

Desert Tortoise Preserve Committee, Inc

May 27, 2025

Scott Soares Senior Environmental Scientist Supervisor California Off-Highway Motor Vehicle Recreation Division Sacramento, California 95814 Sent via email to: <u>scott.soares@parks.ca.gov</u>

Re: California City Habitat Management Program and Monitoring Reports

Dear Scott:

Our interest in California City's Habitat Management Program (HMP) and monitoring reports is to determine if they are in compliance with the California Code of Regulations governing the Grants and Cooperative Agreements Program (Program). The purpose of the Program is to "[P]rovide for well managed OHV [off-highway vehicle] recreation by providing financial assistance to eligible agencies and organizations that develop, maintain, operate, expand, support, or contribute to well-managed, high-quality, OHV Recreation areas, roads, and trails, and to responsibly maintain the wildlife, soils, and habitat of Project Areas in a manner that will sustain long-term OHV Recreation." The HMP and monitoring reports provide the necessary information to determine if grant applicants will responsibly maintain wildlife and their habitats within areas affected by OHV use.

We received electronic copies of the HMP for California City for years 2022-2023 (the first HMP), 2023-2024 (the second HMP), and monitoring reports for 2024 from Inge Elmes, the OHV Manager. We requested the HMP and monitoring reports to determine if they adequately addressed impacts to the desert tortoise, burrowing owl and Mohave ground squirrel and their habitats resulting from OHV recreation use allowed by California City.

Background Information

California City has requested continued funding (\$666,244) to support ground operations that include maintenance and improvements to the existing OHV facilities, routes, and trails. According to California City's OHV grant applications, the OHV recreation area covers approximately 180 square miles and includes over 1,800 miles of dirt roads designated as combination use roads and trails, 33.5 miles of designated OHV trails and 4,500 acres of open riding areas.¹ The riding opportunities range from advanced to beginner using a variety of vehicle types such as all-terrain, motorcycles, dune buggies and four-wheel drive. Approximately 375,000 visitor days associated with OHV recreation occur annually. OHV trails and routes link riders to Bureau of Land Management (BLM) OHV recreation areas including the Rand Mountains, Red Mountain, Cuddeback Dry Lake, Spangler Hills, Jawbone Canyon, and Dove Springs, with the latter three being BLM-designated OHV open areas.

HMPs and Monitoring

California City submitted two HMPs that include the appropriate special status species and their habitats, including the desert tortoise, burrowing owl and Mohave ground squirrel. The current legal status of these species is as follows:

<u>Desert tortoise</u>: The desert tortoise is currently listed as Threatened and is a candidate for listing as Endangered under the California Endangered Species Act (CESA). The California Fish and Game Commission (CFGC) found that the species may warrant listing as Endangered in April 2020. In April 2024 it voted unanimously to accept the petition to change the listing status to Endangered, and it is expected to formally adopt Endangered status in June 2025. The desert tortoise has been listed as Threatened under the Federal Endangered Species Act since 1990.

<u>Burrowing owl</u>: The CFGC found that the burrowing owl may warrant listing as Endangered in October 2024, is currently a candidate for such listing, and is protected by the same take prohibitions given to the species as if it were listed under CESA.

<u>Mohave ground squirrel</u>: The Mohave ground squirrel has been listed as a Threatened species under CESA since 1984. In January 2025, the U.S. Fish and Wildlife Service

¹ <u>https://www.californiacity-ca.gov/CC/images/OHV_Department/CalCityOHVMap.png</u>

(USFWS) accepted a petition to federally-list the species and designate its critical habitat and is expected to release its 12-month status review in January 2026.

California City contracted with Sapphos Environmental for desert tortoise and burrowing owl monitoring to determine presence of these species and their sign in areas adjacent to the Desert Tortoise Research Natural Area (DTRNA) and Galileo Hill. Surveys were performed along a portion of the Randsburg-Mojave Road near the DTRNA, and the 20 Mule Team Parkway near Galileo Hill on May 23, 2024, with two biologists walking parallel on adjacent transects approximately 20 feet apart, surveying the entire project area and 50foot buffer. Survey times were approximately 2 hours for the survey along the Randsburg-Mojave Road and 1.5 hours along the 20 Mule Team Parkway.

Although there is suitable habitat on site, there were no observations of desert tortoise, burrowing owl or their sign. Inge Elmes personally inspected the areas adjacent to the DTRNA on August 7, 2024 and Galileo Hill on November 12, 2024 and reported "No visible activity or changes to report."

