

DESERT TORTOISE COUNCIL

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Via email only

22 July 2022

Catrina Williams, Field Manager
BLM Red Rock/Sloan Field Office
ATTN: Fee Station Infrastructure Draft EA
4701 N. Torrey Pines
Las Vegas, NV 89130
[BLM NV LV RR FEE STATION IMPRVMTS@blm.gov](mailto:BLM_NV_LV_RR_FEE_STATION_IMPRVMTS@blm.gov)

RE: Draft Environmental Assessment for Fee Station Infrastructure Improvements and Right-of-Way Issuance at Red Rock Canyon National Conservation Area - DOI-BLM-NV-S020-2020-0015-EA

Dear Ms. Williams,

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.

As of June 2022, our mailing address has changed to:

Desert Tortoise Council
3807 Sierra Highway #6-4514
Acton, CA 93510.

Our email address has not changed. Both addresses are provided above in our letterhead for your use when providing future correspondence to us.

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

Description of the Proposed Action and Alternatives

BLM has evaluated the impacts of two alternatives, the No Action alternative and Proposed Action alternative.

The No Action alternative would allow existing safety, security, septic, and traffic issues to persist at the Fee Station and Entrance to the Scenic Drive.

The Proposed Action alternative would consist of the following: installing exterior lighting, replacing the fee station septic system, building a fast pass lane and bicycle lane, widening the entrance roadway, building a ride share lane with improvements to the existing parking lot, and building a maintenance/emergency vehicle entrance.

Our comments are suggested modifications to information presented and requests that additional information and analyses and appropriate mitigation/conservation measures be added to the EA and implemented.

Surveys for the Mojave Desert Tortoise: In the EA, BLM says, the emphasis of the 2005 Red Rock Canyon National Conservation Area (RRCNCA) Resource Management Plan is "to protect unique habitats for threatened, endangered, and special status species while providing areas for community growth, recreation, mineral exploration and development, and other resource uses." On page 30, BLM says, "The Proposed Action would occur within known occupied habitat for Mojave desert tortoise, and several individuals have been observed crossing the roads near the fee station booth over the years." Hence, the Council presumes that BLM would implement actions that would protect habitats for the tortoise in the RRCNCA. This would include following U.S. Fish and Wildlife Service (USFWS) guidance for surveys for the tortoise. Because we found no

data of survey results for tortoises, we presume that BLM did not implement protocol level surveys for the tortoise (USFWS 2009, USFWS 2019).

On page 14 of the EA, BLM says, “A BLM authorized desert tortoise biologist or a desert tortoise monitor would clear the construction zone and monitor the project area for the presence of desert tortoises throughout construction.” Again, on page 30 of the EA, BLM says “A biological monitor would walk in advance of the drill rig to identify potential burrows to avoid and move any desert tortoises out of harm’s way.” Our understanding of USFWS’s Desert Tortoise (Mojave Population) Field Manual (*Gopherus agassizii*) (2009) says that “[d]irect supervision is always required for field and clearance surveys; direct supervision means that the Authorized Biologist has direct voice and sight contact with the desert Tortoise Monitor.”

We urge BLM to conduct protocol pre-project and clearance surveys for the tortoise prior to the initiation of any surface disturbance and provide this information to the U.S. Fish and Wildlife Service (USFWS).

Indirect Impacts: One of the purposes of the Proposed Action is to increase recreation access and use to the public. In Table 3-1, BLM says, “The Proposed Action is not anticipated to negatively affect recreation because much of the work is intended to enhance access.” On page 1, BLM says “RRCNCA is visited by over 3 million people annually with visitation rate is projected to increase significantly into the near future.” This visitation rate increase would include increased access by vehicles.

