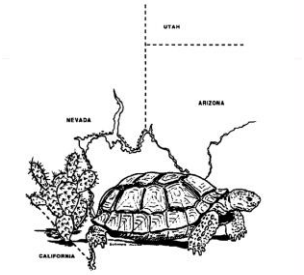

DESERT TORTOISE COUNCIL
4654 East Avenue S #257B
Palmdale, California 93552
www.deserttortoise.org
ed.larue@verizon.net

Via email only

31 October 2014

Mr. Bill Dunn
Winkelman NRDC
PO Box 68
Mammoth, Arizona 85618
dunnranches@yahoo.com

RE: Comments on the Draft "Best Management Practices for Ranching in Sonoran Desert Tortoise (*Gopherus morafkai*) Habitat in Arizona"

The Desert Tortoise Council (Council) is a private, 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 this species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council regularly provides information to individuals, organizations and regulatory agencies on matters potentially affecting the desert tortoise within its historical range.

The Council would like to commend the Winkelman Natural Resource Conservation District (NRDC) for taking the initiative to develop best management practices (BMPs) for ranching activities to benefit the conservation of the Sonoran desert tortoise (herein "MDT" for Morafka's desert tortoise). We understand the purpose of this document is for the U.S. Fish and Wildlife Service (USFWS) to take this under consideration in their pending decision on whether to list or not to list the MDT under the Endangered Species Act (ESA), and if the USFWS does list the MDT as threatened, that these measures could be adopted through the 4D Rule process (e.g., allowing by regulation that certain activities that may affect a threatened species to proceed without project-specific consultation). Though the NRDC requested that comments on the document be provided in track changes, the Council's comments are provided in this correspondence since they primarily address overriding questions of process and the application of these BMPs rather than addressing individual BMPs.

The document includes a relevant account of the status of current scientific knowledge concerning the ecology of the MDT and the effects of grazing by livestock. The development and implementation of the BMPs appears to be based on several factors as stated by the NRCS:

- Livestock grazing in Arizona is actively managed;
- Tortoise populations generally occur in steeper topography than livestock grazing activities;
- The habitat shared by livestock and SDT [herein "MDT"] is not a significant proportion of the SDT range in Arizona; and
- There is scant evidence that grazing has had significant impact on SDT populations.

Though the Council agrees that the implementation of these and other BMPs would assist in reducing impacts to the MDT and its habitat, it remains evident that grazing by livestock is unlikely to actually benefit the tortoise or its habitat. Most of the scientific studies concerning the effects of livestock grazing on tortoises have been completed in the Mojave Desert. The Mojave Desert—its topography, vegetation, rainfall patterns, and species of desert tortoise present—is markedly different from the Sonoran Desert. However, the documented adverse affects of even managed grazing to the tortoise in the Mojave Desert has been severe (note: there are many scientific studies available in the peer reviewed literature; if needed, the Council can provide a list of these references). The varied topography and increased plant species diversity of the Sonoran Desert ameliorates some of the possible impacts of grazing to the MDT. However, the long-term consequences of past grazing and the ecological impacts that it has contributed to have resulted in local declines of plant species richness and the spread of non-native vegetation. Exotic plant species have become more abundant in desert ecosystems (in both the Mojave Desert and Sonoran Desert systems), in part due to livestock grazing, and these non-native plant species have the potential of disrupting major ecological processes. This situation cannot be quickly changed, even under current managed grazing programs.

The document is not specific regarding how a particular rancher would "sign on" to the program and commit to implementation of the BMPs. Would the BMPs apply only within specific areas of an allotment with tortoise habitat, or would they apply across the entire ranching operation? As a voluntary program, could a rancher choose to implement some but not other BMPs? Also, how would a rancher determine if or where tortoises may be present within the allotment? Generic AGFD survey guidelines are cited, but it is unclear if or how surveys would be implemented.

It is stated that lands grazed by livestock do not include a significant proportion of the MDT range in Arizona. How has this been determined? What are the numbers and proportion of acres where overlap exists? How many independent livestock operations are there in MDT habitat and what proportion of those operations are expected to comply with the BMPs?

Most BMPs are qualitative, with provisions to minimize, reduce, and limit certain activities. However, there are no standards established to quantify these reductions. Also, no provisions are made for monitoring or reporting the implementation of the BMPs, or for monitoring the effectiveness of these actions to actually improve conditions for the MDT.

Missing from the list of BMPs is any discussion or management criteria to be used for determining stocking rates or to establish allowable forage plant utilization levels in MDT habitat. Also, BMPs may be useful in addressing livestock management operations during periods of extended drought when reduction of and damage to the available vegetation by livestock may exacerbate the consequences of drought conditions to MDT.

It could be argued that there is scant evidence that any single factor has had significant impact on MDT populations, yet populations are declining. The lack of evidence is not evidence for the lack of effects. Much more focused research is needed on the effects of various land use activities on the MDT, including grazing by livestock. None-the-less, it is evident that much of the current knowledge about the potential effects of grazing has been incorporated into the NRCS BMPs.

The Council is very supportive of the use of these and other BMPs to reduce potential impacts to MDT, and the Council acknowledges that there would be long-term benefits of the program over many of the current livestock management practices. However, in desert systems, restoration of natural conditions and reestablishing critical ecological process may take a very long time. The Council does not support the blanket application of these BMPs in order to provide compliance with the consultation requirements of the ESA if the MDT should be listed. Consideration of site-specific conditions is critical in determining how to manage both livestock and MDT within the same habitats, because ultimately, as seen in the Mojave Desert, the ecological impacts of grazing by livestock have the potential to be severe. However, the Council recognizes that these BMPs could provide a strong foundation to efficiently conclude project specific consultation. In addition, the application of the BMPs to provide ESA compliance for livestock operations on private land through a Section 4D Rule may be appropriate. However, the Section 4D Rule should not apply to federal lands for reasons stated above.

The Council appreciates the opportunity to review the proposed application of this important NRCS program. The Council recognizes your commitment to the conservation of the MDT, and believes that, regardless of the ESA listing decision for the MDT, implementation of these measures would provide benefits to the MDT and the desert ecosystem.

Thank you for considering our concerns,
Regards,

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