



**DESERT TORTOISE COUNCIL**

3807 Sierra Highway #6-4514

Acton, CA 93510

[www.deserttortoise.org](http://www.deserttortoise.org)

[eac@deserttortoise.org](mailto:eac@deserttortoise.org)

**Via email only**

March 26, 2023

Attn: Arizona Statewide Rest Area Study  
Arizona Department of Transportation  
1611 W. Jackson Street, MD 310B  
Phoenix, AZ 85007  
[MPDPlanning@azdot.gov](mailto:MPDPlanning@azdot.gov)

RE: ADOT Statewide Rest Area Study

Dear Madam or Sir,

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

Both our physical and email addresses are provided above in our letterhead for your use when providing future correspondence to us. When given a choice, we prefer that the Arizona Department of Transportation (ADOT) email to us future correspondence, as mail delivered via the U.S. Postal Service may take several days to be delivered. Email is an "environmentally friendlier way" of receiving correspondence and documents rather than "snail mail."

We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the proposed project in/near habitats likely occupied by Mojave desert tortoise (*Gopherus agassizii*) (synonymous with Agassiz's desert tortoise) and Sonoran desert tortoise (*Gopherus morafkai*) (synonymous with Morafka's desert tortoise), our comments pertain to enhancing protection of this species during activities funded, authorized, or carried out by ADOT, which we assume will be added to the Administrative Record for this project as needed. Please accept, carefully review, and include in the relevant project file the Council's following comments for the proposed project.

The Mojave desert tortoise is among the top 50 species on the list of the world's most endangered tortoises and freshwater turtles. The International Union for Conservation of Nature's (IUCN) Species Survival Commission, Tortoise and Freshwater Turtle Specialist Group, now considers the Mojave desert tortoise to be Critically Endangered (Berry et al. 2021), as it is a "species that possess an extremely high risk of extinction as a result of rapid population declines of 80 to more than 90 percent over the previous 10 years (or three generations), population size fewer than 50 individuals, other factors." It is one of three turtle and tortoise species in the United States to be critically endangered. This status, in part, prompted the Council to join Defenders of Wildlife and Desert Tortoise Preserve Committee (Defenders of Wildlife et al. 2020) to petition the California Fish and Game Commission in March 2020 to elevate the listing of the Mojave desert tortoise from threatened to endangered in California.

### **Final Draft Working Paper 1 - Existing Conditions and Data Collection**

The Environmental Overview chapter discusses the presence of the Sonoran desert tortoise at eleven rest areas. Currently, the Sonoran desert tortoise is not a listed species under the Federal Endangered Species Act (FESA). However, ADOT is a signatory to the Sonoran Desert Tortoise Candidate Conservation Agreement (USFWS et al. 2015). Please note that the Mojave desert tortoise is likely present in the area at the Haviland Rest Area in Mohave County, Arizona. We request that ADOT make these changes to this document.

Fencing: This document does not mention fences or fencing the rest areas from adjacent lands/habitats. We recommend that the perimeter of rest areas be fenced where it borders relatively undisturbed areas. The fence should be designed and maintained to discourage/prevent persons and dogs from leaving the rest area and harassing, collecting, injuring, or killing wildlife including tortoises.

Waste Containment: We found this issue mentioned once and it was in reference to the Minnesota Department of Transportation as an example of what ADOT could include in its plan. The wording is "Several times daily....Empty waste receptacles, if required."

Food and other materials deposited in waste receptacles is a food subsidy for predators of tortoises (e.g., common raven, coyote. etc.). Common ravens are known predators of the Mojave desert tortoise and their numbers have increased substantially because of human subsidies of food, water, and sites for nesting, roosting, and perching to hunt (Boarman 2003). Common ravens benefit from resources associated with human activities that allow their populations to grow beyond their "natural" carrying capacity in the desert habitat. Coyotes and badgers are also predators of tortoises. Because common ravens can fly at least 30 miles in search of food and water on a daily basis (Boarman et al. 2006) and coyotes can travel an average of 7.5 miles or more daily (Servin et al. 2003), food waste that is not properly contained becomes a food subsidy and contributes to increasing numbers of predators of tortoises and increased probability of tortoise mortality as a result of these subsidies. Although the source of the food subsidy may be localized, the impacts to tortoise can extend for miles.

