



DESERT TORTOISE COUNCIL

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Via email only

29 August 2023

Attn: Laine McCall
St. George Field Office
Bureau of Land Management
345 East Riverside Drive
St. George, UT 84790
lmccall@blm.gov

RE: Washington City Water Tank and Pipeline Final Environmental Assessment (DOI-BLM-UT-C030-2023-0021-EA)

Dear Ms. McCall,

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.

As of June 2022, our mailing address has changed to:

Desert Tortoise Council
3807 Sierra Highway #6-4514
Acton, CA 93510.

Our email address has not changed. Both addresses are provided above in our letterhead for your use when providing future correspondence to us.

We appreciate this opportunity to provide comments on the above-referenced project. Although these comments on the Final EA do not reflect a formal protest from the Council, we understand that BLM's planning process and the proponent's implementation phases are iterative, so we hope that our comments will be accepted as such. Given the location of the proposed project in habitats potentially occupied by Mojave desert tortoise (*Gopherus agassizii*) (synonymous with Agassiz's desert tortoise), our comments pertain to enhancing protection of this species during activities funded, authorized, or carried out by the Bureau of Land Management (BLM), which we assume will be added to the Decision Record for this project as needed. Please accept, carefully review, and include in the relevant project file the Council's following comments for the proposed project.

The Mojave desert tortoise is among the top 50 species on the list of the world's most endangered tortoises and freshwater turtles. The International Union for Conservation of Nature's (IUCN) Species Survival Commission, Tortoise and Freshwater Turtle Specialist Group, now considers the Mojave desert tortoise to be Critically Endangered (Berry et al. 2021), "... based on population reduction (decreasing density), habit loss of over 80% over three generations (90 years), including past reductions and predicted future declines, as well as the effects of disease (upper respiratory tract disease/mycoplasmosis). *Gopherus agassizii* (*sensu stricto*) comprises tortoises in the most well-studied 30% of the larger range; this portion of the original range has seen the most human impacts and is where the largest past population losses have been documented. A recent rigorous rangewide population reassessment of *G. agassizii* (*sensu stricto*) has demonstrated continued adult population and density declines of about 90% over three generations (two in the past and one ongoing) in four of the five *G. agassizii* recovery units and inadequate recruitment with decreasing percentages of juveniles in all five recovery units."

This status, in part, prompted the Council to join Defenders of Wildlife and Desert Tortoise Preserve Committee (Defenders of Wildlife et al. 2020) to petition the California Fish and Game Commission in March 2020 to elevate the listing of the Mojave desert tortoise from threatened to endangered in California.

Description of Proposed Action and Alternatives

Washington City (Applicant) filed a right-of-way (ROW) application with the BLM for a right-of-way (ROW) grant on approximately 2.3 acres of public land managed by the BLM (Project Area) for a water tank, water pipeline, and access road (Project).

BLM analyzed two alternatives in the final environmental assessment (final EA), the No Action Alternative and the Proposed Action Alternative.

No Action Alternative: BLM would not grant a ROW to the Applicant and the construction and operation and maintenance of the water tank, pipeline, access road and powerline on BLM land and associated pump station and pipeline on private land would not occur. Washington City would need to find a different location to construct a water storage tank to meet the growing population demands and State of Utah Division of Drinking Water requirements for water systems.

Proposed Action Alternative: The Proposed Action Alternative is for the construction, operations, and maintenance of a water storage tank, water transmission pipeline, temporary and permanent access maintenance road, powerline, pump station, and drainage ditches. Construction phase would take 6 to 9 months. The operation and maintenance phase would likely be for several decades or longer.

Water Storage Tank – A 2-million-gallon cylindrical water storage tank 140 feet in diameter and 25 feet tall would be constructed on a poured concrete base and partially buried. The footprint of the tank would be about 1 acre including the perimeter fence. An additional 1.5 acres would be needed during construction including cut and fill areas. Blasting may be required during construction.

