



DESERT TORTOISE COUNCIL

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Via email

22 March 2024

Attn.: RMPA EA
Tyler Lindsey, Manager
Lower Sonoran Field Office
Sonoran Desert National Monument
Bureau of Land Management
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Phoenix, AZ 85022.
BLM_AZ_SDNMtargetshooting@blm.gov
tlindsey@blm.gov

RE: Sonoran Desert National Monument Target Shooting Resource Management Plan Amendment EA (DOI-BLM-AZ-P040-2022-0001-RMP-EA) and Finding of No Significant Impact

Dear Mr. Lindsey,

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 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 proposed project in habitats occupied by the Sonoran desert tortoise (*Gopherus morafkai*) (synonymous with Morafka's desert tortoise), our comments include recommendations intended to enhance protection of this species and its habitat during activities authorized by the Bureau of Land Management (BLM), which we recommend be added to the authorizing document

(e.g., resource management plan amendment, etc.) for this proposed action, as appropriate. Please accept, carefully review, and include in the relevant project file the Council’s following comments and attachments for the proposed project.

The International Union for Conservation of Nature’s (IUCN) Species Survival Commission, Tortoise and Freshwater Turtle Specialist Group, now considers the Sonoran desert tortoise, located in Arizona and Sonora, Mexico, to be Vulnerable at this time, but nearly qualifies as Endangered (Averill-Murray et al. 2023). “Steep declines of approximately 54% have occurred in recent years in several formally monitored local subpopulations in Arizona.” “Despite evidence that several subpopulations have stabilized or increased, survival rates are predicted to decline with future drought conditions, which are expected to intensify with global climate change.” In Mexico, “patterns of rainfall and drought across Sonora mirror those in Arizona and suggest that Sonoran subpopulations likely increased and decreased similarly over time.” According to the IUCN, this designation of Vulnerable means that the species is “considered to be facing a high rate of extinction in the wild” and is one step above endangered.

The IUCN identified several threats to the survival of the Sonoran desert tortoise including residential, commercial, and industrial development; ranching and farming; roads and railroads; hunting and trapping; recreational activities; wildfires and fire suppression activities; invasive non-native plant species; and drought/temperature extremes from climate change.

Description of the Proposed Action

Consistent with the 2017 Monument Target Shooting Resource Management Plan Amendment/Final Environmental Impact Statement (RMPA/FEIS) and the April 2022 settlement agreement, this proposed Resource Management Plan Amendment/Environmental Assessment (RMPA/EA) focuses only on recreation management decisions for dispersed recreational target shooting and the resources and uses in the Sonoran Desert National Monument (Monument) affected by that activity. BLM defines “recreational target shooting” as “the discharge of any firearm for any lawful recreational purpose other than the lawful taking of a game animal” (i.e., hunting).

BLM is proposing three action alternatives in addition to the No Action Alternative.

Alternative A: No Action – The existing management guidance per the 2018 Approved RMPA would continue. About 50,500 acres (10%) of the Monument is unavailable for dispersed recreational target shooting, while the remainder of the Monument (435,200 acres; 90%) is available for dispersed recreational target shooting.

Alternative B: Monument Object Protection Alternative – The focus of this alternative is on protection of Monument objects that are considered incompatible with dispersed recreational target shooting because they have low resilience to disturbance associated with that activity. dispersed recreational target shooting would be available on 165,130 acres (34% of the Monument) and unavailable on 320,661 acres (66% of the Monument). These Monument objects included Category I and II tortoise habitat, saguaro cactus forest communities, 0.25-mile buffers around water sources and bat colonies, designated critical habitat for the acuña cactus, and a 0.25-mile buffer around pre-historic and historic sites. A monitoring and mitigation protocol would be implemented to “determine if areas would remain available for dispersed recreational target shooting under the limits of acceptable change.” “Closures could require a plan amendment” (BLM 2024).