We found no discussion of the types of outdoor waste receptacles to be used or their size or placement based on frequencies of use. To prevent food subsidies for tortoise predators, outdoor

waste receptacles should be used that prevent common ravens, coyotes, and other tortoise predators from accessing their contents. There are several companies that make such waste receptacles (e.g., <https://bearsaver.com/>).

Arizona has some very windy areas. For waste receptacles to be effective, they must be impervious to wind removing disposed of waste.

If waste receptacles are not emptied frequently enough, their function is defeated. California Department of Transportation (Caltrans) contracts the daily maintenance of their rest areas and it has not been successful. At more than one rest area in the desert, we have observed outside waste containers overflowing with waste and waste on the ground because of inadequate frequency of waste collection and/or inadequate number of receptacles at frequently used locations by the public at the rest area. For example, outdoor waste receptacles near bathrooms are filled faster than those farther away.

The Council recommends that ADOT only use waste receptacles at rest areas that are designed and have been tested to prevent tortoise predators (e.g., common, raven, coyotes, etc.) from accessing their contents, and will contain waste under windy conditions. We further recommend that more waste receptacles or larger receptacles should be placed in areas receiving more use. ADOT should ensure that waste receptacles are emptied frequently and the contents disposed of properly so that waste does not overflow from receptacles or is deposited on the ground because the receptacles are full. ADOT should conduct studies to determine that effectiveness of the design and placement of waste receptacles and frequency of emptying them in achieving these needs.

In addition, ADOT should post and maintain signs that feeding wildlife and leaving food for wildlife is prohibited.

Outdoor Water Sources: As previously mentioned, water is a human subsidy used by common ravens and other tortoise predators. Outside intentional water sources (e.g., outside spigots) and unintentional water sources (e.g., buried pipes) should be designed and maintained so they do not cause puddles of water that tortoise predators use for drinking. Although ADOT is now metering water to determine whether there are spikes and therefore major leaks in water use, pipes and spigots can also have slow leaks that do not register as spikes in water use. It is imperative that there be frequent visual inspections of outside spigots and that the routes where buried pipes are laid is walked to look for wet areas/water on the surface. When discovered, ADOT should have a program in place to fix leaks promptly.

### **Final Draft Working Paper 2 - “Forecast of Future Conditions and Deficiencies”**

Regarding threatened and endangered species, ADOT says it would determine “whether expansion or construction [at rest areas] would affect those species or habitats.” Thus, it appears ADOT’s focus is on minimizing degradation to species.

We remind ADOT that their objectives should include conservation. This would include ensuring that their actions do not contribute to the future listing of additional species under the FESA. Consequently, the list of species that ADOT is concerned about should include species requiring special management consideration to promote their conservation and reduce the likelihood and

need for future listing under the FESA. This should include the Sonoran (SDT) and Mojave desert tortoises in Arizona. In addition, as a signatory to the Sonoran Desert Tortoise Candidate Conservation Agreement (USFWS et al. 2015), ADOT should incorporate into the design, construction, operations, and maintenance of rest areas its commitment to the Landscape Level Conservation Measures and Local Conservation Measures for all agencies, as relevant in the Candidate Conservation Agreement, and:

- Promote awareness of the conservation status of the SDT within ADOT.
- Collect data on SDT sightings in ADOT right-of-way and provide that information to Arizona Game and Fish Department (AGFD).
- Partner with AGFD to implement survey and handling procedures, conservation approaches and research related to SDTs.
- Maintain ADOT right-of-way to minimize invasive plant species and fire risk.
- Partner with state and federal agencies to address invasive plant species in and adjacent to ADOT right-of-way.
- Coordinate and partner with state and federal agencies and other interested parties to incorporate project design features to minimize SDT habitat fragmentation and vehicle strikes.
- Conduct habitat suitability surveys and analyze potential impacts for projects with a scope of work that could impact SDT habitat.
- Provide awareness training and/or information to ADOT and contractor personnel working on construction and maintenance projects in areas with suitable habitat.
- Follow the most current protocol for relocating any SDT that may be impacted by an ADOT construction or maintenance project.
- Coordinate with the AGFD regarding strategies and conservation actions to protect the SDT per AGFD's State Wildlife Action Plan

We recommend that ADOT revise the first bulleted item to include promoting the conservation status of tortoises to the public. We also recommend that ADOT help AGFD *implement* [emphasis added] strategies and conservations actions to protect the SDT on lands that ADOT manages and projects that they authorize, fund, or carry out.

We recommend that rest areas be designed and constructed or modified so their operations and maintenance does not provide human subsidies of food (waste), water, and/or nest sites for ravens. This includes buildings, fences, and other vertical structures associated with rest areas.

