



## DESERT TORTOISE COUNCIL

4654 East Avenue S #257B  
Palmdale, California 93552

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

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

### Via email and BLM eplanning comment portal

27 March 2020

Ms. Valerie Gohlke, Public Affairs Specialist

Bureau of Land Management

Kingman Field Office

2755 Mission Blvd.

Kingman, AZ 86401

[vgohlke@blm.gov](mailto:vgohlke@blm.gov)

[https://eplanning.blm.gov/epl-front-](https://eplanning.blm.gov/epl-front-office/eplanning/comments/commentSubmission.do?commentPeriodId=8001186)

[office/eplanning/comments/commentSubmission.do?commentPeriodId=8001186](https://eplanning.blm.gov/epl-front-office/eplanning/comments/commentSubmission.do?commentPeriodId=8001186)

RE: Black Mountain Herd Management Area Wild Burro Gather and Population Control Plan Environmental Assessment, Mohave County, Arizona (DOI-BLM-AZ-C010-2019-0030-EA)

Dear Ms. Gohlke,

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.

We appreciate this opportunity to provide comments on the Black Mountain Herd Management Area Wild Burro Gather and Population Control Plan Environmental Assessment (EA). Given the location of the proposed project in habitats likely occupied by Agassiz's desert tortoise (*Gopherus agassizii*) (synonymous with "Mojave desert tortoise") and Morafka's desert tortoise (*Gopherus morafkai*) (synonymous with "Sonoran desert tortoise"), our comments pertain to enhancing protection of these species during authorized activities.

## **Proposed Action**

During the next 10 years, the Bureau of Land Management (BLM) proposes to remove excess wild burros (*Equus asinus*), achieve and maintain the established appropriate management level (AML) of burros, and implement fertility control for wild burros on lands within and near the Black Mountain Herd Management Area (HMA). BLM is proposing to reduce the number of burros in/near this HMA from the estimated population of 2,205 in 2019 to 478, which was determined by BLM (1996) as the AML for this HMA. According to BLM (2019), the overpopulation of wild burros is a contributing factor to the poor land health of the grazing allotments in the HMA, and is causing public safety concerns and private property damage.

The Black Mountain wild burro herd is the largest wild burro herd on public lands. Located in northwest Arizona, the Black Mountain HMA includes BLM-administered land and portions of the National Park Service's Lake Mead National Recreation Area, Arizona State Trust Land, and Arizona Game and Fish – State Wildlife Areas.

BLM is requesting comments on whether it will implement all, part, or none of the proposed action alternatives for gathers and/or population control measures for wild burros. BLM's decision will not set or adjust the AML within the Black Mountain HMA nor adjust authorized animal unit months for livestock grazing within the HMA, as these decisions were set through previous planning and implementation-level decisions and would be undertaken in conformance with applicable regulations.

## **BLM's Proposed Alternatives**

BLM has analyzed five alternatives in the EA, the "No Action Alternative" and four Proposed Action Alternatives.

No Action Alternative – The wild burro population would likely continue to increase at an approximate rate of 15% per year. Within five years, the burro population could exceed 3,800, which would be 706% above the AML.

### **Proposed Action Alternatives**

Alternative A – Gather and remove excess wild burros, utilizing all BLM-approved gather methods, use fertility control vaccine treatments and adjust sex ratios to reduce population growth to achieve and maintain AML. Vehicles, heavy equipment, and helicopters would be used.

Alternative B – Gather and remove excess wild burros, utilizing all BLM-approved gather methods, use fertility control vaccine treatments, and adjust sex ratios to reduce population growth to achieve and maintain AML, geld up to 100 males. Vehicles, heavy equipment, and helicopters would be used.

Alternative C – Alternative C is the same as Alternative A but would not include sex ratio adjustments. Additionally, the number of females treated with fertility control would be increased from 100 to 150 females.

Alternative D – Alternative D is the same as Alternative A but would not include fertility control vaccines or sex ratio adjustments.

