

DESERT TORTOISE COUNCIL

4654 East Avenue S #257B Palmdale, California 93552 www.deserttortoise.org eac@deserttortoise.org

Via BLM eportal and emai

29 June 2020

Amanda Dodson, Field Manager
Bureau of Land Management, Kingman Field Office
2755 Mission Blvd, Kingman, AZ 86401
Attn: Big Ranch/Gold Basin Permit Renewal
adodson@blm.gov, https://eplanning.blm.gov/eplanningui/project/1505667/595/8001450/comment

RE: Big Ranch Unit A, Big Ranch Unit B, Gold Basin Allotments Grazing Permit Renewals Environmental Assessment (DOI-BLM-AZ-C010-2020-0025-EA)

Dear Ms. Dodson,

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 management and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the Big Ranch Unit A, Big Ranch Unit B, Gold Basin Allotments Grazing Permit Renewals Environmental Assessment (EA) in habitats 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") (collectively "desert tortoises" or "tortoises"), our comments pertain to enhancing protection of these species during activities authorized by the Bureau of Land Management (BLM). Because the habitat requirements for desert tortoises are not the same as foraging requirements for cattle, we are providing you with comments to help BLM manage for Mojave and Sonoran desert tortoises and their habitats where livestock grazing currently occurs.

We acknowledge and thank BLM's Kingman Field Office for notifying the Council of this Environmental Assessment. We appreciate your efforts to honor the Council's written request to provide us with information on proposed actions by BLM that may affect Mojave or Sonoran desert tortoises and/or its habitats.

Location of Proposal

The Big Ranch Unit A, Big Ranch Unit B, Gold Basin grazing allotments occur in the White Hills Land Health Evaluation Area, north of Kingman in Mohave County, Arizona. The allotments cover approximately 393,500 acres with BLM managing 273,200 acres, Arizona State Land Department managing 18,277 acres, and 102,023 acres of private land.

Alternatives Presented

BLM describes three alternatives:

- No Action BLM would allow the permittee to continue current yearlong grazing management for 10-years in the Big Ranch Unit A and Gold Basin allotments, and ephemeral grazing management in Big Ranch Unit B. Most of the Key Areas (i.e., sample sites) in the White Hills Evaluation Area and all Key Areas near/within the range of desert tortoises did not meet rangeland health standards for cattle.
- Proposed Action Same as No Action but with new terms and conditions (as appropriate), maintenance of existing range improvements, and addition of 16 watering sites to fully implement the Adaptive Management Plan (AMP). Yearlong grazing would be reduced from 5,396 AUMs to 2,966 in Unit A and 2,943 AUMs to 1,663 in Gold Basin.
- No Grazing Alternative Under this alternative, the existing grazing permit for the Big Ranch Unit A and Gold Basin allotments would not be renewed and livestock grazing would be cancelled, existing range improvements would be evaluated for feasibility of maintenance by BLM or removed and reclaimed. The permit for ephemeral grazing on the Big Ranch Unit B allotment would be renewed with current terms and conditions as the allotment is currently meeting Arizona Standards for Rangeland Health and no changes were deemed necessary.

Desert Tortoise Council's Recommendation

As currently presented, the Council supports none of the described alternatives. We make this determination because BLM has not provided data in the EA that demonstrates that the Proposed Action would comply with BLM's commitment in the Candidate Conservation Agreement for the Sonoran Desert Tortoise (USFWS et al. 2015) with respect to livestock grazing. In addition, BLM has not provided data to support its statement that the "Proposed Action was designed to manage the allotments for livestock grazing, provide for a diversity of wildlife and plant species, maintain functioning ecosystems, and maintain or improve ecological condition to meet Rangeland Health Standards."

We believe the range of alternatives presented was not sufficiently broad. Section 102(2)E) of the National Environmental Policy Act (NEPA) and BLM's Handbook on NEPA (BLM 2008a) directs BLM to "study, develop, and describe appropriate alternatives to recommended courses of action in any proposal that involves unresolved conflicts concerning alternative uses of available resources..."

