qualified Biologist or other Qualified Biological Monitors should be on the project site during initial grading, ground disturbance and vegetation removal activities to monitor construction activity that could directly or indirectly impact special-status biological resources. The Qualified Biologist should have the authority to halt all activities that are in violation of the special-status species protection measures. Work should proceed only after potential hazards to special-status species are removed and the species is no longer at risk. The Qualified Biologist should have in her/his possession a copy of all the compliance measures while work is being conducted on the project site. A report of biological monitoring activities

and project compliance should be prepared at the end of the construction period and submitted to the County for documentation.

BIO-2 Construction Worker Environmental Awareness Training and Education Program

Prior to any activity on site and for the duration of construction activities, all personnel at the project site (including laydown areas and/or transmission routes) should attend a Worker Environmental Awareness Program (WEAP) developed and presented by the Qualified Biologist. New personnel should receive WEAP training on the first day of work and prior to commencing work on the site. Any employee responsible for the operation and maintenance (O&M) of the project facilities should also attend WEAP training.

- The program should include information on the life history of special-status species with potential to occur on the site, as well as other wildlife and plant species that may be encountered during construction activities.
- The program should also discuss the legal protection status of each species, the definition of "take" under the Federal Endangered Species Act and California Endangered Species Act, measures the project proponent is implementing to protect the species, reporting requirements, specific measures that each worker should employ to avoid take of wildlife species, and penalties for violation of the Federal Endangered Species Act or California Endangered Species Act.
- The program should provide information on how and where to bring injured wildlife for treatment in the case that any species are injured on the project site.
- An acknowledgement form signed by each worker indicating that WEAP training has been completed should be kept on record.
- A sticker should be placed on hard hats indicating that the worker has completed the WEAP training. Construction workers should not be permitted to operate equipment within the construction areas unless they have attended the WEAP training and are wearing hard hats with the required sticker. A copy of the training transcript and/or training video, as well as a list of the names of all personnel who attended the WEAP training and copies of the signed acknowledgement forms should be submitted to the San Bernardino County Planning and Community Development Department upon the County's request.

BIO-3 Pre-construction Surveys

A pre-construction desert tortoise presence/absence survey should be conducted by a Qualified Biologist no more than 30 days in advance of project development in accordance with USFWS survey protocols (USFWS 2020). A discussion of survey results, including negative findings, should be provided to the County upon completion of the survey. If desert tortoise are not documented during the survey, no additional measures related to desert tortoise avoidance and minimization are recommended. If desert tortoise are documented inhabiting the project site during presence/absence surveys, mitigation measures BIO-1 and BIO-4 should be implemented.

BIO-4 Additional Measures for Desert Tortoise

If pre-construction desert tortoise surveys document that the species is inhabiting the project site, the following measures are recommended to reduce impacts to less than significant. Implementation of any measures that would result in the "take" of desert tortoise cannot be undertaken without formal authorization from CDFW and USFWS.

- Develop a plan for desert tortoise translocation and monitoring prior to project construction in accordance with USFWS guidelines (USFWS 1994, 2020, 2024). The plan should provide the framework for implementing, but not limited to, the following measures, or similar measures deemed sufficient and approved during agency consultation (Note: any desert tortoise translocation plan must be reviewed and approved by CDFW and USFWS).
- If a tortoise-proof exclusion fence is practicable, a fence should be installed around all non-linear construction areas prior to the initiation of ground disturbing activities, in coordination with a Qualified Biologist. The fence should be constructed of 0.5-inch mesh hardware cloth and extend 18 inches above ground and 12 inches below ground. Where burial of the fence is not possible, the lower 12 inches should be folded outward against the ground and fastened to the ground to prevent desert tortoise entry. The fence should be supported sufficiently to maintain its integrity, be checked at least monthly during construction and operations, and maintained when necessary by the project proponent to ensure its integrity. Provisions should be made for closing off the fence at the point of vehicle entry. Common raven (*Corvus corax*) perching deterrents should be installed as part of the fence construction.
- After fence installation, a Qualified Biologist should conduct a clearance survey in accordance with USFWS protocols for desert tortoise within the fenced construction site (USFWS 2020). A Qualified Biologist should have the appropriate education and experience to accomplish biological monitoring and mitigation tasks and be approved by the CDFW and the USFWS. Two surveys, with transects spaced at 5 meters, without finding any tortoises or new tortoise sign should occur prior to declaring the site clear of tortoises.
- All burrows that could provide shelter for a desert tortoise should be hand-excavated prior to ground-disturbing activities.
- A Qualified Biologist should remain on-site until all vegetation is cleared and, at a minimum, conduct site and fence inspections on a regular basis throughout construction in order to facilitate project compliance with mitigation measures.
- A Qualified Biologist should remain on-call throughout fencing and grading activities in the event a desert tortoise enters the project site.
- Compensatory habitat mitigation should be secured in the form of a conservation easement or purchase of mitigation bank credits to compensate for the loss of occupied desert tortoise habitat at a minimum ratio of 1:1, with habitat of equal or greater value.

