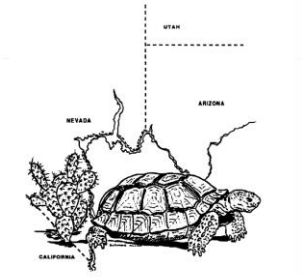

DESERT TORTOISE COUNCIL
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12 March 2014

Mark Slaughter, Assistant Field Manager
Bureau of Land Management, Southern Nevada District Office
4701 North Torrey Pines Drive
Las Vegas, NV 89130, mslaught@blm.gov

RE: Proposed release of captive desert tortoises into the Piute-Eldorado Critical Habitat Unit, Clark County, Nevada

Dear Mr. Slaughter:

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 1976 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 formally asked the U.S. Bureau of Land Management (BLM) to consider us as an Interested Party in the translocation and population augmentation of tortoises into southern Nevada on 14 September 2012 (letter available upon request). What is the status of our request? Are we currently considered an Interested Party for this and other tortoise-related issues on public lands managed by the BLM in Nevada? In September 2012 there was no indication that the U.S. Fish and Wildlife Service (USFWS) intended to release up to 600 captive tortoises onto BLM lands in the Piute-Eldorado Critical Habitat Unit. The Council only incidentally heard about this intended release at the recent Council Symposium held in Ontario, California on 21-23 February 2014.

The Council strongly opposes the translocation action as currently defined and herein asks a series of important questions concerning justification of the action. We request answers to our questions from the BLM and/or USFWS before translocation occurs.

Need for Environmental Analysis

Unless otherwise noted, we refer to the USFWS December 2013 translocation plan herein as the "Translocation Plan" or "Plan," citing information and data given therein. Aside from the Translocation Plan, which was provided to us by a third party, we are unaware of any specific environmental documents analyzing this proposed project. We note that it was not specifically analyzed in the BLM's (BLM 2013) Final Environmental Assessment to release tortoises into southern Nevada.

We ask you why there is no project-specific environmental document analyzing this intended release of captive tortoises into the Piute-Eldorado Desert Wildlife Management Area (DWMA)? We have been led to believe that the underlying issue is the displacement of captive tortoises from the Desert Tortoise Conservation Center (DTCC), which we understand will be closed later this year; is this correct? Why is there no appropriate environmental analysis to determine what to do with these displaced, captive tortoises? The potential release of 600 tortoises (many of which may be pets) into the Eldorado Valley should be only one of the alternatives, and likely one that should be considered but rejected from further consideration.

Persisting Drought Conditions

We appreciate that USFWS (2013) makes the following statement on page 3 of the Translocation Plan: "Specific release points will be selected close to the time of release and will take into account **conditions at that time**" (emphasis added). Has Eldorado Valley been exposed to drought conditions the past several years that may exacerbate successful translocation of tortoises in spring and fall of 2014?

Esque et al. (2010) reported that the catastrophic losses of tortoises associated with the Fort Irwin translocation study and with other research projects in parts of the Mojave Desert between 2005 and 2008 were due to drought-induced low population levels of coyote prey species, particularly rabbits and hares, so that coyotes likely preyed more heavily on both resident and translocated tortoise as a result. They indicate that this prey-predator relationship was reported in Woodbury and Hardy (1948), so it has been a well-known risk since the earliest tortoise studies.

Has USFWS conducted any studies at the intended Eldorado translocation sites to determine if current levels of rabbits and hares are abnormally low in response to several years of drought? Has the USFWS and BLM established a baseline for rabbit and hare counts in drought as well as wet years for comparative purposes or any purpose? It is particularly disconcerting that USFWS plans to release as many as 300 subadult tortoises, which Esque et al. (2010) identified, along with female tortoises, to have been particularly susceptible to coyote predation. What proportion of the 300 adult tortoises is female, which is another high-risk demographic reported by Esque et al.?

We note in the Translocation Plan that the study by Goodlett et al. (1994) found only 4 adult tortoises on the Eldorado study plot and 19 carcasses, concluding that, "The condition of the environment during and immediately preceding the [Goodlett 1994] survey was characterized as drought-stressed." Aside from recent distance sampling studies, which necessarily cover large regions, has USFWS specifically studied the intended translocation areas to see if they are currently in a drought-stressed condition? Since there is no way to know if the remainder of 2014 and 2015 will also be drought years, it concerns us that USFWS is willing to place up to 600 tortoises at risk for what are predictable and potentially catastrophic results to those animals should drought conditions persist.