The direct and indirect impacts from the increased vehicle access should be analyzed in the EA with respect to the tortoise and its habitat. We suggest this analysis should include indirect impacts such as (1) increased roadkill of wildlife species including tortoises, (2) increased food subsidies for common ravens and other tortoise predators from roadkill thereby contributing to increases in predation pressure on the tortoise, (3) increased transport of non-native invasive plant species by carrying their seeds and plant parts in the crevices of tires and other parts of vehicles and equipment and resulting competition with native forbs that provide nutritious forage for tortoises, (4) increased likelihood of fires as most human-caused ignition points for fires in the Mojave Desert occurred along well-traveled roads (Brooks and Matchett 2006) and non-native plants provide the fuel to carry fires, and (5) increased trash that would attract predators (e.g., common raven (*Corvus corax*), coyote (*Canis latrans*)) of the tortoise. The road effect zone should be analyzed with respect to the tortoise. For example, von Seckendorff Hoff and Marlow (2002) reported a linear relationship between traffic level and reduction in tortoise numbers and sign from infrequent use of unpaved roadways (3,620 to 4,608 feet = 0.68 to 0.87 mile) to major highways with heavy use (5,000 vehicles per day; 2.49 miles). Thus, if increased vehicle access is facilitated by implementation of the Proposed Action, the expected result would be a further reduction in tortoise sign and numbers and a reduction in tortoise habitat.

Part of the Proposed Action is to install lighting but we found little information of the description of the fixtures/poles. Please ensure that the light poles and fixtures are designed so common raves cannot use them as perch or nesting sites. This unintended human subsidy in other areas of the Mojave Desert has resulted in increased tortoise predation by common ravens (Boarman et al. 2006).

Affected Environment - Threatened and Endangered Species: In the Affected Environment section for Threatened and Endangered Species, BLM says “Federally listed threatened and endangered animal species are managed by the USFWS.” We remind BLM that the federal Endangered Species Act requires all federal agencies to conserve/manage federally listed threatened and endangered species. We suggest modifying this language in the EA to say “BLM manages for federally listed threatened and endangered species in consultation/coordination with the USFWS.”

BLM further says Mojave desert tortoises “eat a wide variety of herbaceous vegetation, especially grasses and the flowers of annual plants. They are also known to eat woody perennials, cacti, and non-native species, such as red brome (*Bromus rubens*) and red-stem filaree (*Erodium cicutarium*).” Forage selected by tortoises varies from year to year, season to season, and location because plant species availability varies. Please note that while the Mojave desert tortoise may eat non-native grasses, they are not their preferred diet. Tortoises preferred herbaceous species to non-native annual grasses when other herbaceous forage is available (Ofstedal et al. 2002). Non-native annual grasses have lower protein content and potassium excretion potential than native perennial grasses (Ofstedal 2002). Jennings and Berry (2015) reported desert tortoises are selective foragers and selection of plant foods may be affected by nutrition and potassium levels. The tortoises they studied primarily consumed forbs and herbaceous perennials. Also important is that red brome has been shown to be physically harmful to tortoises, impacting their jaws, nostril, and eyes (Medica and Eckert 2007).

Consultation with the U.S. Fish and Wildlife Service: BLM says the U.S. Fish and Wildlife Service (USFWS) is reviewing the Proposed Action with respect to its effects on the threatened Mojave Desert Tortoise. This consultation under section 7(a)(2) of the FESA is pending, and the outcome will be updated in the Final EA.

Mitigation of Impacts, and Conservation of the Tortoise: Although section 7(a)(2) of the FESA and its implementing regulations require implementation of a biological opinion’s reasonable and prudent measures and terms and conditions, which are mandatory, to minimize the incidental take of listed species, they do not require mitigation. However, section 7(a)(1) of the FESA requires all federal agencies to conserve species listed under the FESA. Consequently, we urge BLM to implement actions to fully mitigate the direct and indirect impacts (some of which we describe above briefly) of the Proposed Action (e.g., loss/degradation of tortoise habitat from direct and indirect impacts, etc.) and to implement conservation measures to improve the status of the tortoise in RRCNCA. Mitigation would include:

- (1) habitat restoration of the ecological functions in areas degraded/destroyed by past activities in the RRCNCA,
- (2) management of human subsidies for tortoise predators,
- (3) management of non-native plant species/ preventive management of non-native fuel loads for fires. Because restoration of soils, soil crusts, and native vegetation and seed banks takes decades or longer in the Mojave Desert, the acres restored should be much greater than the acres impacted by the proposed project to mitigate this temporal loss of habitat.

