

DESERT TORTOISE COUNCIL

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Date: 19 December 2012

To: Richard Spotts, Bureau of Land Management

From: Ed LaRue, Ecosystems Advisory Committee

RE: Washington Parkway Study (herein "Study")

Dear Mr. Spotts,

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.

Herein, the Council is responding to a newspaper article recently published in The Spectrum & Daily News by writer, David DeMille, entitled "Study: new road could protect endangered tortoise." We were able to review the document entitled, "Washington Parkway Study, integration of east-west transportation needs with conservation objectives for desert tortoise in Washington County, Utah," prepared by Jacobs & Logan Simpson Designs Inc. on behalf of Dixie Metropolitan Planning Organization, Utah Department of Transportation (herein, "the Study").

The Council has serious concerns about the representation of a new highway through tortoise critical habitat and the Red Cliffs Desert Reserve ("Reserve") as a way to protect desert tortoises. Having reviewed the Study, we can see how someone not familiar with road impacts to the desert tortoise could be misled by the Study's assertion that a new road through a conservation area "...can ameliorate many existing threats, contribute to improving conditions, and provide future management options for the tortoise on the Reserve" (page i of the Study). However, having read the Study, we see the new road as a serious threat, and fail to see how any of the typical or creative mitigation measures presented therein can do any of the things the Study seems to promise in the introductory statement given above.

Following are some of our present concerns, though we expect the list to increase if this project is pursued in this critically important tortoise conservation area.

Since the creation of the Reserve is tied in with the Washington County Habitat Conservation Plan (HCP), placement of a new road through the Reserve must be construed as an “unforeseeable event” that would necessitate that the USFWS reinitiate consultation under Section 10(a)(1)(B), as placement of such a roadway would substantially undermine conservation provided for by the HCP. This reinitiation should be added to the bulleted list of short-term and long-term steps listed on page vi of the Study. We see that reinitiation is supposed to occur in 2016, so we trust the Council’s concerns will be considered then.

Does the impact analysis associated with the HCP consider or allow loss of publically managed habitat within the Reserve? The Study fails to document the level of existing authorized impact under the HCP compared to the documented levels of conservation within the Reserve. Since there has been a 41% reduction in tortoise numbers within the Reserve between 1998 and 2003 (page ii of the Study referencing McLuckie *et al.* 2012) and some unknown level of authorized incidental take outside the Reserve, the Council sees no conceivable way that existing data support a conclusion that the HCP is functioning at intended conservation levels. Adding the fully avoidable impact of a new highway through a conservation area that is already not meeting its intended function (i.e., stable or increasing tortoise populations) is unacceptable.

McLuckie *et al.* (2012) found that the 2003 tortoise “... population decline was attributed to drought conditions in the early 2000s, with other contributing factors influencing population numbers including habitat degradation due to **wildfires** and recreational use, disease, and **predation**” [bold emphasis added]. Placement of this road through the Reserve would expose tortoise habitats to increased incidence of wildfire, as several studies have shown wildfires to be associated with vehicle travel on paved and unpaved roads. Predation would also likely increase as animals killed on the new roadway would provide subsidies to common ravens and coyotes, both of which may be attracted into the area and further impact tortoise populations.

It is disingenuous to conclude that “...a new road through the Reserve could be used as a management tool to address many of the existing threats ...” (page iii of the Study). Such a road would, in and of itself, create new impacts and threats that cannot likely be mitigated. New impacts would predictably include increased predation on tortoises as predators are attracted to road-killed animals; increased weed species and a concomitant increase in the number of wildfires; unacceptable additional habitat fragmentation to a Reserve area that is already too small; indirect impacts that degrade habitats out to 4,000 meters from the roadside (Hoff and Marlow 2002).

Whereas mitigation measures identified in Table 4 on pages 52 through 54 are those typically implemented to mitigate impacts associated with new roads, the Study makes the unsupported conclusion that these measures will further reduce many other existing threats in the Reserve not associated with the new road. The idea is that mitigation money generated by the new road would be applied to existing programs, but the Study fails to assess if these existing programs are functioning or not, or if they are underfunded and not being implemented. If they are underfunded or not being implemented, that is a fault of those entities governing the HCP who are required by law to provide guaranteed funding to ensure protective measures are being implemented. Perhaps money associated with the new road will help implement measures more quickly, but at what cost? The Council affirms, let the measures be implemented as scheduled without introducing this new, avoidable impact as a means to expedite implementation of those measures.

