



## DESERT TORTOISE COUNCIL

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### Via email only

9 January 2020

Mr. Rick Baxter, Program Manager  
Bureau of Reclamation, Provo Area Office  
302 East Lakeview Parkway  
Provo, UT 84606  
[lpp@usbr.gov](mailto:lpp@usbr.gov)

RE: Notice of Intent to Prepare a Draft Environmental Impact Statement and Public Scoping Period for the Lake Powell Pipeline Project

Dear Mr. Baxter,

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 above-referenced project. Given the location of the proposed project in habitats likely occupied by Agassiz's desert tortoise (*Gopherus agassizii*) (synonymous with "Mojave desert tortoise"), our comments pertain to enhancing protection of this species during activities authorized by the Bureau of Reclamation (Reclamation).

We note that Reclamation published the Notice of Intent (NOI) on December 6, 2019 with a closing date of January 9, 2020. While Reclamation provided a few extra days beyond the typical minimum 30-day comment period, the NOI's comment period overlapped the holidays when most people were visiting family/friends and/or preparing for/celebrating the holidays. For future NOIs, we urge Reclamation to publish a longer comment period for their National Environmental Policy Act (NEPA) documents when the comment period overlaps the holiday season. In doing so, Reclamation will ensure with the interested public an "early and open process for determining the scope of issues to be addressed and for identifying the significant issues related to a proposed action" (40 CFR 1501.7). We are unaware of any project-related urgency to limit the NOI comment period to 35 days.

We note in the NOI that the project would allow construction of a 140-mile, 69-inch water pipeline from Lake Powell in Page, Arizona to Sand Hollow Reservoir near St. George, UT. However, there are two alternatives, as follows: “The Southern Alternative and the Highway Alternative. The Southern Alternative would travel south of the Kaibab Indian Reservation while the alignment for the Highway Alternative would cross lands held in trust by the United States for the benefit of the Kaibab Band of Paiute Indians, following Arizona State Route 389. The Southern Alternative would cross land administered by the BLM in Utah and Arizona and would require multiple right-of-way (ROW) grants and an amendment to the Arizona Strip Resource Management Plan (RMP), because a small portion of the pipeline would go outside an approved utility corridor.”

Given our mission statement above, we necessarily limit our comments as they would affect desert tortoises, and ask that the Draft Environmental Impact Statement (DEIS) provide the following information and analysis.

#### Alternatives Considered

After reading the NOI, the Council was unable to find information explaining the need to provide an additional 86,249 acre-feet of water [we presume per year] to the St. George area and the limitation of constructing a 140-mile long pipeline from Lake Powell. Absent this information, we are left with the impression that Reclamation has artificially narrowed the purpose and need of the proposed action. The Council contends that Reclamation has an obligation to develop and analyze other viable alternatives to constructing the pipeline to deliver water. To support this contention, we note that a federal appellate court has previously ruled that in its EIS a federal agency must evaluate a reasonable range of alternatives to the project including other sites, and must give adequate consideration to the public’s needs and objectives in balancing ecological protection with the purpose of the proposed project, along with adequately addressing the proposed project’s impacts on the desert’s sensitive ecological system (National Parks & Conservation Association v. Bureau of Land Management, Ninth Cir. Dkt Nos. 05-56814 et seq. (11/10/09). Therefore, the Council requests that Reclamation frame the purpose and need by explaining the need to provide water and develop and analyze other viable alternatives in addition to granting the ROW for the Lake Powell Pipeline, that is “other reasonable courses of actions” (40 CFR 1508.25).

The alternatives analysis should include an economic analysis that provides the total cost of constructing the pipeline versus other alternatives, so the public can see how much the total cost of each alternative is. This would include an analysis of the costs of replacing all public resources that would be lost from granting the ROW for the development of the pipeline including direct, indirect, and cumulative impacts. Please note, this analysis would include replacement or creation costs including the time needed to achieve full replacement, not just acquisition, management, monitoring, and adaptive management costs.

The DEIS should demonstrate the various methods that the communities in the St. George area are implementing to reduce water use. For example, other communities in the western U.S. have been under drought conditions for more than a decade. Rather than import water from another area, they have implemented conservation measures that have reduced water use by more than half. Other communities have decided to limit their growth and improve their quality of life and property values by only using the resources that occur in their immediate area.

