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Via email only

December 30, 2025

Ms. Jenna Giddens, Ms. Betsy Bangert
Bureau of Land Management – Red Rock Sloan Field Office
4701 North Torrey Pines Drive
Las Vegas, NV 89130
ebangert@blm.gov, BLM_NV_LV_SloanCanyon_NCA@blm.gov

RE: Sloan Canyon Public Trail Route Workshop, Sloan Canyon National Conservation Area

Dear Ms. Bangert,

The Desert Tortoise Council (Council) is a non-profit organization comprising 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 northern 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 to receive emails for 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 trail system in habitats occupied by the Mojave desert tortoise (*Gopherus agassizii*) (synonymous with Agassiz's desert tortoise), our comments include recommendations intended to enhance protection of this species and its habitat during activities that may be authorized by the Bureau of Land Management (BLM), which we recommend be added to project terms and conditions in the authorizing documents [e.g., issuance of right-of-way (ROW) grants, management plan and decision document, etc.] as appropriate. Please accept, carefully review, and include in the relevant project file the Council's following comments and appendix for the proposed action.

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), "… based on population reduction (decreasing density), habitat loss of over 80% over three generations (90 years), including past reductions and predicted future declines, as well as the effects of disease (upper respiratory tract disease/mycoplasmosis). *Gopherus agassizii* (sensu stricto) comprises tortoises in the most well-studied 30% of the larger range; this portion of the original range has seen the most human impacts and is where the largest past population losses have been documented. A recent rigorous rangewide population reassessment of *G. agassizii* (sensu stricto) has demonstrated continued adult population and density declines of about 90% over three generations (two in the past and one ongoing) in four of the five *G. agassizii* recovery units and inadequate recruitment with decreasing percentages of juveniles in all five recovery units."

Thank you for contacting us via email on December 11, 2025 for an opportunity to provide input on the Sloan Canyon Public Trail Network. As per the BLM's email, the planning effort will culminate in a draft Environmental Assessment (draft EA). Once a draft document is prepared, it will be made available on the BLM's ePlanning website for public review and comment. Please add the Council to the list of Affected Interests so that we may review the draft EA when available.

Review of the Sloan Canyon National Conservation Area (NCA) website[1], provided the following background information: "In November 2002, Congress designated the NCA to preserve and protect a portion of southern Nevada's Mojave Desert for future generations. The 48,438-acre NCA forms the southern mountainous skyline of Las Vegas and the City of Henderson. The 14,790-acre North McCullough Wilderness lies entirely within the Sloan Canyon NCA and contains unique and spectacular natural resources including thousands of acres of pristine land that remain in a natural state. The North McCullough Wilderness is volcanic in origin and examples of lava flows, ash falls, and glassy zones are clearly displayed in the Wilderness. The North McCullough Wilderness, located only a few miles from Las Vegas and the City of Henderson, provides opportunities for solitude and a primitive and unconfined type of recreation in an area where the earth and its community of life are untrammeled. The Sloan Canyon NCA provides outstanding opportunities for visitors who desire to view the unique scenic and geologic features, remarkable cultural resources, and diverse recreation possibilities."

We appreciate the BLM depicts authorized and unauthorized routes in the link in the footnote[2]. Given the congressional intent of establishing the NCA for protection of natural resources, including desert tortoises and their habitats, we recommend that all unauthorized routes be eliminated. Dead end unauthorized routes such as those shown in the Sloan Canyon NCA Central Area Overview should be prioritized for closure. Rather than mark them with red Carsonite closed route markers, the BLM should implement a program of route closures that would use vertical mulching and other techniques to camouflage and eliminate the appearance of routes.

[1] https://www.blm.gov/programs/national-conservation-lands/nevada/sloan-canyon-nca
[2] https://www.blm.gov/sites/default/files/docs/2025-11/Sloan%20Canyon%20Trail%20Workshop.zip

Within the listed population of the Mojave desert tortoise, animals are most common and most vulnerable in relatively level areas, below about 20% slopes. Therefore, we recommend that the BLM focus route closures in areas below 20% slope, beginning with unauthorized routes. We recommend that available models (Gray et al., 2019, Nussear et al. 2012) be used to identify habitats most likely to support tortoises and use results of these models to close unauthorized and perhaps authorized routes in the areas of higher tortoise density estimates. Routes that should be prioritized for closure include redundant routes, all those in washes, and social routes that were not created by heavy equipment, particularly those that are seldom used and already in a state of natural recovery.