We believe any release program should be held in abeyance until the drought period ends and the habitat can be considered able to support the tortoises. We ask that USFWS carefully consider this position before releasing tortoises into Eldorado Valley.

Stability of the Resident Population of Tortoises

The Translocation Plan provides background information that shows a substantial portion of the tortoise population in Eldorado Valley is dead. For example, USFWS (2013) indicates that "…36 of 96 tortoise detections during range-wide monitoring in Eldorado Valley were of shell remains." If a third of the detected tortoises are dead, why expose 600 new tortoises to unknown conditions causing those deaths? Does USFWS know why a third of the tortoises are dead? Is it from disease, for example, and will the captive tortoises released into Eldorado Valley be exposed to disease and other unknown factors that have decimated the resident population? Or were the deaths drought related?

The Translocation Plan reports that only two other places, including Pahrump and Mormon Mesa, demonstrate higher ratios of dead-to-live tortoises in all of Nevada compared to Eldorado Valley. The Plan then uses this information to qualify this site for population augmentation. Is there another interpretation of these data? For example, these data also suggest that this is one of the worst places to release tortoises. Presumably, all of southern Nevada has been exposed to somewhat similar climatic conditions, yet Eldorado Valley, Pahrump, and Mormon Mesa are the three regions with the highest tortoise death rates. This suggests that something other than drought may be responsible for the relatively higher incidences of tortoise mortality in Eldorado Valley. Are you aware of other causes of death besides drought?

Related to the above, a population that would be ideal to augment is one that is currently growing after suffering a loss due to a previous stressor that has recently been reduced or removed. In such a situation, augmentation would help a reduced population return to healthy levels more quickly than natural recruitment alone. What stressors caused the population to fall? What evidence is there that these stressors have been removed or reduced? And what evidence is there to indicate that the resident population is growing and will continue to grow over the long term? Without this information, the most conservative approach would be to assume that the resident population is at or above the current carrying capacity, especially considering the current drought. In this scenario, any population "augmentation" would lead to population displacement, resulting in potentially high loss rates for both resident tortoises as well as translocated tortoises.

After reporting the survey data referenced above, and after stating that Goodlett et al. (1994) characterized the area as "drought-stressed" in 1994, the Translocation Plan concludes that the proposed translocation targets an area that is considered to have high tortoise potential based on Nussear et al. (2009). The text of the Plan does not make it clear that Nussear et al. 2009 is not a survey but rather is a computer-generated model of potential habitat, based on a relatively coarse one square kilometer raster. While models can be highly informative, all models, when considered at a site-specific level, should be confirmed on the ground in greater detail, especially when the area in question has a long history of being drought-stressed, and especially before proceeding with large-scale desert tortoise releases. Has this on-the-ground confirmation of habitat quality been done, or will it be done before tortoises are released? If they will be performed, what criteria must be met to release the tortoises? If they have already been done, what is the current state of forage for tortoises in the proposed translocation area?

Health Status of Resident and Translocated Tortoises

At the 2014 Symposium, Dr. Elliott Jacobson and other veterinarians specifically referred to the captive tortoises at the DTCC as potentially harboring pathogens from captives other than *Gopherus agassizii*. Existing ELISA tests (because they have not been developed or are not available) would not detect some of these newly described and other unknown pathogens that could be introduced into Eldorado Valley under this Translocation Plan. Has USFWS considered the potential impacts of introducing these unknown pathogens to resident tortoises in Eldorado Valley? Conversely, has USFWS conducted surveys to determine health and disease status of the resident tortoises in Eldorado Valley to determine which pathogens, if any, the translocated tortoises would be exposed?

We see that surveys for resident tortoises will be performed in early April 2014, that blood samples will be taken, and that health assessments will be performed in May 2014. Will health studies be designed to detect herpesvirus and/or the two known species of mycoplasma? The only specific time frame identified for the release of DTCC tortoises in the Translocation Plan is on the title page, which is given as "Spring/Fall 2014." Given that health assessments on the resident population will not be performed until May 2014, does this mean that translocated tortoises will not be released until the fall? The Translocation Plan fails to indicate the intended release date, or to explain how that date will be dependent on results of health assessments.

Given the above concerns, if USFWS determines with the May 2014 health assessments that the few, remaining resident tortoises may have an infectious disease, would the DTCC tortoises still be released? In the absence of existing baseline data, it seems that if these data are to be collected at the same time the releases are to occur, that the decision to translocate is a foregone conclusion. Shouldn't the baseline data be analyzed to determine if the proposed release is scientifically-based?