Alternative C: Settlement Agreement Alternative – This alternative was developed following the requirements of the April 2022 settlement agreement, which identified specific areas to be analyzed as unavailable, identified buffer distances for specific resources (such as the Komatke Trail), and required incorporating the results of the suitability analysis (in Appendix A of the EA). Areas lacking suitable topography for dispersed recreational target shooting backstops are designated as unavailable. Other resource buffers for the protection of Monument objects were retained (Alternative B). Designated wilderness areas and lands managed to protect wilderness characteristics would be unavailable for dispersed recreational target shooting to preserve wilderness characteristics. Dispersed recreational target shooting would be available on 5,295 acres (1% of the Monument) and unavailable on 480,496 acres (99%) of the Monument. Alternative C would include implementation of the existing Monument Monitoring and Mitigation Protocol as in Alternative B.

Alternative D: Monument Unavailable for Dispersed Recreational Target Shooting – All BLM-administered lands in the Monument would be unavailable for dispersed recreational target shooting. Dispersed recreational target shooting opportunities would continue to be available on nearby BLM-administered lands outside the Monument. Alternative D would include implementation of the existing Monument Monitoring and Mitigation Protocol. This alternative would reduce the demand on BLM staff resources for monitoring.

Alternatives Considered but Eliminated from Further Study

BLM considered two additional alternatives. One would have included additional resources identified as not compatible with dispersed recreational target shooting disturbance, such as mountain lion habitat, and increased the buffer areas around known locations of Monument objects listed in Alternatives B and C. The second alternative considered combining the results of the topographic suitability analysis and the components of Alternative B. BLM eliminated these alternatives from analysis because they would have substantially similar effects to those under the action alternatives and the difference in acreages effects between these alternatives and the action alternatives was small.

The Sonoran Desert National Monument is located in Maricopa and Pinal counties between Buckeye to the north, Maricopa to the east, and Gila Bend to the west. It is bordered by the Barry M. Goldwater Military Range to the southwest and the Tohono O’odham Tribal Lands to the southeast. The remaining boundary is bordered by BLM, state and private lands.

The Monument contains extensive saguaro cactus (*Carnegiea gigantea*) forest communities, three distinct mountain ranges: the Maricopa, Sand Tank, and Table Top Mountains, and other prominent features such as the Booth and White Hills, all separated by wide valleys. Three wilderness areas are within the Monument (the North Maricopa Mountains Wilderness, the South Maricopa Mountains Wilderness, and the Table Top Wilderness), and many significant archaeological and historic sites. It includes 165,927 acres of Category I habitat, 124,704 acres of Category II habitat, and 3,497 acres of Category III habitat for the Sonoran desert tortoise.

Comments on the Environmental Assessment

First Page after Front Cover: “The BLM’s multiple-use mission is to sustain the health and productivity of the public lands for the use and enjoyment of present and future generations.” The Council requests that this quote be removed from the document. This EA is about managing a

national monument, not public lands managed under the Federal Land Policy and Management Act (FLPMA) for multiple use. This quote should be replaced with a information from Presidential Proclamation 7397 in 2001 that established the Sonoran Desert National Monument. This Proclamation directed BLM to protect the objects listed in the Proclamation, including the tortoise, tortoise habitat, and the diversity of native wildlife and vegetation in the Monument as well as the biological, scientific, and historic resources.

Pages 15-23: Under Alternative B, BLM says, “Closures [to recreational target shooting] could require a plan amendment.” For this and the other Alternatives that allow target shooting, we did not find seasonal closures proposed. Short and Finney (2022) stated that “[m]ost public lands are subject to seasonal closure to all target shooting when conditions become very dry.” This closure is implemented to reduce the risk of fire because of the presence of dry vegetation and ignition sources from humans including, vehicles, smoking, shooting, and fireworks.

The Council requests that BLM include this management action in all alternatives where target shooting is allowed in the Monument, and that BLM have the authority to implement seasonal closures without amending the RMP.

In this section on Alternatives, we did not find an alternative that BLM indicated as the preferred alternative or the environmentally preferred alternative. Please modify the EA to include this information.