In California City's 2024/2025 Grants Program Application under the HMP Assessment of Regulatory Compliance, Section IV (Management/Monitoring Program by Species and Sensitive Habitat, Table 3), the response was "Desert tortoise: OHV trails near Desert Tortoise Research Natural Area may affect species crossing into legal riding areas;" "Burrowing owl: Not known if it occurs on OHV trails, routes or roads. Off route travel and illegal trespassing may impact habitat. Occurrences on Galileo Hill;" and "Mohave ground squirrel: Not known if it occurs on OHV trails, routes or roads. Off route travel and illegal trespassing may impact habitat."

The response under Table 4a was "Desert tortoise: Habitat area to be surveyed monthly. Monitoring specifically during the summer months to check for activity;" "Burrowing owl: Conduct current condition survey and document ongoing monitoring of observance location at Galileo Hill. Area to be surveyed after heavy OHV use to determine effectiveness of protection measures;" and "Mohave ground squirrel: Conduct current condition survey and document ongoing monitoring of observance areas. Habitat area to be surveyed and ongoing monitoring to check for activity." The following map shows the monitoring area along an approximately 4,000-foot segment of the 20 Mule Team Parkway (red) adjacent to Galileo Hill.



The following map shows the monitoring area on an approximately 3,000-foot segment of the Randsburg-Mojave Road (red) adjacent to the DTRNA.



Comments and Recommendations

Based on our review of the HMPs and monitoring reports, we offer the following comments and recommendations for monitoring and the HMPs:

1. Monitoring: Existing monitoring along two short segments of the Randsburg-Mojave Road and 20 Mule Team Parkway is inadequate to assess impacts of OHV recreation on the desert tortoise, burrowing owl and Mohave ground squirrel. These county-maintained roads are heavily travelled by the general public and OHVs and are not representative of the more expansive network of routes designated specifically for OHV travel and the designated Open Riding areas.

Monitoring should be expanded to adequately sample areas adjacent to the 1,800 miles of dirt roads designated as OHV trails and routes, and 4,500 acres of open riding areas. California City should provide a map to the Off-Highway Motor Vehicle Recreation (OHMVR) Division that clearly shows these routes and open riding areas. The current map does not provide this information.

Design of the Monitoring Plan: The purpose of the Program is "to responsibly maintain the wildlife, soils, and habitat of Project Areas," and we presume the monitoring is to determine whether the management of these OHV Project Areas is maintaining the wildlife, soils, and habitat. From the information provided in the HMP and results, the questions appear to be limited to whether certain wildlife species are present within specific locations in the Project Areas. Data on presence does not answer the question of whether wildlife are being responsibly maintained.

To comply with the Program, we recommend that the monitoring plan include the following criteria:

- The monitoring plan that is implemented should be designed to collect the appropriate information to be able to show whether wildlife, soils and habitat are being maintained in the Project Areas.
- The monitoring plan should be developed based on the biological needs of each species including habitat needs (e.g., feeding, breeding, shelter, avoidance of predators, movements, etc.).
- The collection of data to determine baseline conditions is needed to serve as a comparison for future monitoring results to determine whether the management that is being implemented is achieving the intended objectives in the Project Areas.
- The locations of where the data are collected should be distributed randomly throughout the Project Areas.
- Knowledge of the biology/ecology of each special status species and impacts of OHV routes and use to each species may indicate that additional modifications to the sampling design are needed (e.g., time of day, time of year, etc.).

- The sample sizes should be adequate so the results do not have large confidence limits. Both sample size and locations should be adequate so the data indicate what is occurring throughout the Project Areas.
- Monitoring results or new information about the species may require that the monitoring plan be revised.

To assist in designing and planning a monitoring plan, we suggest referring to:

- <u>https://www.biodiversityinfrastructure.org/handbook/6-evaluation-monitoring/6-1-the-general-principles/6-1-1-goals-of-monitoring-and-evaluation/</u>
- <u>https://www.biodiversityinfrastructure.org/handbook/6-evaluation-monitoring/6-2-designing-and-planning-a-monitoring-plan/</u> and
- <u>https://www.biodiversityinfrastructure.org/handbook/6-evaluation-monitoring/6-3-field-techniques-applied-to-wildlife-monitoring/</u>

<u>Desert tortoise</u>: Published literature and reports indicate that route density (Averill-Murray and Allison 2023) and frequency of use affect the presence of desert tortoises and their sign, with sign occurring farther from roads that are more frequently traveled (Nafus et al. 2013, Peaden et al. 2015, Peaden et al. 2017). Monitoring zones adjacent to designated OHV roads and trails for the desert tortoise should be expanded from 50 feet to approximately 500-600 feet based on published research on road effects (Goodlett and Goodlett 1992), home ranges and movements of desert tortoises.