Water Transmission Pipeline – This feature would occur on BLM and private land. On BLM land, a 16-inch diameter pipeline would be buried 3 feet below grade following mostly an existing two-track road. The ROW length for the pipeline would be 1,850 feet. The construction width would be 50 feet with a final width for operations and maintenance of 30 feet. An additional 2,850 feet of 12-inch diameter pipeline would be installed on private land.

Access Road – The construction and maintenance road would occur on BLM land (1,850 feet long) and private land (2,850 feet long). The ROW for the improved road would be 30 feet. During the construction phase, the road would be improved to accommodate transport of heavy equipment. After completion of construction phase, the “access road would be rehabbed to 15 feet within the 30-foot ROW and surfaced with untreated road base.” A portion of the road would require realignment to allow for equipment access and to account for the local drainage.

Pump Station – The pump station would be constructed on private land. No information was provided on its size or components. The long-term impacts would affect 0.3 acres.

Powerline – The powerline from the pump station to the tank would be buried 3 to 4 feet deep in the ROW.

Drainage Ditches – Following site clearing and grading, berms and drainage ditches may be constructed to contain runoff and divert floodwaters from the construction area. The berms and ditches would be incorporated into the final grading of the facility site.

Operations and maintenance would consist of the City visiting the “tank site approximately once per week for routine inspection and maintenance of equipment.”

Elevations range from approximately 2,800 feet at the proposed pump station site to approximately 3,200 feet near the tank site. The Proposed Action is in Washington City, Washington County, Utah.

Two other alternative sites were considered but dismissed. Both alternative sites were 700-800 feet farther away from the service area/pump station. Because more BLM lands and pipeline ROW would be required, BLM eliminated them from further analysis.

Comments on the Final Environmental Assessment

The BLM says it prepared this final EA to provide “a site-specific analysis of potential impacts that could result with the implementation of the Proposed Action or alternatives to the Proposed Action.” While site-specific analysis is required in an environmental assessment or environmental impact statement, for this Proposed Action, we believe additional analysis is necessary to meet regulatory requirements.

Connected Actions

In the final EA, BLM says the “proposed water tank and pipeline would provide water for the increasing population and development within the Long Valley area of Washington City.” “Washington City would need to find a different location to construct a water storage tank to meet the growing population demands and State of Utah Division of Drinking Water requirements for water systems. However, no appropriate site on private land was identified in the general area during the feasibility study phase.”

If the above statements are true, the Proposed Action Alternative would be a “connected action” to the future planned development in Washington City.

The Council on Environmental Quality’s (CEQ) Regulations for Implementing the National Environmental Policy Act (NEPA) requires that “connected actions” be considered together during a NEPA environmental impact analysis (40 Code of Federal Regulations (CFR) 1508.25). As a connected action, the final EA should include an analysis of impacts from this planned development in Washington City in addition to the site-specific impacts from the construction, operations, and maintenance of the water storage tank, water transmission pipeline and water pump station.

The Federal Land Policy and Management Act (FLPMA), section 302(b) says, “[i]n managing the public lands the Secretary [of the Interior] shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands.” This would include placing a non-federal project on BLM land if locations other than BLM land are available to meet Washington City’s water need.

We found little information in the final EA describing the operations and maintenance activities or analysis of their impacts. BLM describes these activities in section 2.2.4.3 Inspection and Maintenance Schedule – “A detailed operations and maintenance plan would be developed for the tank site and other project components during facility construction and prior to operation. It is anticipated that the City will visit the tank site approximately once per week for routine inspection and maintenance of equipment.” Table 2-2 Applicant-Committed Environmental Protection Measures (ACEPMs) states- “Washington City would develop a Standard Operations Plan (SOP) and Emergency Action Plan for the operation and maintenance of the tank, pipeline, and pump station in accordance with UAC R309 after the project is constructed.” We conclude that BLM does not know what the activities are that would be conducted during the operations and maintenance phase of the Proposed Project Alternative. If the activities are unknown, their resulting impacts have not been analyzed in the final EA.