### Connected Actions

Pursuant to Section 1508.25 of the Council on Environmental Quality's (CEQ) regulations (40 CFR 1508.25), any environmental impact statement (EIS) must cover the entire scope of a proposed action, considering all connected, cumulative, and similar actions in one document. Pursuant to Section 1506.1(a) of these regulations, an agency action cannot "[l]imit the choice of reasonable alternatives" before reaching a final decision in a published [Record of Decision] (ROD). These regulations ensure agencies will prepare a complete environmental analysis that results in a "hard look" at the environmental consequences of all proposed actions instead of segmenting environmental reviews (Novack 2015). The Council is concerned that the proposed Northern Corridor Highway and proposed Lake Powell Pipeline project are being segmented by their separate analyses. They appear to be connected actions, as St. George wants both for population and economic growth and to deal with future traffic issues. Please explain whether these proposed actions are connected and if not, why.

### Densities and Distributions of Tortoises Potentially Affected

- Identify and show those portions of the two alignment alternatives that occur within the range of the listed population of the Agassiz's desert tortoise (USFWS 1990).
- Identify and show those portions of the two alignment alternatives that occur within designated critical habitat of the listed population of the Agassiz's desert tortoise (USFWS 1994); Bureau of Land Management (BLM) Areas of Critical Environmental Concern (ACEC) and in Arizona, designated categories of tortoise habitats; National Park Service (NPS) lands; and any other biologically sensitive areas [e.g., proximity to wilderness areas, National Conservation Lands (NCL), etc.].
- As per the latest guidance from the U.S. Fish and Wildlife Service (USFWS 2018), ensure that protocol-level surveys for the desert tortoise are performed in suitable habitats on western portions of the alternative pipelines during the most active periods (April-May and/or September/October) so that density estimates of tortoises that may be affected by the two alternatives can be estimated and reported in the DEIS.
- Prior to performing protocol surveys, the proponent must enlist only biologists who have demonstrated experience in surveying for tortoises. The proponent and qualified biologists must meet with pertinent biologists of the USFWS, BLM, and NPS to determine a realistic action area as defined by 50 Code of Federal Regulations 402.2. Agencies should also advise the proponent of suitable survey methodologies for the alternative pipelines.
- Given the sensitivity of the project, the Council believes that only 100% surveys with appropriate zone of influence studies should be performed. "Probabilistic sampling" as described in USFWS (2018) should not be performed unless prior approval is obtained from USFWS, BLM, and NPS.
- Similarly, if any previous surveys were performed more than a year ago, the surveys should be performed again, unless USFWS expressly agrees new surveys are not needed.

- At a minimum, the DEIS must show, for both alternatives, (1) those portions of the pipelines that are occupied and unoccupied by tortoises; (2) locations of all scats, burrows, carcasses, tortoises, and other diagnostic signs; (3) based on the results, estimate the number of tortoises that would be affected by the two alternatives; and (4) provide estimates of the acres of suitable, occupied, and critical habitats (also acres within designated ACECs and NCL lands) that would be permanently and temporarily impacted by construction, operation, and maintenance.

#### Necessary Analyses

- The DEIS should include a thorough analysis and discussion of the status and trend of the tortoise in the action area, tortoise conservation area, recovery unit, and range wide. Tied to this analysis should be a discussion of all likely sources of mortality for the tortoise and degradation and loss of habitat from construction, operation, and maintenance of the two pipeline alternatives.

• Per the NOI, “The pipeline would deliver up to 86,249 acre-feet of water from Lake Powell to Sand Hollow Reservoir. UBWR proposes building the LPP in order to bring a second source of water to Washington and Kane Counties in Utah to meet future water demands, diversify the regional water supply portfolio, and enhance the water supply reliability.” We note that supplying additional water to urban sites fosters human population growth and expansion (e.g., the construction of additional housing, businesses, roads, utilities, etc.) We are concerned that the proposed action will result in growth-inducing impacts in the St. George area that will adversely affect the desert tortoise. Under 40 CFR 1508.8(b), “Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.”

• We request that the DEIS fully analyze, not describe, the growth-inducing effects of constructing, operating, and maintaining a pipeline that brings additional water to the St. George area with respect to impacts on (1) the survival and recovery of the tortoise at the population, recovery unit, and species level; (2) its habitats; and (3) its population and habitat connectivity. In addition, we request that the DEIS include safeguards that would prevent these growth-inducing effects from impacting the tortoise and its habitats.