### **Desert Tortoise Council’s Recommendation for Proposed Action**

The Council is concerned that the overpopulation of wild burros is a contributing factor to the poor land health of the wildlife habitats in this HMA, specifically habitats for desert tortoises. To help reverse the worsening conditions of tortoise habitats, the Council supports BLM implementing a suite of activities that would safely, humanely, and quickly reduce the number of wild burros in the HMA to the most recently calculated AML and slow down recruitment to the greatest possible extent. Although BLM provided data in the EA on the number of burros removed in recent years, recruitment has greatly exceeded removal each year. Burro removal and ongoing maintenance of the burro AML is needed to reduce ongoing impacts to soils, surface hydrology, and vegetation so the habitats in this area may begin the decades-long restoration process.

We encourage BLM to use the best available data and develop/select a suite of activities that would provide BLM with the flexibility to implement them in various combinations as needed to reduce burro numbers and maintain the AML. This would include gathering and removing burros using new or modified methods (see below), adjusting sex ratios to reduce population growth, increasing the number of females given fertility control treatments, and using various fertility control treatments as they become available. In addition, whatever activities BLM decides to implement, the implementation, monitoring, and adaptive management methodology must occur routinely and be science-based.

### **Using Science and Technology**

The Council strongly supports the National Research Council’s (2013) recommendations and overall findings that BLM should use procedures for the scientific determination of their decisions and actions with regard to the management of wild burros.

BLM should adopt new technologies/methods for implementing its activities and incorporate them in the EA. For example, BLM should consider using drones to determine overall burro distribution and locate individual burros and groups to plan gathers rather than helicopters and vehicles. The last systematic aerial survey for burros was conducted in 2014; it covered about 75 percent of the HMA. Drone use provides several advantages over helicopter and land vehicle use such as efficiency and accuracy (e.g., several drones can survey different areas of the HMA simultaneously, thus reducing the likelihood of repeat counting or undercounting), economy (e.g., drones are less expensive to operate than helicopters), and less impact on the environment (e.g., reduced noise, greenhouse gas emissions, etc.). In addition, drones can be used to locate appropriate temporary gather sites and public observation sites with these same advantages. Increased survey accuracy conducted annually would result in increased accuracy in maintaining the burro AML and decreased impacts to tortoise habitats.

In Appendix H – Standard Operating Procedures for Population-level Fertility Control Treatments, BLM states “Records maintained by the Kingman Field Office will include the quantity of fertility control vaccines received and used, the number of treated jennies, and the freeze-mark(s) applied by date.” We recommend that BLM maintain records for each jenny

regarding the dates and quantities of fertility control vaccines received. For the vaccine to be effective, it must be administered periodically to each jenny. Unless BLM has data for each jenny and the quantity and date each dose is administered, BLM will not be able to conclude whether the appropriate vaccine regimen is properly implemented to each individual jenny.

### **Affected Environment**

In the Affected Environment section of the EA, BLM identifies only the Sonoran desert tortoise as occurring in the Black Mountain HMA and describes it as a “typical wildlife species” in the area. In Appendix I – Special Status Species, BLM reports, “the southern Black Mountains are a contact zone between the Sonoran and Mojave tortoise, although the Mojave lineage predominates.” We request that BLM clarify its information in the EA on the occurrence and abundance of Mojave and Sonoran desert tortoises in the Black Mountain HMA. Because of the occurrence of both species and their apparent niche separation, with *G. agassizii* generally occurring in alluvial fans and valley bottoms and *G. morafkai* occurring in foothills, hillside slopes, and more mountainous terrain (Edwards et al. 2015), information on the presence of both species should be included in the Affected Environment section of the EA.

### **Mitigation Measures**

Given the presence of both Sonoran and Mojave desert tortoises in the Black Mountain HMA and their ecological separation, we request that BLM develop and implement mitigation measures that are appropriate for each species.

The Sonoran desert tortoise is managed under the Sonoran Desert Tortoise Candidate Conservation Agreement (USFWS et al. 2015) of which BLM is a signatory. Under this Candidate Conservation Agreement, the Sonoran desert tortoise is a BLM Sensitive Species and is managed according to BLM Manual Section 6840 (2008), Special Status Species Management. In the Candidate Conservation Agreement, BLM committed “to implement measures to conserve the Sonoran desert tortoise and its habitat, to promote their conservation, and reduce the likelihood and need to be listed as threatened or endangered by managing this species and its habitat to minimize or eliminate threats affecting the status of the species or to improve the condition of its habitat.” Given these commitments, we encourage BLM to coordinate with the U.S. Fish and Wildlife Service and the Arizona Game and Fish Department (AGFD) during the development, implementation, and reporting on the effectiveness of mitigation measures for the Sonoran desert tortoise.