We assert BLM should have presented an alternative that focused on management for the conservation of the Mojave and Sonoran desert tortoises and other special status species (e.g., improving the habitat to meet their survival and persistence needs, etc.) while bringing the allotments to rangeland health standards as quickly as possible. Because of comments previously provided to BLM's Kingman Office by the Council [e.g., Black Mountain Herd Management Area Wild Burro Gather and Population Control Plan Environmental Assessment, Mohave County, Arizona (DOI-BLM-AZ-C010-2019-0030-EA) (Council March 27, 2020) and Evaluation of Standards for Rangeland Health (BLM-AZIM-99-012) for the White Hills Evaluation Area, Mohave County, AZ (Council February 28, 2020)], BLM was aware that management of tortoises and habitat for tortoises including (1) adequate quality and quantity of native herbaceous plant species with adequate nutritional value and (2) adequate cover from predators and temperature extremes are issues and should be included in the range of alternatives. BLM's Proposed Action is to reduce AUMs until grazing health standards start to improve (rather than are met), build more waters to allow cattle to graze more areas of the allotment, and implement no Best Management Practices (BMPs) that address the needs of tortoises. BLM assumes that managing for rangeland health standards would also manage for tortoises and their habitats. Because cattle and tortoises have different habitat requirements, this assumption is incorrect. We request that it be corrected in the EA and that a new alternative be developed.

Because of BLM's multiple use and sustained yield mandates [section102(7) of Federal Land Policy and Management Act], the Council contends BLM should be managing for the persistence of all resources, not just livestock. As previously stated in our February 28, 2020 letter to BLM, "When examining the methodology used by BLM to determine rangeland health for the White Hills Evaluation Area, we were unable to determine how BLM evaluated specific attributes of the environment that are needed by tortoises for their survival, growth, reproduction, and recruitment, as required under 43 CFR 4180.1(d). For example, Mojave desert tortoises forage on native herbaceous vegetation and need plant species with a high water and protein content, but low potassium content (Oftedal et al. 2002)."

"However, BLM's methodology selected a few species of woody shrubs and perennial grasses as evaluation species and determined rangeland health from this information. It appears that BLM has selected certain perennial plant species as indicators of rangeland health that livestock forage on, but has neglected to include plant species needed as forage by special status species of animals in the White Hills Evaluation Area including desert tortoises. Because of this omission, BLM is not able to assess the effects of livestock grazing on special status animal species including desert tortoises." We note that the primary dietary component of the Sonoran desert tortoise's diet is herbaceous vegetation with shrubs and perennial grasses comprising a substantially lesser component (USFWS 2015a) and that both cattle and tortoises forage on herbaceous vegetation. Consequently, we request that BLM develop this fourth alternative, that it be supported by science, and included in the EA.

Best Management Practices

Six BMPs are included in the Proposed Action. Of these, three apply to desert tortoises:

• Utilization monitoring would be completed every year to determine use thresholds.

- Monitoring would be done every three to five years to determine the 17 indictors of land health for key areas.
- Rest at all key areas as needed.

We find these BMPs well-intentioned but inadequate with respect to tortoises, other special status species, and wildlife species. They are vague and unquantifiable. BMPs should be part of a science-based monitoring plan with requirements and standards that must be met to comply with the issued permit. Failure to meet requirements and standards should have penalties and required corrective actions. Because this information (e.g., providing references of scientific studies that demonstrate the specific BMPs to be implemented have worked in like/similar environments) is not provided in the EA, it is not possible for the public or the decisionmaker to determine if their implementation is likely to provide measureable improvement in rangeland health standards and habitat needs of tortoises and other special status species. We request that BLM revise the EA to include a science-based plan with appropriate BMPs, requirements and standards, and penalties and corrective actions that would provide management of tortoise habitat as BLM committed to in the Candidate Conservation Agreement for the Sonoran Desert Tortoise (CCA).

Invasive Non-Native Species - Affected Environment and Environmental Consequences

BLM provides a summary of some of the more prevalent invasive plant species in the Project Area. Among annual plant species, the "most common invasive species are red brome (*Bromus rubens*) and Mediterranean grass (*Schismus*)." BLM says, "Maintaining the desired plant community (DPC), as prescribed in the Proposed Action, is expected to reduce the spread of undesirable plant species." We have four concerns about this statement.

First, according to BLM's methodology, much of the area in the three allotments does not meet rangeland health standards; it does not currently contain the DCP (species composition, density, and cover). Therefore, maintaining the DPC has not been achieved and maintaining existing conditions is not acceptable using BLM's rangeland health standards. Thus, invasive plant species will continue to be a serious problem until BLM achieves the DPC. This may take decades, especially with stressors such a climate change that increases the frequency and intensity of droughts for plants in arid lands that currently live near their physiological limits (Archer and Predick 2008).