• In the cumulative effects analysis of the DEIS, please ensure that the Council on Environmental Quality’s (CEQ) “Considering Cumulative Effects under the National Environmental Policy Act” (1997) is followed, including the eight principles, when analyzing cumulative effects of the proposed action to the tortoise and its habitats. CEQ states, “Determining the cumulative environmental consequences of an action requires delineating the cause-and-effect relationships between the multiple actions and the resources, ecosystems, and human communities of concern. The range of actions that must be considered includes not only the project proposal but all connected and similar actions that could contribute to cumulative effects.” The analysis “must describe the response of the resource to this environmental change.” Cumulative impact analysis should “address the sustainability of resources, ecosystems, and human communities.” For example, the DEIS should include data on the estimated number of acres of tortoise habitats and the numbers of tortoises that may be lost to growth-inducing impacts in the St. George and other affected regions.

### Impact Studies for Other Resources

Following are some of the studies that should be performed, seasonally in some cases, and their results reported and analyzed in the DEIS.

- A jurisdictional waters analysis should be performed for all potential impacts to washes, streams, and drainages.
- There are likely to be special status plant species found along the two alternatives as determined by appropriate literature reviews and followed by field surveys, the results of which would be reported in the DEIS. Surveys must be completed at the appropriate time of year by qualified biologists (preferably botanists) using the latest acceptable methodologies.

### Mitigation Measures to Offset All Impacts

The DEIS should disclose how the proponent plans to minimize and avoid impacts during construction, operation, and maintenance of the proposed pipeline, which may differ depending on which alternative is selected, so the analyses should reflect both alternatives, with regards to, at a minimum, the following issues:

- The DEIS should include appropriate mitigation for all direct, indirect, and cumulative effects to the tortoise and its habitats; the mitigation should use the best available science with a commitment to implement the mitigation commensurate to impacts to the tortoise and its habitats. As a minimum the proponent should develop and implement a fully-developed desert tortoise relocation plan; predator management plan; weed management plan; fire management plan; compensation plan for the temporal degradation and loss of tortoise habitat that includes protection of the acquired, improved, and restored habitat in perpetuity for the tortoise from future development and human use; a plan to protect adjacent tortoise habitats that can be accessed as a result of the new pipeline right-of-way road and access roads in those areas where new access is created; and a habitat restoration plan for disturbed areas that are not required for pipeline maintenance.
- These mitigation plans should include an implementation schedule that is tied to key actions of the construction, operation, maintenance, and restoration phases of the project so that mitigation occurs concurrently with or in advance of the impacts. The plans should specify success criteria, include a monitoring plan to collect data to determine whether success criteria have been met, and identify actions that would be required if the mitigation measures do not meet the success criteria. Because increased vehicle access may result in subsequent fires, we request that the DEIS include a fire prevention plan in addition to a fire management plan.
- In 2016, the Council funded the completion of best management practices for habitat restoration (Abella and Berry 2016), which are attached to this letter for your consideration and implementation.
- Explain how the proponent will minimize the direct loss of desert tortoise habitats by using existing disturbance and avoiding sensitive areas, such as designated critical habitat and other sensitive areas (e.g., ACEC, NCLs, etc.).

- Develop a specific program to avoid subsidizing known tortoise predators, including common ravens and coyotes, particularly during construction. If deemed applicable by the agencies, the proponent should contribute to the National Fish and Wildlife Foundation's Raven Management Fund for regional and cumulative impacts.
- Ensure that all standard measures to mitigate the local, regional, and cumulative impacts of raven predation on the tortoise are included in this DEIS, including developing a raven management plan for this specific project. USFWS (2010) provides a template for a project-specific management plan for common ravens. This template includes sections on construction, operation, maintenance, and restoration with monitoring and adaptive management during each project phase (USFWS 2010).
- Compensate for lost habitats through either habitat acquisition, mitigation fees, or other existing programs acceptable to the regulatory agencies. Compensation may be variable depending on the sensitivity of habitats impacted, which should also be documented in the DEIS.
- Define protocols for displacing tortoises and monitoring them until qualified biologists judge they are out of harm's way. We assume that tortoises would be *relocated* into adjacent suitable habitats rather than *translocated* en masse to some distant location, and that the methods will be disclosed in the DEIS.
- We request that the DEIS address the effects of the proposed action on global warming, as the proposed action is growth-inducing from a development perspective, and the effects that global warming may have on the proposed action. For the latter, we recommend including: an analysis of habitats within the pipeline alignments that may provide refugia for tortoise populations; an analysis of how the proposed action would contribute to the spread and proliferation of nonnative invasive plant species; how this spread/proliferation would affect the desert tortoise and its habitats (including the frequency and size of human-caused fires); and how the proposed action may affect the likelihood of human-caused fires. We strongly urge the proponent to develop and implement a management and monitoring plan using this analysis and other relevant data that would reduce the transport and spread of nonnative seeds and other plant propagules to/within the project area and eliminate/reduce the likelihood of human-caused fires. The plan should integrate vegetation management with fire management and fire response.
- Given the above concerns, the DEIS should include a weed abatement program, monitoring plan, and identify remedial activities to ensure the project does not result in the proliferation of non-native plant species, particularly in sensitive habitats identified herein.
- We are concerned that the placement of this pipeline may fragment regional connectivity between tortoises occurring in adjacent areas. The placement of either alignment may fragment travel corridors and may substantially reduce or destroy their functions in the future as wildlife corridors. We strongly request that the environmental consequences section of the DEIS include a thorough analysis of this indirect effect (40 Code of Federal Regulations 1502.16) and appropriate mitigation to maintain the function of population connectivity for the Agassiz's desert tortoise and other wildlife species be identified.