Page 24, Management Common to All Alternatives: In the EA, BLM says that “anyone engaging in recreational target shooting activities within the Monument must comply with all SOPs [standard operating procedures] and the general mitigation measures and administrative actions described in Appendix H of the 2012 Monument RMP/FEIS (BLM 2012b); as adopted in Appendix D of the 2012 Approved RMP (BLM 2012a); and applicable laws and regulations.” For the alternatives allowing target shooting, “[s]hooters are required to remove any targets, items on which targets are mounted, and brass and shells (including shotgun shells) from spent ammunition.” “It is the ultimate responsibility of the recreational target shooter to ensure the projectiles they fire are contained within the shooting site they select.”

In searching the BLM website for the Monument (<https://www.blm.gov/national-conservation-lands/arizona/sonoran-desert>) and the Visiting the Sonoran Desert National Monument website (<https://www.blm.gov/visit/sonoran-desert-national-monument>), we found no information on standard operating procedures, general mitigation, measures, and administrative actions, and applicable laws and regulation posted for the activity of recreational target shooting. In the Monument brochure (https://www.blm.gov/sites/default/files/docs/2023-08/AZ_PHD_LSFO_Sonoran-Desert-NM-Brochure-2023-508.pdf), we found a short paragraph on Know the Rules, Target Shooting:

“Target Shooting: Part of the monument is closed to target shooting: see map. Where target shooting is allowed, a safe backdrop is required. Use firearms responsibly; shooting natural features, including cactus and other plants, is prohibited. It is also illegal to knowingly shoot on, from, across, or into any road or trail.”

We ask how BLM expects the public to access, read, and follow the many requirements in Appendix H and Appendix D when they are not easily available to the public that plans to or is visiting the Monument (e.g., provided on the BLM webpages and the brochure for the Monument,

posted at applicable locations at the entrances to or inside the Monument). Consequently, any assumptions that BLM is making about compliance with these many requirements by a knowledgeable public and resulting impacts to objects identified for protection in the Proclamation, including the tortoise, should be reassessed and reanalyzed in the EA.

Page 24, Monitoring and Mitigation Protocol: “[T]he BLM has established a framework for periodically monitoring and assessing the impacts of dispersed recreational target shooting and may implement management responses...”

The Council requests that the protocol that BLM implements should be conducted seasonally and be a high priority. We are concerned that BLM’s overworked staff may not implement the protocol for several years, and unknowingly (because of the absence of collecting data) allow destruction/degradation of objects in the Monument it is obligated to protect. This concern is based on, for example, BLM’s history of not implementing land health evaluations on grazing allotments for several years. In addition, “may implement” should be changed to “will implement” management responses and add “to correct the levels of impact(s) and restore the damaged resources.” This is BLM’s directive for managing the objects listed in the Proclamation.

“The April 2022 settlement agreement requires the BLM to apply a mitigation and monitoring protocol designed to protect Monument objects where dispersed recreational target shooting is allowed under Alternative C. This proposed RMPA/EA considers that this monitoring and mitigation protocol would apply to all alternatives.” The Council appreciates this especially as the protocol would be applied to track impacts from illegal target shooting if no target shooting is allowed in the Monument. We would like clarification on the protocol that BLM proposes to implement. Please see our comments below on “Appendix B Sonoran Desert National Monument Monitoring and Mitigation Protocol.”

Pages 37-41, 45, Affected Environment, Sonoran Desert Tortoise – We found no information on the baseline condition for the Sonoran desert tortoise in the Monument in the EA. Because the Monument was established in 2001 and requires protection of the tortoise, the tortoise became a candidate species under the Federal Endangered Species Act (FESA) in 2010 until 2021, and the BLM is a signatory to implementing the Candidate Conservation Agreement for the Sonoran Desert Tortoise (*Gopherus morafkai*) in Arizona, we would expect that BLM would have collected baseline data on the tortoise population in the Monument. That information should be compared to current and future data collected on the status of the tortoise in the Monument. We request that BLM include its demographic data on the tortoise in the Monument per its management responsibilities.