The population of the Mojave desert tortoise in the HMA is adjacent to the federally threatened *Gopherus agassizii*. Given the size of the HMA and number of burros to be gathered, held, and removed, we presume that BLM will need to establish several gather sites and observation sites throughout the HMA and will be transporting burros using several vehicles and routes throughout the HMA to one or more holding sites. To meet BLM’s criteria for locating these sites, most will likely occur in habitats for the Mojave desert tortoise and result in impacts to tortoises/tortoise habitats. We request that BLM implement measures to avoid, minimize, and rectify the impacts that will occur from its actions by adopting appropriate mitigation measures for the Mojave desert tortoise. Below is a list of the relevant mitigation measures (Desert Tortoise Council 2017) that BLM should implement when conducting burro gathering and/or removal activities in habitats for the Mojave desert tortoise in the Black Mountain HMA.

-----  
List of appropriate mitigation measures section numbers and headings for BLM to implement during activities to remove excess wild burros and maintain an appropriate management level of burros (from Desert Tortoise Council 2017).

- 3.2.1 – Field Contact Representative;
  - 3.2.2 – Authorized Desert Tortoise Biologist (or equivalent);
  - 3.2.3 – Biological Monitors;
  - 3.2.4 – Capturing, Handling, and Monitoring Desert Tortoises (first half of section);
  - 3.2.8 – Desert Tortoise Clearance Surveys and Relocation to Nearby Areas (last three Paragraphs of section);
  - 3.2.10 – Education and Environmental Awareness Program for All Workers at the Site of the Proposed Action, and include the public that is observing with workers;
  - 3.2.11 – Access to Project Site;
  - 3.2.12 – Speed Limits and Signage;
  - 3.2.13 – Trash and Litter Control Program;
  - 3.2.14 – Dogs, Other Pets, and Firearms;
  - 3.2.15 – Avian Predator Control and Raven Management Plan;
  - 3.2.17 – Trenches, Borings, and Other Excavations Outside Desert Tortoise Exclusion Fencing;
  - 3.2.18 – Checking for Tortoises beneath Vehicles and Equipment;
  - 3.2.19 – Construction Area Flagging;
  - 3.2.23 – Confining Activity to Delineated Areas and Times;
  - 3.2.24 – Noise Reduction;
  - 3.2.27 – Spill Prevention/Fire Management Plan;
  - 3.2.28 – Water Storage (last sentence of section);
  - 3.2.32 – Weed Management/Revegetation; and
  - 3.2.33 – Reporting.
- 

Some examples of the need for BLM to implement these mitigation measures are provided below.

3.2.32 - Weed Management: In the EA, we were unable to locate a commitment by BLM to use weed-free feed for burros or to use vehicles and equipment that are free of seeds or other plant propagules. To reduce the spread of invasive plant species (Executive Order 13112 and BLM Manual Section 1740-2 Integrated Vegetation Management), the EA should include mitigation measures that (1) all feed used for burros would be weed-free, and (2) all motorized and non-motorized equipment employed in the capture and transportation of gathered animals should be free of seeds and other plant propagules to ensure these activities do not promote the spread of invasive plant species.

3.2.15 – Avian Predator Control: In Appendix F – Standard Operating Procedures for Gathers, the Contractor may be required to humanely euthanize burros in the field and to dispose of the carcasses as directed. Because carcasses can quickly attract scavengers that are predators of desert tortoises [e.g., coyotes (*Canis latrans*) and common ravens (*Corvus corax*) (Boarman 2002, Boarman 2003, Esque et al. 2010)], we request that disposal/removal of carcasses from the HMA occur as soon as possible to eliminate attracting these scavengers to areas with/near tortoises.