Using operations and maintenance plans from other water purveyors, we would predict that maintenance work to clean/repair/replace components such as valves, segments of pipe, etc. would be needed among other activities and that for some of these activities, chemicals would be used. We contend that this final EA document should include a description of the actual or likely operation and maintenance activities and an analysis of their impacts to the resource issues including the tortoise/tortoise habitat. Again, the construction phase of the Proposed Action Alternative is “connected” to the operations and maintenance phase under NEPA. In implementing the project, please be sure that the proponent demonstrates compliance with these regulatory requirements.

Analysis of Direct Impacts

The final EA describes about half of the habitat directly impacted from the Proposed Action as temporary even though the impacts would be long-term (defined in the final EA as “generally last longer than five years”). For native vegetation to recover following land clearing activities such as grading or trenching takes several decades to centuries (Abella 2010). This description of the impacts as temporary is misleading and inaccurate with respect to natural resources. We suggest clarifying it to say that although there are areas that would be used during the construction phase of the Proposed Action Alternative, the impacts /disturbance are long-term. As such, please be sure that acceptable restoration measures are implemented for the project (see Abella and Berry 2016, Abella et al. 2023).

Analysis of Indirect Impacts

Examples of indirect impacts that result from a project with surface disturbance in the Mojave Desert include subsidized predators, invasive plants, increased fire frequency, size, and intensity, habitat loss and degradation, and blasting, which doesn't represent a comprehensive list. We were unable to find an analysis of these indirect impacts to the tortoise/tortoise habitat in either the draft or final EA. Although some of these impacts have Environmental Protection Measures (i.e., measures to mitigate impacts) in the final EA, we were unable to find an analysis of these impacts to tortoise/tortoise habitats prior to implementation of these measures.

Below, we have provided information on just one example of these indirect impacts, subsidized predators.

Subsidized Predators: Subsidized predators is one example of an indirect impact to the tortoise resulting from construction, operations, and maintenance of the Proposed Action Alternative and development of the nearby area is increased tortoise predation. Common ravens are known to prey on juvenile desert tortoises based on direct observations and circumstantial evidence, such as shell-skeletal remains with holes pecked in the carapace (Boarman 1993). The number of common ravens increased by 1,528% in the Mojave Desert since the 1960s (Boarman 1993). This increase in raven numbers is attributed to unintentional subsidies provided by humans.

In the Mojave Desert, common ravens are subsidized predators because they benefit from resources associated with human activities that allow their populations to grow beyond their “natural” carrying capacity in the desert habitat. Kristan et al. (2004) found that human developments in the western Mojave Desert affect raven populations by providing food subsidies, particularly trash and roadkill. Boarman et al. (2006) reported raven abundance was greatest near resource subsidies (specifically food = trash and water). Human subsidies include food and water from landfills and other sources of waste, reservoirs, sewage ponds, agricultural fields, feedlots, gutters, as well as perch, roost, and nest sites from power towers, telephone poles, light posts, billboards, fences, freeway or railroad overpasses, abandoned vehicles, and buildings (Boarman 1993). Subsidies allow ravens to survive in the desert during summer and winter when prey and water resources are typically inactive or scarce. Boarman et al. (1993) concluded that the human provided resource subsidies must be reduced to facilitate a smaller raven population in the desert and reduced predation on the tortoise.

Coyotes are known predators of tortoises. High adult tortoise mortality from coyote predation was reported by Petersen (1994), Esque et al, (2010) and Nagy et al. (2015). In some areas, numbers of ravens correlated positively with coyote abundance (Boarman et al. 2006). Lovich et al. (2014) reported tortoise predation may be exacerbated by drought if coyotes switch from preferred mammalian prey to tortoises during dry years. Because the Mojave Desert has been in a multidecade drought (Stahle 2020, Williams et al. 2022) due to climate change and drought conditions of increased duration and intensity are expected to continue in future years, increased predation pressure from coyotes on tortoises is expected to continue.