Pages 44-54, Environment Consequences, Sonoran Desert Tortoise: On pages 28-29 of the EA, BLM provided the results of a recreational site inventory and targeted site evaluations. These reports concluded that “the vast majority of dispersed recreational target shooting activities occurring on the Monument do not meet criteria for legal dispersed recreational target shooting (i.e., users are not removing litter, targets, or shell casings; vegetation and other resources are being used as targets and/or sustaining unintentional damage from gunfire; and users are accessing shooting areas via illegal routes or traveling cross-country via motorized vehicle).” They also concluded that numerous activities including illegal actions are associated with some target shooting some of which are described below. In addition, BLM concluded that “dispersed recreational target shooting is heavily dependent on motorized vehicles for access” (BLM 2014). Apparently, this includes illegal access.

The EA should describe and analyze all the impacts associated with legal and illegal target shooting recreation. This would include impacts to the tortoise and other special status species from litter, trash, and food (increased predators/predation); contamination to soils, vegetation, and wildlife from heavy metals such as lead (Pain et al. 2019) (Arizona does not prohibit the use of lead ammunition) including its movement and concentration through the food web; and impacts from the use of motorized vehicles including physical and temporal impacts to soils, vegetation, and wildlife, increased surface disturbance, transport of non-native plants, and sources of wildfires.

Wildfires should be a major concern of BLM in managing objects to be protected. For example, when managing for the tortoise and its habitat, one wildfire can destroy hundreds of thousands of acres of habitat (based on the recent history of wildfires in the Sonoran Desert in Arizona) and injure or kill most tortoises in the fire's path. After a fire, it is unlikely that this area will return to its pre-fire condition for several decades, if ever.

Large, intensive wildfires in Sonoran Desert vegetation communities are not historically common. Historically, fire was not an important ecological process in the evolution of the Sonoran Desert (Esque et al. 2002). In the Sonoran Desert, climate and human activities influence fire regimes through their effects on fuel condition and fire ignition (Alford et al. 2005). Precipitation and temperature govern the amount of vegetation that is produced and the moisture content of the fuels. Human activities often provide an ignition source to the fuels. Most of the wildfires in the Sonoran Desert are human caused.

The 115,000-acre Bush Fire in 2020 was carried largely by invasive non-native annual red brome. As a result, the Sonoran Desert ecosystem in places has been replaced by grasses and invasive plants that in turn promote fire. The Diamond Fire in 2023 was fueled by invasive buffelgrass. These fires burned so hot that native desert plants do not survive and are, in turn, replaced by more non-native grasses (McDermott 2024). The iconic saguaro is easily damaged and often killed by fire, and seedling establishment may be low after fire, especially when cover of mature saguaros and nurse plants is reduced.

Shryock et al. (2015) reported that “the most direct long-term effects of wildfire on Sonoran desert tortoise habitat involve changes in the availability of food, thermal refugia, and protection from predation. Invasive non-native plant species may increase in abundance following wildfire and may reduce the growth or survival of juvenile desert tortoises. In addition, “most measured vegetation properties did not show a full recovery to undisturbed conditions” for the time since the study on wildfires occurred which was 30 years. Shryock et al. (2015) concluded that “reductions in vegetation cover in burned areas, along with changes in food availability or diversity, could be particularly influential to the survival of juvenile desert tortoises and their recruitment into larger size classes” meaning their survival and recruitment would be substantially reduced.

McDermott (2024) asserts that preventing fires in the first place makes more sense than waiting for saguaros, other cacti, and other perennial vegetation native to the Sonoran Desert to grow.

In the Proclamation, the protection of the “large saguaro cactus forest communities” and “palo verde/mixed cacti association” and specifically “saguaros, palo-verde trees, ironwood, prickly pear, and cholla” and the endangered acuña pineapple cactus are specifically listed along with other plant species. Fauna specifically listed in the Proclamation include and endangered Sonoran pronghorn, desert bighorn sheep, three species of bats, numerous species of nesting birds, the Sonoran desert tortoise, and 25,000 acres of land in the Maricopa Mountains area as critical habitat for the desert tortoise.

One large fire the size of the 243,000-acre Cave Creek Complex Fire would destroy the natural and cultural resources on half the Monument that BLM is directed to protect under the Proclamation.