3.2.15 – Avian Predator Control: In Appendix F of the EA, BLM states, “5. When dust conditions occur within or adjacent to the gather site or holding facility, the Contractor shall be required to wet down the ground with water.” Any water pooling or forming puddles on the ground attracts common ravens because it provides a subsidized water source for them (Boarman 2002). Because common ravens are a predator of the desert tortoise, we request that the Standard Operating Procedures (SOPs) for Gathers and all other SOPs using water applied to the ground be amended to include that no standing water would result from implementation of these procedures within a few minutes of its application.

3.2.2 – Authorized Desert Tortoise Biologist (or equivalent); 3.2.3 – Biological Monitors; 3.2.4 – Capturing, Handling, and Monitoring Desert Tortoises (first half of section); and 3.2.8 – Desert Tortoise Clearance Surveys and Relocation to Nearby Areas: In the Environmental Effects section of the EA, the BLM says, “Appendix J provides guidelines for handling Sonoran Desert Tortoise that are consistent with the Arizona Game and Fish Department’s Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects.” In Appendix I – Special Status and Threatened and Endangered Species, BLM says, “Mitigation measures would include that Handling Guidelines developed by the [Arizona] Game and Fish [Department] will be handed out to all workers. Activity sites would be located away from [tortoise] burrows.”

The Handling Guidelines that BLM provided in Appendix J of the EA are entitled “Guidelines for Handling Desert Tortoise Encountered on Roads and Vehicle Ways.” This BLM document is not comparable to the AGFD guidelines for handling, because it lacks information on handling tortoises with respect to appropriate habitat for releasing the tortoise, appropriate temperatures, use of burrows, use of a qualified biologist, timing of clearance surveys, use of disposable gloves, and other issues in the AGFD guidelines. We request that BLM replace their handling guidelines in this appendix with the AGFD’s (2014) Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects (<https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/2014%20Tortoise%20handling%20guidelines.pdf>). In addition, we request that BLM comply with the all requirements in this document including that “managers of projects likely to affect desert tortoises should obtain a scientific collecting license from the Department [AGFD] to facilitate handling or temporary possession of tortoises.”

Because BLM is a signatory to the Candidate Conservation Agreement and member of the Arizona Interagency Desert Tortoise Team, we request that BLM implement all other AGFD-provided guidance on Sonoran desert tortoises. This would include implementing the Desert Tortoise Survey Guidelines for Environmental Consultants (AGFD 2010) <https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/2010SurveyguidelinesForConsultants.pdf> and the

Recommended Standard Mitigation Measures for Projects in Sonoran Desert Tortoise Habitat (Arizona Interagency Desert Tortoise Team 2008). The Survey Guidelines describe clearance surveys as having 100 percent coverage. The latter document (<https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/MitigationMeasures.pdf>) includes scheduling activities to reduce potential adverse effects, developing and implementing an information and education plan for project personnel, designating a desert tortoise coordinator, modifying project activities to avoid injuring or harming tortoises in the project area, minimizing the project's footprint, limiting habitat disturbance within the project footprint, preventing attraction of predators or enhancement of predator populations, removing hazards, restoring habitat, and monitoring the effectiveness of the mitigation and reporting it to AGFD.

3.2.2 – Authorized Desert Tortoise Biologist (or equivalent); 3.2.3 – Biological Monitors; 3.2.4 – Capturing, Handling, and Monitoring Desert Tortoises (the first half); and 3.2.8 – Desert Tortoise Clearance Surveys and Relocation to Nearby Areas: Prior to setting up each gather site, observation site, or temporary holding site, “BLM would conduct all necessary clearances (archaeological, special status plant/animal species, etc.)” We request that BLM provide a description of the clearance methodology to be implemented for desert tortoises and the qualifications of those who would conduct the clearances.

### **Appropriate Management Level for Burros in the Black Mountain HMA**

Although BLM's decision will not set or adjust the AML for wild burros within the Black Mountain HMA, we urge BLM to revisit this AML as soon as possible. Several changes have occurred since the AML was established in 1996. These include but are not limited to:

- climate change and associated impacts of longer and more severe droughts, more aggressive invasive species, and increased fire frequency, intensity, and size;
- requirements to consider climate change in land management actions and decisions;
- increased human population use nearby and associated wildlife subsidies and conflicts;
- continuing decline in the poor land health of the grazing allotments in the HMA;
- requirements to conserve recently designated special status species, and
- a burro population more than three times larger than the appropriate management level.