None of the protective measures identified on pages 52 through 54 would be necessary “but for” the placement of a new road through the Reserve. There are several places in the Study, including page 46 where the following quote is excerpted, that seem to suggest that a new road through the Reserve will ultimately help tortoises by alleviating threats elsewhere: “...a new road through the Reserve could be considered as a management tool to address many of the existing threats.” This is the first time the Council’s board of directors has ever heard of such a proposition! How can a new road through a dedicated Reserve have any benefits to a population of tortoises that has already undergone a 41% decline in numbers? The Study fails to demonstrate how implementing measures that are already required in the HCP will offset all impacts, including new impacts associated with the road and all others in the Reserve. Rather, the Study resorts to repackaging old and existing mitigation measures to solve most existing problems and those newly created by the highway.

Further, there is this statement on page 46 where the Study identifies “...that there are various opportunities for roadway design and the application of engineering techniques that could be used not only to minimize the impacts of a new roadway corridor but also to address many of the existing management issues associated with the Reserve.” As documented on page 6 of the Study, “The implementation of the HCP is guided by the Habitat Conservation Advisory Committee (HCAC) and the Habitat Conservation Technical Committee (HCTC), which includes representative[s] from local governments and land and resource management agencies.” The Council assumes that these organizations (USFWS, BLM, State of Utah School and Institutional Trust Lands Administration, Utah State Parks, Utah Division of Wildlife Resources, etc.) would ultimately be responsible for addressing existing management issues and implementing protective measures, not a new project proponent endorsing a new impact.

“But for” this project, none of the threats listed in the table in the executive summary (pages iii and iv of the Study) would affect the Reserve. Therefore, the best way to eliminate the following threats is to prohibit the construction of a new highway through the Reserve: Direct mortality, construction activities, habitat fragmentation, habitat loss, small reserve/population size, disturbance, spread of exotic and invasive plants, increased risk of fire, increased predation, disease, increased access to remote areas, and cumulative threats. In Section 7.9 on page 51, the Study fails to indicate that a new roadway through the Reserve would be a new source of road-killed animals that would serve to subsidize ravens and coyotes.

The Council takes exception to the following statement: “This study illustrates that a comprehensive approach to roadway design and associated management can ameliorate many existing threats, contribute to improving conditions, and provide future management options for the tortoise on the Reserve.” First of all, there are no “improving conditions” in a population that has declined by almost half since the HCP was implemented and the Reserve established. It is extremely misleading to claim that the project itself, which is probably immitigable, will somehow benefit tortoise conservation elsewhere; such statements redirect the readers’ attention away from the impacts associated with the proposed project by promising conservation elsewhere. Since this conservation is already guaranteed by an HCP with its adaptive management contingency plans, there is no need for the “additional” conservation proposed by this new project.

The discussion on pages 15 and 16 of the Study, which acknowledges a study Ed LaRue and Sharon Dougherty completed in 1996, is cited to indicate that allowable levels of mortality take are higher than actual levels, but fails to indicate why. In fact, the level of mortality take (53 tortoises) was smaller than the +/- 1,100 allowed mortalities because 1,455 tortoises were moved out of harm's way during construction (LaRue and Dougherty 1996), not because take was overestimated, as implied by the Study. The Study fails to reveal that linear projects, including pipelines and roadways, have the most serious direct impacts because they affect the home ranges of many more tortoises than do individual square or rectangular parcels. A hundred acres of habitat lost along a right-of-way ten miles long will affect many more tortoises than would occur on a 100-acre parcel in similar habitats. As such, 38 of 53 (72%) mortalities occurred during construction of the Mojave-Kern Pipeline, and 48 of 53 (91%) deaths (including 38 on the Mojave-Kern Pipeline) occurred along only four *linear* projects (LaRue and Dougherty 1996).

The biological opinion analysis presented on pages 16 through 21 is a summary of potential impacts associated with proposed projects, as envisioned in the biological opinions; it is not an actual assessment of how many tortoises were directly and, particularly, indirectly affected by those projects. For the actual number of tortoises that were directly affected to be determined, the Study would have had to interview hundreds of sources, which was not done. As such, this is a theoretical discussion, not an impacts analysis. For example, the Study fails to indicate how many of the 482 biological opinions they summarized have actually been implemented. LaRue and Dougherty (1996), for example, found that only 171 of the 234 biological opinions issued between 1989 and 1995 had been implemented and resulted in habitat loss. We would ask of the Study's authors, how many of those 482 biological opinions have been implemented, how many acres destroyed, how many tortoises accidentally killed, and how many harassed? Until these numbers are provided, the analysis given in the Study is not indicative of actual impacts but only virtual impacts.