Conservation measures would include implementation of effective education of the more than 3 million visitors to RRCNCA annually about the biology and status of the tortoise and what they can do to help conserve the tortoise. The Council is available to assist BLM with the development of this education program and offers links to publications on habitat restoration for your use (see below).

To assist BLM in habitat restoration efforts, particularly for the Mojave desert tortoise, we are providing the following papers and a reference for your use:

Best Management Practices – Restoring Perennial Plants

https://deserttortoise.org/wp-content/uploads/BMP_fact_sheet_1_restore_perennials.pdf

Best Management Practices – Enhancing Forage for the Mojave Desert Tortoise

https://deserttortoise.org/wp-content/uploads/BMP_fact_sheet_2_forage.pdf

Best Management Practices – Salvaging Topsoil

https://deserttortoise.org/wp-content/uploads/BMP_fact_sheet_3_topsoil.pdf

Best Management Practices – Rehabilitating Lands After Severe Disturbance

https://deserttortoise.org/wp-content/uploads/BMP_fact_sheet_4_severe_disturbance.pdf

Best Management Practices – Reducing Impacts of Roads

https://deserttortoise.org/wp-content/uploads/BMP_fact_sheet_5_roads.pdf

Restoration plan for site within the Eastern Expansion Area of Desert Tortoise Research Natural Area

https://deserttortoise.org/wp-content/uploads/restoration_plan_guidance_21apr2017.pdf

Abella S.R. and K.H. Berry. 2016. Enhancing and restoring habitat for the desert tortoise (*Gopherus agassizii*). *Journal of Fish and Wildlife Management* 7(1):255–279.

<https://doi.org/10.3996/052015-JFWM-046>.

Timing of Construction/Impacts from Operation and Maintenance: On page 12 in the ES, BLM says, “Construction would start at any time throughout the year, although the preferred timeframe of the construction work would span between the months of October and March to avoid active wildlife seasons.” However, on page 31 of the EA, BLM says, “The period of greatest tortoise activity is generally defined as March 1 – Oct 31. However, unseasonably warm weather [in winter] and/or precipitation outside this period may result in tortoise activity, particularly by hatchling and juvenile tortoise, and thus warrant adherence to requirements established for periods of greater activity.” Consequently, if BLM’s intent is to avoid the tortoise active season, construction should begin after November 1 and conclude by March 1. We request this temporal mitigation measure be implemented. In addition, future maintenance activities should be scheduled to occur outside the tortoise active season.

Water for Construction: During construction of the Proposed Action, BLM says that if artificial water sources are used there will be escape ramps installed for wildlife. In addition, BLM mentions

that dust control measures would be implemented, such as watering the affected ground. Because these water sources are another example of a human subsidy for tortoise predators, we request that BLM require that artificial water sources be installed and used so they are not accessible by tortoise predators. In addition, we request that water used for dust control measures or any other use be limited so that pooling or puddles are not created. This requirement should be applied to any maintenance activities.

Cattle Guard Installation: The Proposed Action appears to include installation of a new cattle guard (Appendix B-7). Please ensure that it is designed so it does not entrap tortoises of any size either between or under the slats. or prevent tortoises from righting themselves should they fall through the slats.

Cumulative Effects Analysis: Please see *Grand Canyon Trust v. F.A.A.*, 290 F.3d 339, 345-46 (D.C. Cir. 2002) in which the court decided that agencies must analyze the cumulative impacts of actions in environmental assessments.