These factors and others have resulted in new or an increased magnitude of threats that were not present when the AML for burros was established in 1996.

We contend that the AML should not be a number or range of numbers, but an adaptive process. The establishment of an AML for each HMA should be linked to consistent, scientifically supported methods and data. As new data are collected on rangeland, equid, and wildlife dynamics and needs, including the needs of herbivorous (e.g., desert tortoises) and omnivorous wildlife species, they are used to calculate an updated AML. This approach allows for adaptive management of the AML every year or few years, rather than the current process of establishing an AML number with no ability to easily adjust it as environmental conditions change in the Black Mountain HMA.

We appreciate this opportunity to provide our comments and trust that our input will help protect tortoises during any authorized project activities. Herein, we ask that the Desert Tortoise Council be identified as an Affected Interest for this and all other BLM projects that may affect species of desert tortoises or their habitats, and that any subsequent environmental documentation for this particular project is provided to us at the contact information listed above.

Regards,



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

### Literature Cited

- [AGFD] Arizona Game and Fish Department. 2010. Desert Tortoise Survey Guidelines for Environmental Consultants. <https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/2010SurveyguidelinesForConsultants.pdf>
- [AGFD] Arizona Game and Fish Department. 2014. Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects (<https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/2014%20Tortoise%20handling%20guidelines.pdf>)
- Arizona Interagency Desert Tortoise Team. 2008. Recommended Standard Mitigation Measures for Projects in Sonoran Desert Tortoise Habitat. June 2008. <https://s3.amazonaws.com/azgfd-portal-wordpress/PortalImages/files/wildlife/MitigationMeasures.pdf>
- Boarman, W.I. 2002. Threats to Desert Tortoise Populations: A Critical Review of the Literature. U.S. Geological Survey, Western Ecological Research Center, San Diego Field Station, San Diego, CA. Prepared for West Mojave Planning Team, Bureau of Land Management.
- Boarman, W.I. 2003. Managing a subsidized predator population: Reducing common raven predation on desert tortoises. Environmental Management v. 32, p. 205–217. <http://obpa-nc.org/DOI-AdminRecord/0054468-0054487.pdf>
- [BLM] Bureau of Land Management. 1996. Black Mountain Ecosystem Management Plan, Environmental Assessment and Decision Record. Bureau of Land Management, Phoenix District, Kingman Resource Area; National Park Service, Lake Mead National Recreation Area, and Arizona Game and Fish Department.
- [BLM] Bureau of Land Management. 2019. An Evaluation of Standards for Rangeland Health (BLM-AZIM-99-012) for the White Hills Evaluation Area. Mohave County, Arizona. Kingman Field Office, Kingman, AZ.



Desert Tortoise Council. 2017. A Compilation of Frequently Implemented Best Management Practices to Protect Mojave Desert Tortoise during Implementation of Federal Actions. [https://deserttortoise.org/wp-content/uploads/dtc\\_construction\\_BMPs\\_090517.pdf](https://deserttortoise.org/wp-content/uploads/dtc_construction_BMPs_090517.pdf)

Edwards, T., K. H. Berry, R. D. Inman, T. C. Esque, K. E. Nussear, C. A. Jones, and M. Culver. 2015. "Testing Taxon Tenacity of Tortoises: Evidence for a Geographical Selection Gradient at a Secondary Contact Zone." *Ecology and Evolution* 5 (10):2095-114.

Esque, T.C., K.E. Nussear, K.K., Drake, A.D Walde, K.H., Berry, R.C. Averill-Murray, A.P. Woodman, W.I. Boarman, P.A. Medica, J. Mack, and J.S. Heaton. 2010. Effects of subsidized predators, resource variability, and human population density on desert tortoise populations in the Mojave Desert, USA: *Endangered Species Research*, v. 12, p. 167–177.

National Research Council. 2013. *Using Science to Improve the BLM Wild Horse and Burro Program: A Way Forward*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/13511>.

[USFWS] U. S. Fish and Wildlife Service. 2015. Candidate Conservation Agreement for the Sonoran Desert Tortoise (*Gopherus morafkai*) in Arizona. Phoenix AZ.