The desert tortoise is more likely to use washes for movement and foraging (Jennings 1993, Jennings and Berry 2015 and 2023), so additional sampling areas adjacent to the 1,800 miles of dirt roads designated as combination use roads and trails, 33.5 miles of designated OHV trails, and 4,500 acres of Open Riding areas should include those with washes. Surveys for the desert tortoise should be conducted during the year when it is most active above ground. Generally, the species is most active from April through May and September through October when air temperatures are below 95°F. Monitoring during the summer and winter months is inappropriate because the desert tortoise is typically inactive, sheltering in burrows to escape high and low temperatures, respectively. Thus, the habitats for the desert tortoise in the Project Areas may need to be stratified based on frequency of use, road density and type of habitat. Data should be collected and analyzed from each stratum.

The surveys of each Project area were not protocol-level surveys recommended by the USFWS (U.S. Fish and Wildlife Service 2019) to determine presence-absence. The

California City OHV Manager or consultant should contact the USFWS Office to discuss the most appropriate type of survey and reporting. The contact information is:

U.S. Fish and Wildlife Service Palm Springs Fish and Wildlife Office 777 E. Tahquitz Canyon Way, Suite 208 Palm Springs, California 92262 (760) 322-2070

<u>Tortoise Habitat</u>: We were unable to find information in the monitoring plan on how California City is determining whether the management of these OHV Project Areas is maintaining habitat for the tortoise.

The HMP should include a monitoring plan for tortoise habitat in the Project Areas to comply with the Program. We recommend that the biological needs of the species (e.g., feeding, breeding, shelter, avoidance of predation, movements, etc.) serve as the foundation for collecting data on tortoise habitat.

For example, to meet the tortoise's nutritional requirements, tortoises are highly selective in their foraging. They choose native herbaceous annual and perennial plants nonrandomly throughout the foraging season, rely on key plants during different phenological periods of spring, forage on plants with low frequencies of occurrence, and focus heavily on leguminous species (Jennings and Berry 2015). Drake et al. (2016) reported that all tortoises fed either the native forb or combined native forb and native grass diets survived and were in good condition. These results were in contrast to tortoises fed an invasive grass diet in which 37 percent of them died. Habitat disturbance from development, resource extraction, off-road vehicle use, and energy development ranks highly among threats to desert systems worldwide. In the Mojave Desert, United States, these disturbances have promoted the establishment of nonnative plants, so that native grasses and forbs are now intermixed with, or have been replaced by, invasive nonnative Mediterranean grasses (Drake et al. 2016).

<u>Burrowing Owl</u>: Monitoring zones for the burrowing owl should conform to California Department of Fish and Wildlife (CDFW) survey guidelines (California Department of Fish and Game 2012), which recommend that surveys be performed at 30-meter intervals out to 150 meters either side of roads that may adversely impact burrowing owls. Those activities include destruction, conversion or degradation of nesting, foraging, over-wintering or other habitats; destruction of natural burrows and burrow surrogates; and disturbances that may result in harassment of owls at occupied burrows.

During the non-breeding season (September 1 to January 31) surveys can provide information on burrowing owl occupancy. Burrowing owls are more detectable during the breeding season with detection probabilities being highest from February 1 to August 31. Three surveys during the breeding season should occur at least three weeks apart during the peak of the breeding season, commonly accepted in California as between April 15 and July 15.

Minimizing disturbance through protective buffers during the breeding season can be an effective method of minimizing impacts. During the breeding season, we recommend buffer zones ranging from 650 feet for low intensity disturbance activities to 1,600 feet for medium and high intensity disturbance.

<u>Burrowing Owl Habitat</u>: We were unable to find information in the monitoring plan on how California City is determining whether the management of these OHV Project Areas is maintaining the habitat for the burrowing owl.

The HMP should include a monitoring plan for burrowing owl habitat in the Project Areas to comply with the Program. We recommend that the biological needs of the species (e.g., feeding, breeding, shelter, avoidance of predation, movements, etc.) serve as the foundation for collecting data on burrowing owl habitat.

<u>Mohave Ground Squirrel</u>: Monitoring for the presence of the Mohave ground squirrel was not performed. As noted above, the response in the HMP was "Not known if it occurs on OHV trails, routes or roads. Off route travel and illegal trespassing may impact habitat." Although the California City OHV Manager or consultant may obtain occurrence locations from the California Natural Diversity Database to identify areas where monitoring should be performed, our experience with the area is that Mohave ground squirrels likely occur throughout the region.

The California City OHV Manager should contact CDFW to discuss the type of surveys necessary, which may include use of motion-detecting cameras, to assess the presence of the Mohave ground squirrel within areas potentially affected by OHV recreation. The contact information is:

California Department of Fish and Wildlife Central Region (Region 4) 1234 E. Shaw Avenue Fresno, CA 93710 (559) 243-4005

Mohave Ground Squirrel Habitat: We were unable to find information in the monitoring plan on how California City is determining whether the management of these OHV Project Areas is maintaining the habitat for the Mohave ground squirrel.