Second, we found no analysis in this section that showed how implementation of the Proposed Action would result in achieving the DPC, including reducing the occurrence and spread of non-native species in the allotments. BLM says, "It has been found that proper range practices (rest from grazing) can help prevent the spread of invasive non-native plant species (Sheley 1995)." We agree that preventing the spread of non-native species is one part of the issue. The other is reducing their current occurrence. We were unable to find an analysis and discussion supported by the results of scientific research that demonstrate how preventing the spread and reducing current occurrence would be implemented in the Proposed Action to achieve range health standards. The citation by Sheley (1995) is a paper on how to implement integrated weed management. It is not a paper that describes the implementation of weed management actions and reports on their effectiveness for the non-native weeds present in the Project Area. The author is an Extension Noxious Weed Specialist from Montana State University, Bozeman, Montana. We question the applicability of this reference to the conditions and species in/near the Project Area.

Third, we found no analysis in this section that showed how implementation of the Proposed Action would result in achieving the DPC and maintaining it for both cattle and tortoises. BLM is using a methodology that is skewed toward managing for livestock forage in its assessment of DPC and rangeland health standards. The methodology does not include the needs of tortoises or other special status species in achieving and maintaining the DPC or tortoises/special status species habitat needs, or analyze whether these needs are being met.

Fourth, BLM says, "the Proposed Action was designed to manage the allotments for livestock grazing, provide for a diversity of wildlife and plant species, maintain functioning ecosystems, and maintain or improve ecological condition to meet Rangeland Health Standards." Unfortunately, we found no information (e.g., references of scientific literature, BLM reports, etc.) that support/substantiate this claim by BLM. We were unable to find an *analysis* in the EA of how the Proposed Action would provide for a diversity of wildlife and plant species and maintain functioning ecosystems. We request that BLM add citations from scientific literature that support the applicability of the design of the Proposed Action and its effectiveness. We request that BLM add information to the EA that addresses these four concerns.

As a reminder, under 43 Code of Federal Regulation (CFR) 4180.1, BLM is directed to ensure that the following conditions of rangeland health exist:

- (a) Watersheds are in, or are making significant progress toward, properly functioning physical condition, including their upland, riparian-wetland, and aquatic components; soil and plant conditions support infiltration, soil moisture storage, and the release of water that are in balance with climate and landform and maintain or improve water quality, water quantity, and timing and duration of flow.
- (b) Ecological processes, including the hydrologic cycle, nutrient cycle, and energy flow, are maintained, or there is significant progress toward their attainment, in order to support healthy biotic populations and communities.
- (c) Water quality complies with State water quality standards and achieves, or is making significant progress toward achieving, established BLM management objectives such as meeting wildlife needs.
- (d) Habitats are, or are making significant progress toward being, restored or maintained for Federal threatened and endangered species, Federal Proposed, Federal candidate and other special status species.

Of these, (a), (b), and (d) apply to desert tortoises. We request that BLM's implementation of rangeland health standards (a), (b), and (d) incorporate the needs of tortoises and other special status species for their persistence.

Vegetation - Affected Environment and Environmental Consequences

BLM says, "the more common key species are big galleta (*Pleuraphis rigida*), black grama (*Bouteloua eriopoda*), bush muhly (*Muhlenbergia porteri*), Sand dropseed (*Sporobolus cryptandrus*), Desert needlegrass (*Stipa speciosa*), Slim tridens (*Tridens muticus*), Globemallow (*Sphaeralcea ambigua*), White bursage (*Ambrosia dumosa*) and Mormon tea (*Ephedra spp.*). The key plant species are defined as: 1) forage species of sufficient abundance and palatability to justify its use as an indicator to the degree of use of associated species and 2) those species, because of their importance, must be considered in the management program."