Further, a rest area should have multiple functions including ensuring that their design, construction, operations, and maintenance educate the public about the natural resources in the area (Public Education - in more than one language), and use native plant species and materials in the landscaping of rest areas (Reduced Water Use, Reduced Landscaping Maintenance, and Reduced Likelihood of Invasive Plant Species).

For other wildlife species, lighting should comply with night sky codes (e.g., downward lighting only, etc.) so it does not disrupt the 24-hour cycle of nearby wildlife species.

### **Final Working Paper 3 – “Evaluation Criteria and Plan for Improvements”**

We were unable to find any evaluation criteria that considered wildlife, plants, vegetation, habitat, etc. in this document. Rest areas should not be limited to an area where a person can use the restroom or a truck driver can sleep. As stated above, rest areas should be multifunctional areas. As a minimum, ADOT should revise its evaluation criteria to ensure that rest areas in/near tortoise habitat have information displayed that educates the public about tortoises, their needs, threats caused by humans, and what people can do to help tortoises. The Council offers its assistance in developing appropriate information to display at rest areas.

We appreciate this opportunity to provide comments on this project and trust they will help protect tortoises during any resulting authorized activities. Herein, we reiterate that the Desert Tortoise Council wants to be identified as an Affected Interest for this and all other projects funded, authorized, or carried out by ADOT that may affect species of desert tortoises, and that any subsequent environmental documentation for this project is provided to us at the contact information listed above. Additionally, we ask that you respond in an email that you have received this comment letter so we can be sure our concerns have been registered with the appropriate personnel and office for this project.

Respectfully,



Edward L. LaRue, Jr., M.S.  
Ecosystems Advisory Committee, Chairperson  
Desert Tortoise Council

Cc: Kenneth Petty, Associate Administrator (Acting), Office of Planning, Environment, and Realty  
[kenneth.petty@dot.gov](mailto:kenneth.petty@dot.gov)  
Gary Jensen, Office of Natural Environment, Office of Planning, Environment, and Realty,  
Federal Highways Administration [gary.jensen@dot.gov](mailto:gary.jensen@dot.gov)

### Literature Cited

- Berry, K.H., L.J. Allison, A.M. McLuckie, M. Vaughn, and R.W. Murphy. 2021. *Gopherus agassizii*. The IUCN Red List of Threatened Species 2021: e.T97246272A3150871. <https://dx.doi.org/10.2305/IUCN.UK.2021-2.RLTS.T97246272A3150871.en>
- Boarman, W. 2003. Managing a Subsidized Predator Population: Reducing Common Raven Predation on Desert Tortoises. *Environmental Management* 32, 205–217 (2003). <https://doi.org/10.1007/s00267-003-2982-x>
- Boarman, W.I., M.A. Patten, R.J. Camp, and S.J. Collis. 2006. Ecology of a population of subsidized predators: Common ravens in the central Mojave Desert, California. *Journal of Arid Environments* 67 (2006) 248–261. <https://www.sciencedirect.com/science/article/abs/pii/S0140196306003016>
- Defenders of Wildlife, Desert Tortoise Preserve Committee, and Desert Tortoise Council. 2020. A Petition to the State of California Fish And Game Commission to move the Mojave

desert tortoise from listed as threatened to endangered. Formal petition submitted 11 March 2020.

[https://defenders.org/sites/default/files/2020-03/Desert%20Tortoise%20Petition%203\\_20\\_2020%20Final\\_0.pdf](https://defenders.org/sites/default/files/2020-03/Desert%20Tortoise%20Petition%203_20_2020%20Final_0.pdf)

Servin, J., V. Sanchez-Cordero, and S. Gallina. 2003. Distances traveled daily by coyotes, *Canis latrans*, in a pine–oak forest in Durango, Mexico. *Journal of Mammalogy* 84(2):547–552.

[USFWS et al.] U.S. Fish and Wildlife Service, Bureau of Land Management, Bureau of Reclamation, National Park Service, Department of Defense, Customs and Border Protection, U.S. Forest Service, Natural Resources Conservation Service, Arizona Game and Fish Department, and Arizona Department of Transportation. 2015. Candidate Conservation Agreement for the Sonoran Desert Tortoise (*Gopherus morafkai*) in Arizona. May 27, 2015. <https://www.blm.gov/sites/blm.gov/files/policies/IMAZ-2016-004-a1.pdf>.