The HMP should include a monitoring plan for Mohave ground squirrel habitat in the Project Areas to comply with the Program. We recommend that the biological needs of the species (e.g., feeding, breeding, shelter, avoidance of predation, movements, etc.) serve as the foundation for collecting data on Mohave ground squirrel habitat.

Monitoring plans should be prepared based on the most likely habitats occupied by the desert tortoise, burrowing owl and Mohave ground squirrel. Below are maps showing these habitats.

<u>Desert Tortoise</u>: The map below shows high probability of occurrence for the desert tortoise, obtained from DataBasin. Habitat maps are also available from Nussear et al. (2009) and Feinberg et al. (2019).



The map below shows the least cost corridors for the desert tortoise obtained from DataBasin.

Legend



<u>Burrowing Owl</u>: The map below shows areas of high probability of occurrence for the burrowing owl obtained from DataBasin.



<u>Mohave Ground Squirrel</u>: The map below shows areas of high probability of occurrence the Mohave ground squirrel, obtained from DataBasin.



2. HMP: California City should 1) modify its HMP to reflect the current status of the desert tortoise, burrowing owl and Mohave ground squirrel and 2) revise the species surveys and monitoring plans and implementation schedule based on comments and recommendations provided above and information provided in the Literature Cited section below.

3. Law Enforcement: During the busiest OHV riding season the frequency of law enforcement patrols increases and at least 25% of OHV riding areas are patrolled daily. During the remainder of the year, law enforcement patrols the OHV riding areas at least once per week. Signs, fencing and barriers are installed to protect environmentally sensitive species and signs specifically state "Stay on Marked Trails and Routes."

California City law enforcement officers patrol OHV recreation areas, respond to incidents and provide education to OHV users on sensitive habitats such as the DTRNA, of which 75% is located within California City's jurisdiction.

Comment: California City has requested \$60,324 in grant funding to support law enforcement staff. We recommend that additional grant funding be requested to increase law enforcement patrol resources to reduce OHV trespass and unauthorized use in sensitive habitats, including the DTRNA. The BLM's law enforcement officer covering the DTRNA should be contacted to coordinate patrols and enforcement actions.

In addition, we recommend that California City identify all areas within the city limits where unauthorized OHV use occurs so that law enforcement patrols can be focused in those areas, which will reduce impacts to the desert tortoise, burrowing owl and Mohave ground squirrel and their habitats.

Below are examples of areas where OHV use has created numerous trails and staging areas that impact habitat.



Google Maps

OHV Trails near Borax Bill Park and Station in 2025



4. Trash Removal: Large numbers of ravens are nesting around landfills and water sewage facilities, swarming around open trash bins, and preying on threatened and endangered species including the desert tortoise. From 1969 to 2004, the numbers of common ravens in the west Mojave Desert increased approximately 700 percent. Predation on desert tortoise hatchlings and juveniles by ravens has changed the composition of the desert tortoise population to predominantly adult desert tortoises by removing a substantial proportion of hatchling and juvenile desert tortoises in some areas, which has adversely affected recruitment. California City's waste management ordinance states that containers "shall have the lids of such portable containers kept closed or shall be kept covered if a lid is not available, except when depositing waste, to prevent the loss of any waste material."

The Coalition for a Balanced Environment (CBE) (2016) conducted field monitoring of compliance of commercial waste container ordinances and the presence of ravens from March 14 through April 12, 2016 in California City. The rates of non-compliance were 29% for California City and the average number of ravens observed declined from 5.2 to 3, or a

42% decrease, which demonstrates the effectiveness of controlling human food subsidies in California City.

The CBE field monitor performed community outreach between April 25 and May 6, 2016 to inform commercial business owners about the relationship between open waste containers and overpopulation of ravens. Between May 9 and 25, 2016, the CBE field monitor performed follow up surveys in California City and found that non-compliance rates decreased to 23% in California City. CBE recommended 1) coordinating with City and County public health agencies to increase awareness of raven over-population and compliance with waste management ordinances and 2) encouraging contract waste haulers to affix large, visible decals on all waste containers and advising users to keep container lids closed.

Comment: We recommend that California City include additional inspection and enforcement of the waste management ordinance to further reduce availability of food waste for ravens within OHV recreation areas which will provide additional protection for hatchling and juvenile desert tortoises.

Conclusion

We hope comments and recommendations provided in this letter are helpful to you and your staff when you undertake a formal review of the HMP and monitoring reports submitted to the OHMVR Division as part of the Grants and Cooperative Agreements Program. Please contact us if you would like to discuss the comments and recommendations or would like additional information.

Sincerely,

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