As stated above, BLM is using a methodology that is skewed toward managing for livestock forage in its assessment of DPC and rangeland health standards. The methodology does not appear to include the nutritional, physiological, and social needs of tortoises or other special status species in achieving and maintaining the DPC or tortoises/special status species habitats needs, or analyze whether these needs are being met. We were unable to find one herbaceous plant species named as a common key species. Herbaceous species are the majority component of the diet of tortoises and are readily consumed by cattle. In addition, BLM claims, "Proposed management of these key species provides for the physiological requirements of most of the other desirable species on the allotments." We found no information on what species are the "other desirable species on the allotments." We presume they are desirable for cattle. We conclude there is no consideration for the plant species that tortoises need for survival, growth, reproduction, and recruitment. This omission in the EA indicates that BLM is not managing for tortoises as required in 43 CFR 4180.1(d).

BLM continues to makes assumptions about the effects of the Proposed Action in the Environmental Consequences sections on vegetation. These include "Proposed management of these key species provides for the physiological requirements of most of the other desirable species on the allotments" as presented above and "rest and reducing the stocking rate would give key species the opportunity to produce seed heads and increase reproductive functionality. Extended rest over a few years allow[s] for successful stolon rooting, which is how certain grasses such as black gramma reproduce. Given the opportunity to reproduce, key species should begin to reestablish increasing composition and cover. Composition and cover of desired forage species is expected to be maintained or improved under the Proposed Action."

We found no citations from the scientific literature to support these conclusions. We found no discussion on how drought, fire, and climate change would affect these conclusions. As stated above, the EA should include citations, consideration of the ecological needs of tortoises and other special status species in the management of native vegetation, and monitoring of native herbaceous plant species as key species.

Wildlife Resources (Including threatened, endangered, and special status species, and migratory birds) – Affected Environment and Environmental Consequences

In the EA, BLM says, "The Sonoran population of the desert tortoise (*Gopherus agassizi*)[sic] is a candidate for listing under the Endangered Species Act." Please note that in Arizona there are two species of desert tortoises, the Sonoran desert tortoise (*Gopherus morafkai*) and Mojave desert tortoise (*Gopherus agassizii*). In 2015, the USFWS issued a 12-month finding that listing the Sonoran desert tortoise was not warranted (USFWS 2015b), and cited the commitment by numerous agencies in Arizona, including the BLM, to implement the Candidate Conservation Agreement for the Sonoran Desert Tortoise (CCA) (USFWS et al. 2015) as a reason for making this determination. We suggest that the EA be updated to reflect this information on the taxonomy and nomenclature of desert tortoises.

BLM says, "The desert tortoise is also considered in the design criteria (turnout criteria for ephemeral use authorization is 280 pounds per acre minimum in desert tortoise habitat)" for the Proposed Action and No Grazing alternatives. However, we were unable to find a discussion/analysis of how BLM considered the needs of tortoises and how it concluded that 280 pounds per acre minimum in tortoise habitat was adequate to provide for survival, growth,

reproduction, and recruitment of tortoises. We contend that both quality (i.e., species composition) and quantity of ephemeral herbaceous forage species (i.e., native herbaceous vegetation rather than non-native annual grasses and forbs) are critical for management of tortoises and other special status species. We request that BLM include this information, modify its criteria to include quality of native annual plants, and show how it determined that 280 pounds per acre is adequate forage to sustain tortoises.

Under Environmental Consequences, we found no analysis of impacts from implementation of the various alternatives to tortoises. Rather the statements were broad to cover all wildlife species and limited (e.g., "removal of cover from grazing, and displacement due to disturbance. Indirect impacts would be reduced cover in areas receiving active grazing and increase in cover in areas being rested"). There were no citations provided to support these general statements. We request that BLM update the EA and provide scientific information that supports these conclusions.

We found no mention in this section of how BLM is complying with its Handbook 6840 – Management of Special Status Species (BLM 2008b). BLM (2008b) says its objectives are "A. To conserve and/or recover ESA-listed species and the ecosystems on which they depend so that ESA protections are no longer needed for these species" and "B. To initiate proactive conservation measures that reduce or eliminate threats to Bureau sensitive species to minimize the likelihood of and need for listing of these species under the ESA." BLM's responsibilities include:

- "Inventorying BLM lands to determine which BLM special status species occur on public lands, the condition of the populations and their habitats, and how discretionary BLM actions affect those species and their habitats."
- "Monitor implementation of Bureau sensitive species activities and policies within the state, and develop state level policies as needed to ensure program objectives are met."
- "Collaborate with other program leads at the state level to ensure objectives of the BLM special status species program are integrated in those programs as appropriate."
- "Implementing conservation strategies for BLM special status species as contained in approved recovery plans, cooperative agreements, and other instruments the BLM has cooperatively participated in the development of."
- "Conducting and maintaining current inventories of BLM special status species on BLM-administered lands."
- "Ensuring that land use and implementation plans fully address appropriate conservation of BLM special status species."
- "Monitoring populations of Bureau special status species to determine whether management objectives are being met. Records of monitoring activities are to be maintained and used to evaluate progress relative to such objectives. Monitoring shall be conducted consistent with the principles of adaptive management as defined in Department of the Interior policy, as appropriate."