We were unable to find an analysis (emphasis added) of impacts to special status species such as desert tortoises in the EA. We found no consideration of climate change and its impacts on wildlife species including desert tortoises. For BLM to analyze cumulative impacts to desert tortoises and other special status species, it must have a baseline of what their current status and trend is. We did not find this in the EA. Once the baseline status and trend are presented, cumulative impacts analysis in the EA should follow the Council on Environmental Quality (CEQ) (1997) “Considering Cumulative Effects under the National Environmental Policy Act” guidance to federal agencies on how to analyze cumulative effects. The BLM National Environmental Policy Act Handbook – H-1790-1 (BLM 2008a) has adopted this guidance. This guidance contains eight principles listed below to help federal agencies conduct an appropriate cumulative impacts analysis of their alternatives:

In the cumulative effects analysis of the EA, please ensure that the CEQ’s eight principles (reiterated below) are included when analyzing cumulative effects of the proposed action to the tortoise and its habitat. CEQ states, “Determining the cumulative environmental consequences of an action requires delineating the cause-and-effect relationships between the multiple actions and the resources, ecosystems, and human communities of concern. The range of actions that must be considered includes not only the project proposal but all connected and similar actions that could contribute to cumulative effects.” The analysis “must describe the response of the resource to this environmental change.” Cumulative impact analysis should “address the sustainability of resources, ecosystems, and human communities.” CEQ’s guidance on how to analyze cumulative environmental consequences contains eight principles listed below:

- 1. Cumulative effects are caused by the aggregate of past, present, and reasonable future actions.** The effects of a proposed action on a given resource, ecosystem, and human community, include the present and future effects added to the effects that have taken place in the past. Such cumulative effects must also be added to the effects (past, present, and future) caused by all other actions that affect the same resource.

2. **Cumulative effects are the total effect, including both direct and indirect effects, on a given resource, ecosystem, and human community of all actions taken, no matter who (federal, non-federal, or private) has taken the actions.** Individual effects from disparate activities may add up or interact to cause additional effects not apparent when looking at the individual effect at one time. The additional effects contributed by actions unrelated to the proposed action must be included in the analysis of cumulative effects.
3. **Cumulative effects need to be analyzed in terms of the specific resource, ecosystem, and human community being affected.** Environmental effects are often evaluated from the perspective of the proposed action. Analyzing cumulative effects requires focusing on the resources, ecosystem, and human community that may be affected and developing an adequate understanding of how the resources are susceptible to effects.
4. **It is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.** For cumulative effects analysis to help the decision maker and inform interested parties, it must be limited through scoping to effects that can be evaluated meaningfully. The boundaries for evaluating cumulative effects should be expanded to the point at which the resource is no longer affected significantly or the effects are no longer of interest to the affected parties.
5. **Cumulative effects on a given resource, ecosystem, and human community are rarely aligned with political or administrative boundaries.** Resources are typically demarcated according to agency responsibilities, county lines, grazing allotments, or other administrative boundaries. Because natural and sociocultural resources are not usually so aligned, each political entity actually manages only a piece of the affected resource or ecosystem. Cumulative effects analysis on natural systems must use natural ecological boundaries and analysis of human communities must use actual sociocultural boundaries to ensure including all effects.
6. **Cumulative effects may result from the accumulation of similar effects or the synergistic interaction of different effects.** Repeated actions may cause effects to build up through simple addition (more and more of the same type of effect), and the same or different actions may produce effects that interact to produce cumulative effects greater than the sum of the effects.
7. **Cumulative effects may last for many years beyond the life of the action that caused the effects.** Some actions cause damage lasting far longer than the life of the action itself (e.g., acid mine damage, radioactive waste contamination, species extinctions). Cumulative effects analysis needs to apply the best science and forecasting techniques to assess potential catastrophic consequences in the future.
8. **Each affected resource, ecosystem, and human community must be analyzed in terms of its capacity to accommodate additional effects, based on its own time and space parameters.** Analysts tend to think in terms of how the resource, ecosystem, and human community will be modified given the action's development needs. The most effective


cumulative effects analysis focuses on what is needed to ensure long-term productivity or sustainability of the resource.

Principles 5 through 8 are especially relevant to the tortoise given its (1) overall declining trend, (2) densities for most populations below the viability threshold, and (3) low recruitment (USFWS 1994, Allison and McLuckie 2018). Recall that for the Mojave desert tortoise to achieve recovery, tortoises in all five recovery units must achieve recovery (USFWS 2011).

We request that the EA include a cumulative impacts analysis on the tortoise and its habitat.

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 the BLM 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.
Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

Literature Cited

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