The Council contends that BLM is obligated to manage the Monument to substantially minimize the likelihood of wildfires occurring because of the impacts of fire on the ability of the tortoise in the Monument to survive and persist including recruiting tortoises for the next generations. We equate “protect” in the Proclamation with “survive and persist.” This obligation to minimize wildfire extends to other wildlife and plants species/vegetation associations listed in the Proclamation.

Because of the large-scale, severe, and long-term detrimental impacts of wildfire on floral and faunal species that occur in the Monument that BLM is directed to protect, BLM should be actively implementing and regularly updating a science-based, effective fire prevention plan and fire suppression plan. The fire prevention plan would substantially reduce/eliminate human-caused ignition sources and non-native plants that fuel these fires. Human-caused ignition sources include target shooting and associated activities. Non-native plant management would include eliminating the transport of non-native plants/seeds into the Monument and each year mapping and eliminating areas where these plants are found before they set seed. The fire suppression plan should be implemented during “fire season,” which may extend for several months or in some year may be year-long, so that more rapid and appropriate response to fires in and near the Monument occur.

The Council is also concerned about human health and safety. In the EA, BLM establishes a 0.25-mile buffer around known natural and cultural resources to protect them from damage, noise, disturbance, and risk of mortality. In Arizona, it is legal to possess and use high-powered firearms that shoot projectiles farther than 0.25 mile. Consequently, if BLM is to protect specific natural and cultural resources from the direct impacts of target shooting, BLM should increase the distance of this buffer area to the distance that projectiles can travel from the use of legally possessed firearms in the Monument.

The Council request that all these impacts associated with recreations target shooting be analyzed in the EA for protected objects including the tortoise and tortoise habitat, and for vegetation and soils.

Page 55, Wildlife, Cumulative Effects: On page 30 of the EA, BLM says, “The analysis assesses the magnitude of cumulative impacts by comparing the environment in its baseline condition with the expected impacts of the alternatives and other actions in the same geographic area.” Unfortunately, we were unable to find this assessment of the magnitude of cumulative impacts, especially for wildfire.

Unfortunately, we were unable to find this analysis in the cumulative effects section for wildlife on page 55. The analysis is limited to mentioning the “increased wildfire occurrence.” It does not analyze the impacts of this increased occurrence or the increased size and intensity of these fires. It does not analyze the sources of the increased non-native invasive plants that fuel these fires, increased surface disturbance activities that facilitate the establishment of non-native plants, or the increased ignition sources.

To track cumulative impacts, the Council requests that BLM add this proposed action and its impacts to a database and geospatial tracking system for special status species, including the

Sonoran desert tortoise, that track cumulative impacts (e.g., surface disturbance, paved and unpaved routes, cross-country travel, linear projects, invasive species occurrence, herbicide/pesticide use, wildfires, etc.), management decisions to mitigate these impacts, and effectiveness of mitigation for each action. Without such a database and tracking system, BLM is unable to analyze cumulative impacts to special status species (e.g., desert tortoises) with any degree of confidence.

Appendix B Sonoran Desert National Monument Monitoring and Mitigation Protocol

[From: Proposed Resource Management Plan Amendment and Final Environmental Impact Statement for the Sonoran Desert National Monument, Arizona (BLM 2017)]

In our October 28, 2022 comment letter to BLM during the public scoping period for the EA, the Council requested that for all alternatives analyzed, BLM include a scientifically robust, statistically valid monitoring plan that BLM will fund and implement to determine (1) the efficacy of compliance, and (2) impacts to resources including the tortoise and tortoise habitat used for breeding, feeding, shelter, and connectivity.

Throughout the 2024 EA, BLM refers to Appendix B of the 2017 RMPA as the protocol it would use for monitoring and mitigation. The Council is providing comments on this Monitoring and Mitigation Protocol (Protocol).

BLM describes the 2017 Protocol as “not a complete plan, but is presented as an initial framework – with specific examples – to illustrate how the subsequent, completed protocol would function in the protection of the SDNM’s objects.”