The Proposed Action Alternative during construction, operations, and maintenance and the connected residential/commercial development during construction and use would likely increase the availability of human-provided subsidies for predators of the tortoise including the common raven and coyote. For example, during the construction phase of the Proposed Action Alternative and residential/commercial development, the water used to control dust and the waste generated during construction including food brought to the Project site by workers for meals, etc., are examples of food and water subsidies for ravens and coyotes that would attract these predators to the Project area and increase their numbers in the surrounding area. The presence of food waste during operations and maintenance phase of the Proposed Action Alternative and the residential/commercial development would provide food subsidies for ravens and coyotes.

These subsidies of tortoise predators could be mitigated by requiring Best Management Practices (BMPs) that include using water for dust suppression, so it does not form puddles, requiring waste containers that are predator-proof and wind-proof and are regularly maintained by the Contractor and the Applicant, etc.

We request that BLM require that measures be implemented to ensure increased predation and other indirect impacts to the tortoise that may occur from the construction, operations, and maintenance of the Proposed Action alternative and connected residential/commercial development are minimized or avoided. BLM should require the Applicant to ensure that effective mitigation measures are added to the ROW grant as ACEPMs to substantially reduce/eliminate these indirect impacts to the tortoise and other special status species and coordinate the development and implementation of these additional ACEPMs with Utah Division of Wildlife Resources (UDWR) and USFWS.

Analysis of Impacts Prior to and Post-Mitigation

NEPA requires analysis of the impacts to the resource issues before implementing mitigation measures. There is no guarantee that the mitigation measures in the NEPA document will be implemented, and if implemented, will be successful. We request that BLM comply with this requirement for analysis of direct, indirect, and cumulative impacts to the tortoise and tortoise habitat both before the implementation of mitigation measures and after. The effectiveness of the mitigation should be analyzed in monitoring documents the BLM requires of the proponent.

Agency Consultation and Coordination

In Section 4.1 of the final EA, BLM provides information on the persons, groups, agencies, or other parties consulted or coordinated with during the preparation of this analysis. Two entities were listed. One was the U.S. Fish and Wildlife Service for section 7 consultation under the Federal Endangered Species Act (FESA). The other was the Utah Department of Transportation. UDWR was not an agency that was listed with whom BLM coordinated or consulted regarding the Proposed Action Alternative. We urge BLM to coordinate with the UDWR for impacts to wildlife resources including the Mojave desert tortoise prior to implementing protective measures given in the final EA.

We appreciate that a copy of BLM's biological assessment/biological evaluation of the Proposed Action Alternative is included in the final EA. We fully expect that BLM will require the proponent to implement these measures and provide monitoring that will ensure the measures are implemented as intended.

From Table 2-2 of the draft EA, the ACEPMs for the tortoise are:

- (1) A desert tortoise monitor (DTM) would conduct a clearance survey immediately prior to initiation of site construction.
- (2) The DTM would hold a preconstruction meeting with the contractor and all workers that would be onsite during construction and provide desert tortoise awareness training and certification for all onsite workers. The certification would be good for two years. The tortoise awareness training would include a handout with instructions and contact information for reference in the event a tortoise is found or wanders within the construction area.
- (3) The construction area would be enclosed in a silt fence to define the construction limits of the project. If the intent of this fence is to preclude tortoises from the impact area, it should be a galvanized 1" x 2" fence (USFWS 2009), not a silt fence. All ground disturbance and construction activities would be confined within the fence to prevent encroachment beyond the construction envelope.
- (4) A field contact representative (FCR) would be established to conduct daily clearance sweeps of the project area to ensure that there are no tortoises or tortoise hazards (ledges, trash, open excavations/holes, water puddles/ponds) within the construction area.
- (5) The DTM would complete a site visit every two weeks during the active season (February 15 – November 30) to check the construction disturbance limit fence and check for hazards to tortoise. Site visits by the DTM are not required during the less-active season (December 1 – February 14).
- (6) If a desert tortoise or fresh tortoise sign is found, the FCR would contact the monitor, the UDWR and the USFWS to discuss appropriate translocation, avoidance, and minimization measures based on the case-specific circumstances.
- (7) All desert tortoise habitat would be reclaimed with native vegetation seed. Stripped topsoil would be used for reclamation of temporary impact areas. Stripped topsoil containing resident biocrusts and associated mycorrhizal fungi should be used. Fill materials would be free of fines, waste, pollutants, and must be certified weed-free. The approved survey biologist would inspect reclamation activities at the end of construction to ensure disturbed areas are revegetated/restored according to the reclamation plan