We request that BLM explain and support, using scientific studies, how the Proposed Action will contribute to/attain these objectives and responsibilities with respect to desert tortoises. This new information must include results of inventories and monitoring described in each of the pertinent bullet points given above.

Of equal importance, we found no information on how the Proposed Action would comply with BLM's commitments in the CCA to manage for the Sonoran desert (USFWS et al. 2015). Please see our comments in the **Candidate Conservation Agreement for the Sonoran Desert Tortoise** section below regarding this deficiency.

Wildlife Resources (Including threatened, endangered, and special status species, and migratory birds) – Cumulative Impacts

In its cumulative impacts analysis for the Proposed Action to wildlife species including special status species, BLM says, "Areas not meeting standards with continued use would not meet standards and habitat loss would occur. Areas of rest and no livestock grazing would give the opportunity for habitat to re-establish and improve. Other factors such as drought and fire may decrease habitat quality, but would only be temporary if these areas are left to rest and re-establish vegetation. In areas where burro numbers are currently high, habitat quality would not reach potential. Once burro numbers are meeting HMA [Herd Management Area] standards, impacts to vegetation would be reduced and habitat quality would increase for wildlife species."

We found no analysis of impacts to wildlife species, including special status species such as desert tortoises. We found no consideration of climate change and its impacts on special status 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 **Affected Environment** section of the EA. Once the baseline status and trend is presented, cumulative impacts analysis in the EA should follow the Council on Environmental Quality (CEQ) (1997) guidance to federal agencies on how to analyze cumulative environmental consequences. 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:

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. DTC/Comment Letters/Mesa Wind Repower Project 10

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 need 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.

We request that BLM use this guidance and follow these eight principles when analyzing cumulative impacts to identified resources including desert tortoises and other special status species.

Recommended Mitigation and Monitoring

BLM says, "The 17 indicators of rangeland health would continue to be collected at key areas. Data collection of wildlife populations and status would continue to determine impacts to species."

We are unsure how data collection of wildlife populations and status for tortoises and other special status species would continue when this baseline information is not presented in the Affected Environment and Environmental Consequences sections. Because this information is not presented in these sections, we conclude BLM has not been collecting data on tortoise populations to determine their status. Therefore, it appears the statement under Recommended Mitigation and Monitoring is not supported by BLM's past and current actions, and data collection for desert tortoise populations and other special status species would not occur. We found no information in the EA that described the methods and frequency of this data collection.

We strongly request that BLM develop and implement a science-based mitigation and monitoring plan to determine the effects of the Proposed Action (or whatever action BLM selects) and offset the direct and indirect impacts of lost or degraded habitat from maintenance of existing and construction of new range improvements in tortoise habitat. These mitigation lands should have a permanent conservation easement placed on them and be located adjacent to existing tortoise habitat that has legal protections that ensure its permanent conservation status. Because this information is not included in the EA, it is not possible for the public or the decisionmaker to determine whether implementation of the mitigation and monitoring described in the EA is likely to provide measureable improvement in rangeland health standards and habitat needs of tortoises and other special status species.

Candidate Conservation Agreement for the Sonoran Desert Tortoise

The Arizona BLM is signatory to the Candidate Conservation Agreement for the Sonoran Desert Tortoise (CCA) (UFWS et al. 2015). One of CCA's protective measures is to "Ensure adequate forage remains for SDT (Sonoran desert tortoise) following ephemeral use periods." The CCA has several other measures related to grazing and other land use and management activities that BLM committed to implement. These include:

- "Desired Plant Community, Desired Future Condition, and habitat connectivity objectives that address the habitat needs of the SDT,"
- "Management decisions to prioritize management of SDT habitat and implement conservation activities including, vehicle route closure and reclamation, invasive plant treatments and maintenance or restoration of habitat connectivity," and
- "Policy objectives to emphasize and give priority to management of SDT populations and habitat in the event of conflicting resource management objectives, while managing for no net loss in quantity and quality of SDT habitat to the extent practicable and using offsite mitigation (compensation) for unavoidable residual habitat loss."