Monitoring

The Translocation Plan states that monitoring would be performed after translocation is performed. For how long would monitoring be performed, and how frequently? What data would be collected? For example, if only overall population density is recorded, how would you know if potential population/density loss is due to displaced, lost, or sick resident tortoises vice translocated tortoises, or a mixture of both? To answer these questions, monitoring would need to include continued health assessments of both resident and translocated tortoises – will this information be collected? Additionally, what adaptive management options can be considered if "immediate complications for resolution" (Translocation Plan at page 6) are identified? For example, would the translocated tortoises be re-collected? If the resident tortoises contract disease(s) from the translocated tortoises, would they be collected as well? How would these options change after the DTCC is closed?

Genetic Issues with Wild Tortoises in Eldorado Valley

Given that we do not fully understand the impact of mixing populations with differing gene pools, we believe that caution about releasing tortoises of unknown or mixed genetic heritage should be much more carefully studied before any such releases are authorized.

Considering that some of the captive tortoises likely were collected outside of the recovery unit that contains Eldorado Valley, will the USFWS ensure that all of the tortoises to be translocated are from that recovery unit? This project is not like solar projects where wild tortoises are being displaced, which is the function and intent of USFWS' translocation protocols. If only wild animals displaced by development in Las Vegas had been deposited at the DTCC, we would not be as concerned. But, since pets were also deposited there, it is plausible that some of the tortoises that would be released are from California or other states. Published research by Taylor Edwards and others (Edwards et al. 2010, Edwards and Berry 2013) have demonstrated that captive tortoises often are diverse and do not represent even the same species, state, or local region. We are concerned about combining tortoises with differing genetics because we do not yet understand the long-term effect, which might be detrimental to the population.

The Translocation Plan makes the assumption that all tortoises to be released are from Nevada and that being within 175 kilometers of the DTCC will maintain regional genetic integrity. It then concludes, "Genetic analysis of individuals as a means of selecting tortoises to be translocated is [therefore] unnecessary." We do not agree and we do not think there is a scientific basis for this statement. Would not the USFWS want to perform genetic screening of these animals to confirm they are local, that, for example, they were not picked up in Utah, Arizona, or California years ago and only recently deposited at DTCC?

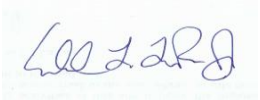
For 23 years, I and other biological consultants on the Board have presented tortoise awareness programs to construction workers for development activities authorized by USFWS biological opinions throughout the listed range. During those programs, we strongly cautioned workers to refrain from releasing pet tortoises into wild populations because of the potential to transmit disease. We did this <u>at the direction</u> of and with the approval of USFWS staff who reviewed these education programs prior to their implementation. It is counterintuitive that we have instructed the public to keep pet tortoises at home when the agency responsible for their recovery is now endorsing unprecedented, regional releases of captive, pet tortoises into the wild. And, not only into the wild, but into critical habitats intended to recover the species.

In conclusion, we believe 1) there has been no pertinent environmental analysis to determine if the release of pet tortoises into critical habitats is scientifically based or is appropriate; 2) that under persisting drought conditions and given recent catastrophic failures to translocate tortoises during drought, it is not scientifically sound to release these tortoises this year without more site-specific analysis; 3) that the USFWS has failed to determine the carrying capacity for tortoises in Eldorado Valley and the cause of significant mortality of resident tortoises but remains willing to expose up to 600 captive tortoises to these unknown factors; 4) that neither the health status of the resident tortoises nor the captive tortoises is sufficiently known to support this intended release; and 5) there is insufficient genetic information on the tortoises to be translocated to ensure the integrity of the host population.

Finally, we believe this entire proposal has resulted out of the stated desire to relocate soon-to-be displaced tortoises from the DTCC, and that the described Plan is not a scientifically-defensible means of augmenting a depleted tortoise population in critical habitat. We believe that closure of the DTCC is a violation of public trust in a process that included the DTCC to provide suitable mitigation for projects, and that poorly considered release of the tortoises from the DTCC is entirely inappropriate. We ask you to continue to seek more rational and realistic solutions to the budget problems of the DTCC and in support of the Desert Tortoise Recovery Plan.

For the reasons given above, the Desert Tortoise Council opposes this proposed Translocation Plan.

Regards,



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

Cc: Matt Hamilton, Project Director BLM, mhamilton@blm.gov
Roy Averill-Murray, USFWS, DTRO, roy_averill-murray@fws.

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