The Council contends the Protocol that BLM provided in the 2017 RMPA, which was seven years ago, should be completed and not left as a framework for BLM to complete at a later date, whenever that may be. In addition, this completed Protocol should be provided in the EA so the public and the decisionmaker can review it and determine the effectiveness of the proposed mitigation and monitoring with respect to its objectives, methods, implementation, schedule, identification of triggers to implement mitigation, and monitoring to determine the effectiveness of the mitigation to fully offset the impacts and implementation of adaptive management. The Protocol should use the best available science for each object to determine whether target shooting and associated activities are having an impact on each protected object — and if the impacts are adverse, the appropriate mitigation that will be implemented to replace the functions and values degraded or lost from target shooting and associated activities.

When the monitoring and mitigation protocol is included in the public review process, this provides the public with the opportunity to provide comments based on their diverse knowledge and experience regarding the adequacy and soundness of the proposed protocol. This public review process increases the likelihood that the monitoring and mitigation protocol when implemented will be effective in protecting the objects/resources as directed by the Proclamation.

As mentioned under the description of alternatives, a monitoring and mitigation protocol would be implemented to “determine if areas would remain available for dispersed recreational target shooting under the limits of acceptable change.” We did not find a definition of what the limits of acceptable change are for the natural and cultural resources in the Monument that BLM is directed

to protect. We suggest this definition should be unique to each resource to be protected because each resource has different needs for its protection = persistence. For example, for the tortoise we suggest that successfully protecting the tortoise would mean that the tortoise population in the Monument has (1) a density that is viable with healthy individuals comprising the population, (2) a sex ratio that is 1:1 or slightly favors females, (3) recruitment occurring, (4) a trend of stable or increasing abundance and density.

The 2017 Monitoring and Mitigation Protocol is a methodology to visually assess recreational impacts to recreational use areas. Unfortunately, this Protocol does not use science to determine stressors and impacts to the protected objects, including the tortoise and tortoise habitat. Rather, it assumes that certain types and numbers of observable incidents from target shooting only are acceptable until a pre-established number of these incidents is reached. We conclude the Protocol is not assessing the effects of target shooting and associated activities on the objects/resources to be protected.

We found no evidence that BLM designed the Monitoring and Mitigation Protocol to gather baseline data on the status/condition of the protected objects/resources to determine a baseline condition and measure the change in that condition using parameters that are important indicators of the persistence/longevity of that object/resource. We found no indication that the monitoring component of the Protocol was designed for statistical adequacy. We found no indication that BLM used science to develop the Protocol especially for the natural resources it is directed to protect. We found no scientifically supported studies to determine the point at which an impact or combination of impacts would trigger the implementation of mitigation, including avoidance, because the objects/resources were no longer being protected in the Monument. We strongly recommend that BLM revise the Protocol to focus on analyzing impacts to the objects from target shooting and associated activities, including indirect and cumulative impacts.

Page B-2: “Impacts on some Monument objects can be remediated through revegetation, cleanup efforts, or other methods.” This statement makes revegetation sound simple in a desert environment. BLM is not including the ecological cost of restoration, the economic cost of the restoration [(revegetation estimates vary from \$4,400 to almost \$27,000 per hectare (Bean et al. 2004, Abella et al. 2023)], and the temporal cost from the loss of the ecological functions and values this vegetation provides to the diversity of flora and fauna that are listed for protection in the Proclamation. For the last factor, Kade and Warren (2002) reported that 56 years after removing an area in the lower Sonoran Desert from vehicle and foot traffic, it did not show full recovery of vegetation and biological soil crusts to pre-disturbance conditions. Shryock et al. (2015) reported that long-lived desert trees and shrubs in the Sonoran Desert exhibit slow population growth, with episodic recruitment and potentially multi-decadal generation times. Although vehicle and foot traffic are not the direct result of target shooting, they are a necessary component of the process to engage in target shooting. At the Monument, multiple impacts from target shooting and associated activities occur to the objects BLM is mandated to protect and all should be monitored.