The draft EA should be based on a complete inventory of existing routes. If not already, the authorized and unauthorized routes shown in the number two footer on the previous page should be inventoried to include widths, relative use, slopes through which the routes pass, whether they are in washes or not, etc. These data should be used to ensure that the routes exist and how they may be closed using criteria like those suggested above.

Under the Clark County Conservation of Public Land and Natural Resources Act of 2002 (Act), Congress directed that "the Secretary [of the Interior], acting through the Director of the Bureau of Land Management, shall manage the [Sloan Canyon National] Conservation Area" . . . "in a manner that conserves, protects, and enhances the resources of the Conservation Area" and that "the Secretary shall allow only such uses of the Conservation Area that the Secretary determines will further the purpose described in section 602 of this Act." In Section 602, Congress established "the Sloan Canyon National Conservation Area to conserve, protect, and enhance for the benefit and enjoyment of present and future generations the cultural, archaeological, natural, wilderness, scientific, geological, historical, biological, wildlife, educational, and scenic resources of the Conservation Area."

Thus, when BLM is proposing to authorize new activities or change existing activities in this NCA, BLM should demonstrate how the proposed authorizations of these new/changed activities would comply with Section 602 of the Act including for the tortoise/tortoise habitat. Such authorizations would include monitoring the impacts of these new/changed activities to these resources using appropriate methods to detect changes to these resources and effective actions that would be taken to change on-the-ground management if the monitoring indicated that current management is not conserving, protecting, and enhancing the resources of the Conservation Area, including the tortoise/tortoise habitat.

Herein we provide the BLM with a few resources to help develop the draft EA and implement route closures. Appendix A includes an extensive list of available literature concerning impacts associated with both legal and illegal off-highway vehicle use (OHV) in desert habitats. We expect that the BLM will use this information to prepare an analysis of impacts that is scientifically well-supported and credible. The impacts analysis in the draft EA should include recommendations of where trails would be authorized and allowable uses on those trails; maintenance and monitoring plans for the trail network (including methods and frequencies of implementation); methods and timelines for restoring trails that are not authorized; and monitoring of direct and indirect impacts to soils, vegetation, and wildlife (including the tortoise) from trail use, especially from authorized and unauthorized uses (e.g., mountain bikes, dogs, etc.).

With respect to the analysis in the draft EA being scientifically well supported and credible, we remind BLM that in the National Environmental Policy Act (NEPA), Congress declared that federal agencies shall "[u]tilize a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences . . . in planning and in decisionmaking." To comply with this requirement, BLM should use the latest information from scientific journals and reports in its development of alternatives and analysis of impacts with respect to natural resources including the tortoise/tortoise habitat. This analysis and any conclusions stated in the draft EA regarding the tortoise and other natural resources should be supported with citations from the scientific literature rather than be unsupported conclusions. In addition, BLM should ensure that it complies its policy on Advancing Science in the BLM: An Implementation Strategy IB 2015-040 (BLM 2015). This policy reinforces BLM's use of science in decision-making.

With respect to restoration of areas damaged from the establishment of routes or trails, we suggest that Abella and Berry (2016) and Abella et al. (2023) be consulted along with other recent research to identify and implement effective methods to restore the biological components of soils and re-establish native annual and perennial vegetation to damaged habitats in the NCA. The science-supported analyses and restoration methods should include analyses of their beneficial and adverse impacts to the tortoise and its habitat in the NCA, and demonstrate how each alternative would comply with the Congressional mandate that established this NCA. We expect that BLM will use this scientific information to develop action alternatives that will comply with Section 602 of the Act.

Because of the numerous adverse impacts to tortoise/tortoise habitats caused by the use of motorized OHVs (including e-bikes), we strongly recommend that all action alternatives include the continued prohibition of the public's use of motorized vehicles (i.e., motorcycles and OHVs, including electric motorcycles and e-bikes) on unauthorized routes within the NCA.

The overall route network (roads and trails) of Sloan Canyon should be described and evaluated as the activities from the entire route network in the NCA impact the natural resources in the NCA including the tortoise/tortoise habitat. For example, Averill-Murray and Allison (2023) said, "we recommend road densities, including all linear features used for travel [e.g., trails], of less than 0.6 km/km^2 as a general target for travel management in areas where wildlife conservation is a priority. Lower densities may be necessary in particularly sensitive areas." If BLM is managing this NCA for tortoises, then the trail densities should be less than these densities described in Averill-Murray and Allison (2023). In addition, they report that the use of vehicles (mountain bikes are vehicles) also "degrade habitat outside their direct footprint, for instance by spreading invasive plant species (Gelbard and Belnap 2003) and facilitating human access deeper into wildlands (McLellan and Shackleton 1988; Trombulak and Frissell 2000)" (as cited in Averill-Murray and Allison 2023).