We request that BLM explain how these measures have been incorporated in the EA for tortoises and how they will be implemented. Through the rangeland health evaluation procedures, BLM should specify how it is ensuring that there is adequate forage quantity and nutritional quality for the Sonoran desert tortoise so that growth, reproduction, and recruitment will occur for this species and the Mojave desert tortoise in the Project Area.

According to BLM's commitment in the CCA, "Livestock grazing permits and authorizations have been reviewed and modified to ensure adequate cover and forage for SDT are maintained or improved." We were unable to find information in the EA that demonstrated this has occurred/is occurring for the SDT with respect to the Project Area. We request that BLM provide data that show how this is occurring and will occur for tortoises on these three allotments.

As previously mentioned, one of the protective measures in the CCA is to "Ensure adequate forage remains for SDT following ephemeral use periods." The agreement has several other measures related to grazing and other land use and management activities.

In the CCA, the agencies say, "Since the late 1980s, BLM has continued to collect data on SDT distribution, habitat quality and condition and continued funding of many of the LTMPs statewide." We request that BLM provide these data that are relevant to the tortoises in the Project Area in the Affected Environment section. If data are not available for the Project Area, we request that BLM say when this information will be collected as it has not been collected during the past 30+ years.

Because BLM is a signatory to the CCA (USFWS et al. 2015) and a member of the Arizona Interagency Desert Tortoise Team, we request that BLM implement all Arizona Game and Fish Department (AGFD) guidance on Sonoran desert tortoises. This would include implementing: the Desert Tortoise Survey Guidelines for Environmental Consultants (AGFD 2010), Guidelines for Handling Sonoran Desert Tortoises Encountered on Development Projects (AGFD 2014), 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 Mitigation Measures document 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. BLM should update the EA and provide information describing how it would implement the mitigation measures if range improvement projects are authorized for construction or maintenance.

Appendix B References

References provided in this appendix of the EA do not include recent information on Sonoran and Mojave desert tortoises including the CCA (USFWS et al. 2015). We request that BLM update its information on desert tortoises and include these references in this appendix.

Finally, we reiterate our comments to BLM in our letter dated February 28, 2020 on the Evaluation of Standards for Rangeland Health (BLM-AZIM-99-012) for the White Hills Evaluation Area, Mohave County, AZ White Hills. We have restated some but not all of them in this comment letter.

We appreciate this opportunity to provide input and trust that our comments 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, and that any subsequent environmental documentation for this particular action 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-

 $\underline{wordpress/Portal Images/files/wildlife/2010 Surveyguide lines For Consultants.pdf}$

[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

- Archer, S.R., and K.I. Predick. 2008. Climate change and ecosystems of the southwestern United States. Rangelands 30(3): 23-28.
- 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

- [BLM] Bureau of Land Management. 2008a. H-1790-1 National Environmental Policy Act Handbook. National Environmental Policy Act Program, Office of the Assistant Director, Renewable Resources and Planning, Washington, D.C. January 2008.
- [BLM] Bureau of Land Management. 2008b. Special Status Species Management. Handbook 6840. December 12, 2008.
- [CEQ] Council on Environmental Quality. 1997. Considering Cumulative Effects under the National Environmental Policy Act.
- Oftedal, O., S. Hillard, and D. Morafka. 2002. Selective Spring Foraging by Juvenile Desert Tortoises (*Gopherus agassizii*) in the Mojave Desert: Evidence of an Adaptive Nutritional Strategy. Chelonian Conservation and Biology 2002; 4(2):341-352.
- [USFWS] U.S. Fish and Wildlife Service. 2015a. Species status assessment for the Sonoran desert tortoise. Version 1.0, September 2015. U.S. Fish and Wildlife Service, Southwest Region, Albuquerque, NM.
- [USFWS] U.S. Fish and Wildlife Service. 2015b. 12-Month Finding on a Petition to List Sonoran Desert Tortoise as an Endangered or Threatened Species. 80 Federal Register 193: 60321-60335.