approved by the BLM. Again, we provide several references (Abella and Berry 2016, and Abella et al. 2023) to advise the BLM in implementing this measure.

(8) Broadcast application of herbicides would be prohibited within the project area; if necessary, spot treatments would be applied by hand using herbicides approved by BLM to treat noxious weeds.

(9) The DTM would prepare all survey reports and field notes and submit them to the USFWS every three months and at the project completion. We recommend that these reports also be submitted to UDWR. Compensation for permanent loss of desert tortoise habitat because of the proposed project will be calculated during ESA Section 7 consultation and will be paid by the project proponent.

We have questions regarding some of these ACEPMs. For #1, a DTM would conduct the clearance surveys. The USFWS Field Manual describes clearance surveys (Chapter 6) and qualifications for persons authorized to conduct clearance surveys (Chapter 3). Clearance surveys should be conducted by persons with “thorough and current knowledge of desert tortoise identification, behavior, natural history, ecology, and physiology, and demonstrate substantial field experience and training to safely and successfully conduct their required duties.” For the Proposed Action, the BLM and USFWS would be agencies that would review the qualifications of the person(s) conducting clearance surveys. If approved, they would be authorized to conduct clearance surveys. We request that BLM ensures this information is implemented to adhere to the protocols in the USFWS’s (2009) Desert Tortoise (Mojave Population) Field Manual (Gopherus agassizii).

Mojave Desert Tortoise Protocols

The USFWS developed standard protocols (USFWS 2009, 2019) for the tortoise to implement for projects that occur within the range of the tortoise. These standard protocols include Preconstruction Surveys and Clearance Surveys. Please be sure that Clearance Surveys, not Presence-Absence Surveys (USFWS 2009) are implemented prior to construction.

We note that the ACEPMs that are listed in the final EA do not include standard measures implemented for projects that include trenching, blasting, and temporary storage and installation of pipes to ensure that these actions are not likely to adversely affect the tortoise. For example, projects that involve trenching in tortoise habitat usually have requirements that trenches be checked as a minimum at the beginning and end of each day to ensure that the tortoise and other wildlife species are in the trench. Trenches are also checked for wildlife species including tortoises immediately before they are backfilled. Pipes that are stored at the project site and the open end of installed pipes are capped to ensure that no tortoises or other wildlife are using them for cover sites. Pipes are inspected immediately before installation to ensure that no wildlife including tortoises are located inside them. We request that BLM review the standard mitigation measures to avoid take of tortoises for projects that include trenches, blasting, and pipes and ensure that they are implemented during construction.

Even though this document is not a formal protest, we appreciate this opportunity to provide comments on the final EA and trust they will help protect tortoises during implementation of authorized activities. We would also like to acknowledge that we were pleased to have received notice directly from the BLM St. George Field Office concerning scoping comments and availability of the draft EA. Herein, we reiterate that the Desert Tortoise Council wants to be identified as an Affected Interest for all other projects funded, authorized, or carried out by the BLM that may affect species of desert tortoises.

Respectfully,



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

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