On page iii of the Study, there are the following statements: "Over the last 30 years, numerous routes have been proposed for a northern transportation route. However, these proposals have been highly controversial due to the potential for serious impacts to the Reserve..." Given the 41% reduction in tortoise population between 1998 and 2003, how can a new proposal be less controversial? It is unfortunate that the Study did not take the opportunity to summarize previous proposals and explain why they were fatally flawed. To do so may help avoid new proposals that will be equally untenable now that tortoises are worse off than they were when those previous alignments were identified. It would have been helpful to show previous proposals on Figure 1, which shows conservation areas including Wilderness Areas, to see what these previous, unacceptable corridors have been.

On page 61, the Study states "The purpose of this study was not to evaluate a specific corridor, but rather to review the current status of the tortoise on the Reserve in relation to various transportation issues (both current and anticipated), as well to provide an overview of strategies and techniques employed by other projects to address similar issues." The Council has considered the evaluation, and understands that the tortoise population has decreased by about 41% between 1998 and 2003. Although the Study fails to document how many acres of tortoise habitat and how many tortoises have been lost and displaced, respectively, as a result of implementing the HCP, it clearly documents that tortoises have declined inside the Reserve in spite of best conservation efforts to recover them.

The Council applauds the many conscientious organizations and their dedicated members who have worked diligently to protect and conserve tortoises inside the Reserve. However, the fact remains that tortoises are not better off now than they were when the Reserve was established, mostly due to drought and wildfires that have severely affected important habitats and over which we have no control. Whereas these impacts were unforeseeable and unavoidable, the creation of a new highway through the Reserve is ill-conceived and completely avoidable.


The Study fails to demonstrate what it seems to promise: Just *how* are tortoises throughout the Reserve supposed to be better off by constructing this highway? What *are* the new management tools that are going to replace 14,624 acres of habitats recently burned on the Reserve, including 25 percent of the tortoise critical habitat? How are these measures supposed to replace the 31 percent of adult tortoises on the Reserve killed in the fire? The Study describes typical mitigation measures implemented for previous road projects that may reduce impacts associated with a new road, although even that reduction is speculative, or at least largely undocumented (only Boarman's studies being the exception). It will be very difficult, if not impossible, to demonstrate how typical mitigation measures will offset impacts and benefit a population that is already halved in its numbers due to recent stochastic events.

In our view, the document's weakness is in its assertion that this serious impact can serve as a ready means to address existing threats and population declines elsewhere on the Reserve. It would have been a much better, more objective, and scientifically plausible study had it not crossed the line of equating new highway construction with new tortoise protection, as echoed in the news article's headline: "Study: new road could protect endangered tortoise."

We appreciate that this document provides new analyses and baseline information that can be used by the many entities identified in Section 8.0 of the Study. Should a new roadway be pursued, the Council herein asks to be considered an Affected Party, receiving all environmental documentation that will allow our members to stay informed about the project's future status.

We cite the purpose of the Study as follows on page i, "...the purpose of this study is to determine if there is justification for further evaluation of a transportation corridor that has as its primary objective conservation, protection, and enhancement of the tortoise and its habitat." Based on the information provided in the Study, *the Council believes that there is no justification for further evaluation*; the Study's evaluation is sufficient to convince us that the tortoise population is already stressed and should not be exposed to this new threat. Further, if the primary objective is conserve, protect, and enhance tortoises and their habitats, why is a new highway being proposed through critical habitats?

Sincerely,



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

Literature Cited

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LaRue, E. and S. Dougherty. 1996. "Federal Biological Opinion Analysis for the Proposed Eagle Mountain Landfill Project." *Proceedings from the Desert Tortoise Council 1997 and 1998 Symposia*, pp. 52-53.

McLuckie, A.M., M.A. Ratchford, and R.A. Fridell. 2012. Draft: Regional desert tortoise monitoring in the Red Cliffs Desert Reserve, 2011. Salt Lake City: UDWR, 12-13, p. 65.