Thank you for your consideration and for this opportunity to support your project. If you have any questions regarding this submission or any of the information provided herein, please contact Andrea Maben at 442-325-7967or amaben@rinconconsultants.com, or Angie Harbin-Ireland at 858-243-1505 or aharbin@rinconconsultants.com.

Sincerely,
Rincon Consultants, Inc.

Amy Leigh Trost
Biologist

Andrea Maben
Biologist/Project Manager

Angie Harbin-Ireland
Director of Natural Resources

Attachments

Figure 1 Regional Location

Figure 2 Study Area Location

Attachment 1 Site Photographs

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Figure 1 Regional Location

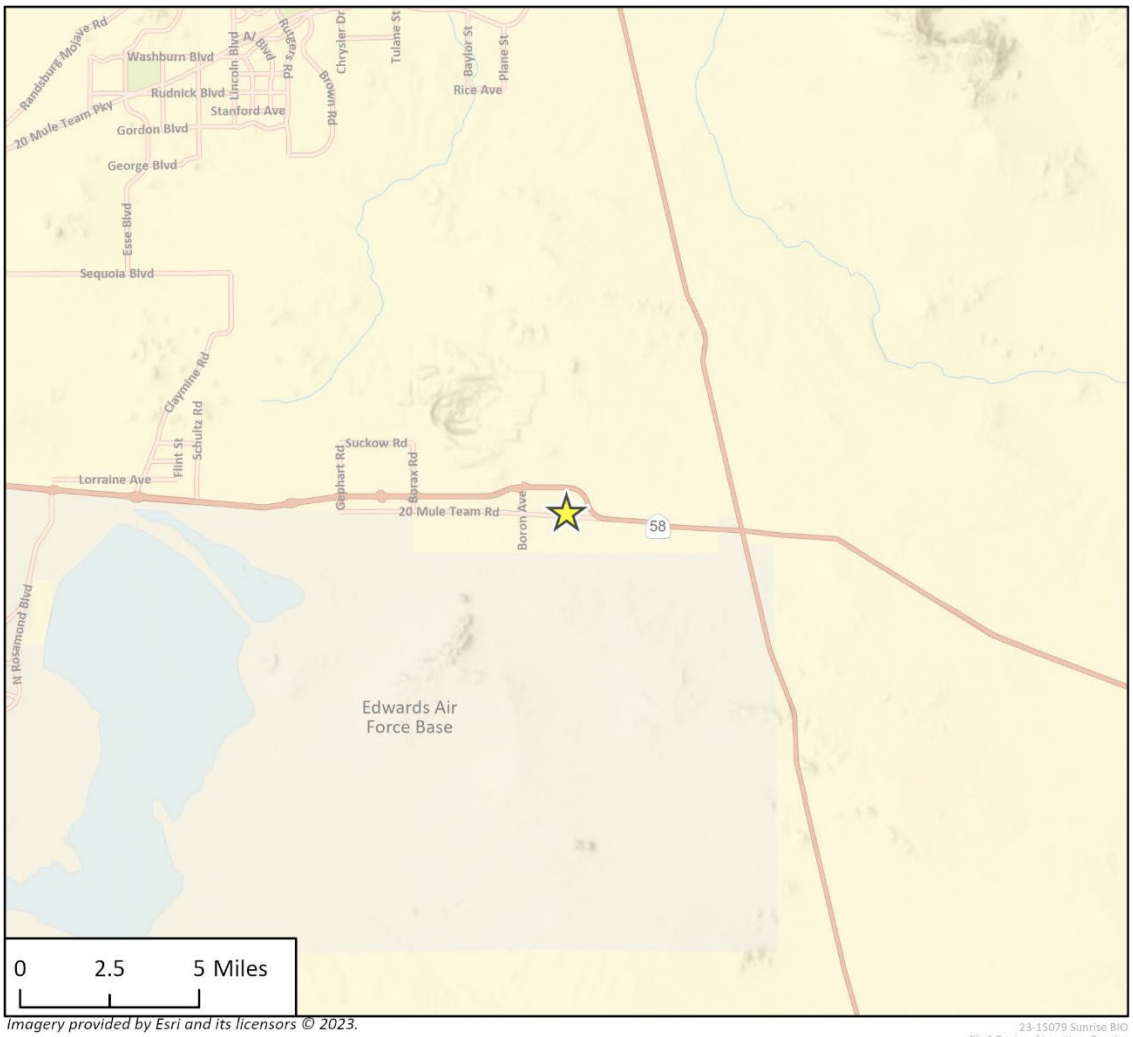
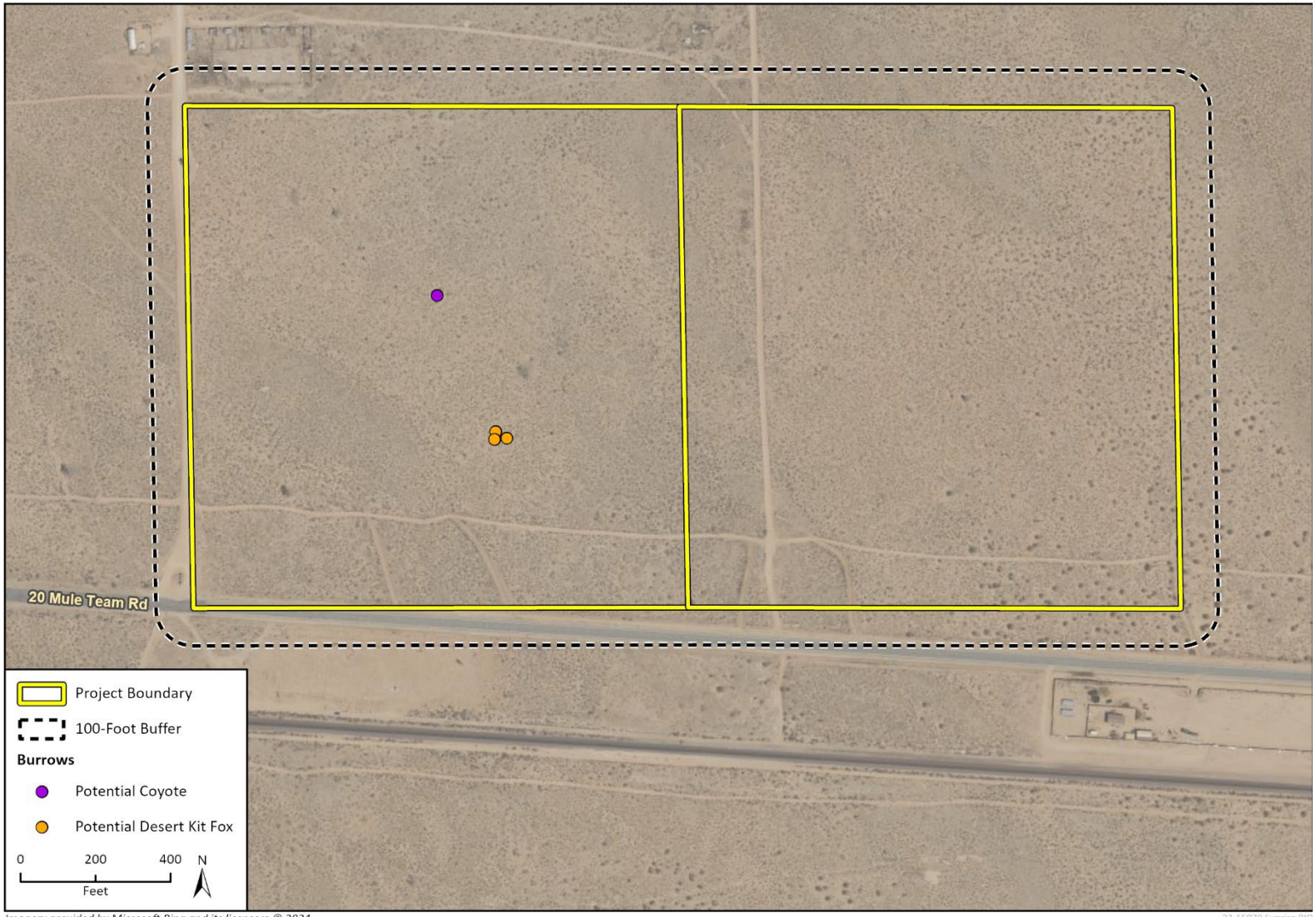


Figure 2 Study Area Location



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23-15079 Sunrise BIO
Fig 2 Study Area_Sunrise

Attachment 1

Site Photographs

Photograph 1. View of project site from southwest corner, facing northeast.

Photograph 2. View of project site from northwest corner, facing southeast.

Photograph 3. View of project site from northeast corner, facing southwest.

Photograph 4. View of project site from southeast corner, facing northwest.

Photograph 5. View of potential coyote burrow, facing southwest.

Photograph 6. View of potential desert kit fox burrow, facing east.