Page B-3: The Protocol’s objectives are to manage the two recreation management zones (RMZs) within the Monument, the Anza RMZ and the Desert Back Country RMZ, and accomplish their management goals to provide distinct visitor opportunities. The Protocol gives the impression that

recreation management is the priority use for managing the Monument, not protection of the objects (i.e., natural and cultural resources). The Council strongly recommends that BLM refocus the purpose, intent, and objectives of the Protocol on protection of the objects and not the recreation experience.

Pages B-12 and B-13: For the section on mitigation and throughout the Protocol, BLM uses the terms “remediate” and “remediation.” Remediate is the process of improving or correcting a situation. Remediation of a resource does not always result in protection of that resource such that it is sustained or persists. If BLM is serious about protecting the objects listed in the Proclamation, BLM should revise the Protocol to prevent/avoid degradation/loss of objects protected under the Proclamation, followed by all other forms of mitigation under the Council on Environmental Quality’s (CEQ) regulations for implementing the National Environmental Policy Act (NEPA) such that the impacts are fully offset, including temporal impacts.

Comments on the Finding of No Significant Impact

Page 2: This document lists numerous impacts that occur from recreational target shooting. However, the FONSI did not include wildfire as an impact from target shooting. The ignition source for wildfires from shooting has been reported by Short and Finney (2022) and Stern (2013, 2015). The number of wildfires reported as caused by shooting at inert targets in Arizona between 1992–2018 was 34 (Short and Finney 2022). Ninety-one percent of target shooting wildfires in the western U.S. were seasonal. They suggest that fuel ignitability may be one reason for these fires.

Wildfires in the Sonoran Desert severely damage/destroy native vegetation and kill/injure wildlife including special status species such as the tortoise. The short-term effects of wildfire in Sonoran Desert vegetation communities include reductions in vegetation cover and losses of dominant shrub, tree, and cacti species, which rarely resprout (Shryock et al. 2015).

The Council provided this information and references to BLM in our October 22, 2022 Scoping Comments – Sonoran Desert National Monument Target Shooting Resource Management Plan Amendment Environmental Assessment. We are disappointed that BLM did not identify wildfires and wildfires cause by target shooting as an impact in the EA or analyze its effects. BLM is obligated to protect these objects/resources in the Sonoran Desert National Monument that are easily destroyed by wildfire. For natural resources, their restoration may take several decades or longer. For the Sonoran desert tortoise, the generation length is 32 to 40 years (IUCN 2019).

For some cultural resources, there is no restoration once they are destroyed by wildfire. We request that BLM describe and analyze these impacts in the EA and that the results of this analysis be included in the FONSI.

Page 3: “The BLM will monitor the resources in the Monument in accordance with the Monument Monitoring and Mitigation Protocol.”

Please see the Council’s comments above under Appendix B Sonoran Desert National Monument Monitoring and Mitigation Protocol Plan. Based on many factors, the Council disagrees with BLM’s conclusion in the FONSI that implementation of this Protocol will protect the

objects/resources that BLM is mandated to protect under the Proclamation. BLM is not requiring restoration, only remediation, and this is not required in all cases. Remediation results in the continuing degradation/loss of natural resources especially for those resources that require a long time (i.e., decades) for restoration (e.g., soils, soil crusts, perennial vegetation, long-lived species such as the tortoise, etc.).

Finally, the Council reasserts its opposition to BLM authorizing target shooting in the Sonoran Desert National Monument. Our reasons were provided in our October 28, 2022 letter to BLM, and information provided above on mortality to tortoises and degradation/destruction of plant communities from human activities related to target shooting including wildfire. These losses of protected objects would take several decades to restore, if at all. Authorizing an activity that can cause such large-scale and long-term destruction of objects that BLM has been charged with protecting is inappropriate and unacceptable.

We appreciate this opportunity to provide the above comments and trust they will help protect tortoises during any resulting authorized activities. 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 Desert Tortoise Council at eac@deserttortoise.org of any proposed projects/actions that 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 it to ensure BLM fully considers actions to conserve tortoises as part of its directive to conserve biodiversity on public lands managed by 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 proposed action.

Respectfully,



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

cc. Raymond Suazo, Arizona State Director, Bureau of Land Management,
blm_az_asoweb@blm.gov

Literature Cited

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