- We are concerned that new access through currently natural habitats may result with development of the pipeline, and that the extent of the impact would vary depending on how much of either pipeline coincides with existing developed corridors. As such, we request that the DEIS include information on the locations, sizes, and arrangements of new and improved roads for both alternatives, who will have access to them, whether the project area will be secured to prevent human access or vandalism, and if so, what methods would be used. The presence of roads even with low vehicle use has several adverse effects on the desert tortoise and its habitats. Besides the direct adverse effect of vehicle impacts resulting in injury or mortality, the indirect effects include the deterioration/loss of wildlife habitat, hydrology, geomorphology, and air quality; increased competition and predation (including by humans); disruption of tortoise movements and fragmentation of habitats; and the loss of naturalness or pristine qualities, all of which should be analyzed in the DEIS.
- Road establishment is often followed by various indirect effects such as increased human access causing disturbance of species' behavior, increase predation, spread of invasive species, and vandalism and/or collection. All indirect effects to the tortoise should be analyzed in the DEIS. The analysis of the effects from road establishment and use should include cumulative effects to the tortoise with respect to nearby tortoise ACECs, areas designated/needed for connectivity between ACECs, for the recovery unit, and range wide.
- The DEIS should analyze the five major categories of primary road effects to the tortoise and special status species: (1) wildlife mortality from collisions with vehicles; (2) hindrance/barrier to animal movements thereby reducing access to resources and mates; (3) degradation of habitat quality [needed for adequate nutrition for successful reproduction and recruitment]; (4) habitat loss caused by disturbance effects in the wider environment and from the physical occupation of land by the road; and (5) subdividing animal populations into smaller and more vulnerable fractions (Jaeger et al. 2005a, 2005b, Roedenbeck et al. 2007). In addition, we request that a sixth category of increased predation resulting from increased numbers of predators subsidized by "roadkill" from road construction, use, and maintenance.
- For your use, we have enclosed a road impacts bibliography to facilitate the analysis that we expect to appear in the DEIS.

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 Reclamation projects that may affect species of desert tortoises, 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

- Jaeger, J. 2005a. Does the configuration of road networks influence the degree to which roads affect wildlife populations? International Conference on Ecology and Transportation 2005 Proceedings, Chapter 5 - Integrating Transportation and Resource Conservation Planning - Landscapes and Road Networks, pages 151-163. August 29, 2005.
- Jaeger, J., J. Bowman, J. Brennan, L. Fahrig, D. Bert, J. Bouchard, N. Charbonneau, K. Frank, B. Gruber, and K. Tluk von Toschanowitz. 2005b. Predicting when animal populations are at risk from roads: an interactive model of road avoidance behavior. *Ecological Modelling* 185 (2005) 329–348.
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- U.S. Fish and Wildlife Service. 2010b. Common raven predation on the desert tortoise. USFWS, Ventura Fish and Wildlife Office, Ventura, CA.
- U.S. Fish and Wildlife Service. 2018. Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*). USFWS Desert Tortoise Recovery Office. Reno, NV.

## Enclosures

- Abella S.R. and K.H. Berry. 2016. Enhancing and restoring habitat for the desert tortoise (*Gopherus agassizii*). *Journal of Fish and Wildlife Management* 7(1):1–25; e1944-687X. doi: 10.3996/052015-JFWM-046.

## Road Impacts Bibliography