There are likely numerous indirect impacts to the natural resources in the NCA from human uses in areas adjacent to the NCA. If BLM is managing for the conservation, protection, and enhancement of the tortoise and other natural resources in the NCA, then BLM should be including population connectivity and linkage habitat in its management of the tortoise and other wildlife species. Averill-Murray et al. (2021) state that "[m]aintaining an ecological network for the Mojave desert tortoise, with a system of core habitats (TCAs = Tortoise Conservation Areas) connected by linkages, is necessary to support demographically viable populations and long-term

gene flow within and between TCAs." We presume that the NCA is considered a TCA because of the purpose and management of the NCA by in the Act. Part of conserving, protecting, and enhancing tortoise/tortoise habitat in the NCA would include assessing and managing linkage habitats that provide effective connectivity to other TCAs. "Ignoring minor or temporary disturbance on the landscape could result in a cumulatively large impact that is not explicitly acknowledged (Goble, 2009); therefore, understanding and quantifying all surface disturbance on a given landscape is prudent."

To accomplish this, "habitat linkages among TCAs must be **wide enough** [emphasis added] to sustain multiple home ranges or local clusters of resident tortoises (Beier and others, 2008; Morafka, 1994), while accounting for edge effects, in order to sustain regional tortoise populations." The lifetime home range for the Mojave desert tortoise is more than 1.5 square miles (3.9 square kilometers) of habitat (Berry 1986) and may make periodic forays of more than seven miles (11 kilometers) at a time (Berry 1986). Consequently, effective linkage habitats are not long narrow corridors. Any development within them has an edge effect (i.e., indirect impact) that extends from all sides into the linkage habitat further narrowing or impeding the use of the linkage habitat, depending on the extent of the edge effect. Thus, when BLM is managing the NCA for the conservation, protection, and enhancement of these natural resources as mandated by the Act (including the tortoise/tortoise habitat), these indirect impacts/edge effects should be described and analyzed for each alternative in the draft EA. These impacts would include those from the use of all vehicles by the public on trails and routes in the NCA **and** adjacent areas.

We recommend incorporating the findings of Averill-Murray et al. (2021) in the development of alternatives for the draft EA and their analysis to ensure that the NCA does not become an island with a small tortoise population that is disconnected from other tortoise populations and eventually is extirpated because of demographic, genetic, and/or environmental effects. The fundamentals of conservation biology include the need for gene flow between populations to maintain genetic diversity; this enables a species to more likely survive, especially during climate change, which supports biodiversity. Thus, linkage habitats are important as they provide connectivity among wildlife populations to maintain viability and biodiversity.

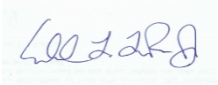
If BLM allows dogs or is considering allowing dogs to accompany their owners on trails, BLM should analyze this impacts on wildlife including the tortoise. Research has been conducted on the presence of wildlife near trails when dogs are allowed/not allowed, and the impacts of feral and free-roaming dogs to the tortoise have been described in the scientific literature. The overall results have been that the occurrence of wildlife is diminished by the presence of dogs on trails with their owners versus no dogs (Lenth et al. 2008, Weston and Stankowich 2014).

While not a scientific study, at least one Board member has had repeated personal experiences when hiking with friends who do not want to keep their dogs on leash. The friends claim they have full control over their dogs at all times. This proves not to be true when a dog picks up an interesting scent and ignores its owner's command to come, or sees an animal and chases it. The impacts of dogs accompanying their owners, free-ranging, and feral dogs should be analyzed in the draft EA with respect to impacts to wildlife including the tortoise.

We appreciate this opportunity to provide the above comments and trust they will help the BLM to produce its draft EA. Herein, we reiterate that the 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 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 notify the Council at eac@deserttortoise.org of any proposed projects that the BLM may authorize, fund, or carry out in the range of any species of desert tortoise in the southwestern United States (i.e., *Gopherus agassizii*, *G. morafkai*, *G. berlandieri*, *G. flavomarginatus*) so we may comment on them to ensure the BLM fully considers and implements actions to conserve these tortoises as part of its directive to conserve biodiversity on lands managed by the BLM.

Please 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

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