DESERT TORTOISE COUNCIL
3807 Sierra Highway #6-4514
Acton, CA 93510
www.deserttortoise.org
eac@deserttortoise.org

Via BLM NEPA ePlanning Portal

January 17, 2026

Katherine Chiasson, Lennie McConnell
Bureau of Land Management
St. George Field Office
4001 East Aviator Dr.
St. George, UT 84790
kchiasson@blm.gov, lmcconnell@blm.gov

RE: Kolob Terrace Road Water Pipeline and Utilities Project Environmental Assessment (DOI-BLM-UT-C30-2026-0003-EA)

Dear Ms. Chiasson and Mr. McConnell,

The Desert Tortoise Council (Council) is a non-profit organization comprising 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 northern 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.

Both our physical and email addresses are provided above in our letterhead for your use when providing future correspondence to us. When given a choice, we prefer to receive emails for future correspondence, as mail delivered via the U.S. Postal Service may take several days to be delivered. Email is an "environmentally friendlier way" of receiving correspondence and documents rather than "snail mail."

We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the proposed project in habitats potentially occupied by the Mojave desert tortoise (*Gopherus agassizii*) (synonymous with Agassiz's desert tortoise), our comments include recommendations intended to enhance protection of this species and its habitat during activities that may be authorized by the Bureau of Land Management (BLM), which we recommend be added to project terms and conditions in the authorizing documents [e.g., issuance of right-of-way (ROW) grants, management plan and decision document, etc.] as appropriate. Please accept, carefully review, and include in the relevant project file the Council's following comments for the proposed action.

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), habitat 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 DTC to join Defenders of Wildlife and the Desert Tortoise Preserve Committee (DTPC) to petition the California Fish and Game Commission (Commission) in March 2020 to elevate the listing of the Mojave desert tortoise from Threatened to Endangered under the California Endangered Species Act (CESA) (Defenders of Wildlife et al. 2020). Importantly, following California Department of Fish and Wildlife's (CDFW) (2024a) status review, in their April 2024 meeting the California Fish and Game Commission voted unanimously to accept the CDFW's petition evaluation and recommendation to uplist the tortoise from threatened to endangered under the CESA based on the scientific data provided on the species' status, declining trend, numerous threats, and lack of effective recovery implementation and land management (CDFW 2024b). On July 15, 2025, the tortoise was officially uplisted to endangered status under the CESA (Commission 2025).

Description of the Proposed Action

According to the Biological Evaluation – Kolob Terrace Road Water Pipeline and Powerline Right-of-Way Project was prepared by Eocene Environmental Group, Inc. and dated August 2025. Pala Holdings LLC and Hank Moyle (Pala Group) along with Rocky Mountain Power, a division of PacifiCorp (collectively Applicants), propose to complete the Kolob Terrace Road Water Pipeline and Powerline Rights-of-Way (ROW) Project (Project) in Washington County, Utah. The Applicants propose to build a 150,000-gallon water tank and associated 8-inch underground water pipeline, and install a three-phase 34.5 kilovolt (kV) underground powerline adjacent to Kolob Terrace Road.

The underground pipeline will be 40,034 linear feet (7.6 miles) with a 20-foot wide ROW and covers approximately 18 acres of land. The pipeline will be built in existing disturbed areas along the shoulder and beneath the pavement of Kolob Terrace Road. There will be two pumping and/or compressor stations required, located on private and BLM lands and a water tank on private land at the terminus of the pipeline. The pipeline will connect to the water system for the town of Virgin, Utah to provide potable water to existing and likely future development. As part of the Project, most of the existing Virgin-11 overhead powerlines in Kolob Terrace Canyon would be removed.

Rocky Mountain Power proposes to construct a three-phase 34.5-kV underground powerline adjacent to Kolob Terrace Road. The underground powerline is an upgrade to an existing Virgin-11 overhead line. Following the underground construction, Rocky Mountain Power plans to remove the existing Virgin-11 backbone overhead line (78 poles) leaving 24 poles in place. The 24 poles will remain to provide direct service connections throughout the Kolob Terrace Canyon and will be re-energized via the proposed underground line following the overhead removal. Individual poles will be cut flush to grade and the pole butts will be abandoned, causing no underground disturbance. Existing roads would be used for accessing each individual pole. Individual poles that cannot be accessed by road will be removed via helicopter.

"Most of the proposed action area (Project areas and associated species buffer[s]) will be funded by a Bureau of Land Management (BLM) ROW grant and will occur on BLM–managed land" (Eocene Environmental Group, Inc. 2025).

The project originates in the northeast portion of the town of Virgin, Washington County, Utah (Figures 1 and 2) and continues to the northeast at elevations ranging from 3,600 feet above sea level (asl) to 4,300 feet asl as the Project progresses up Kolob Canyon. The project and action area are within a valley that leads north to Zion National Park, surrounded by large mesas and mountains on the east and west.

Comments on the Proposed Action

The Council thanks BLM for notifying us of the 15-day comment period for the Kolob Terrace Road Water Pipeline and Utilities Project Environmental Assessment (EA). BLM should be aware that we found no information on BLM's NEPA ePlanning web page for this project that provided the due date for public comments. Consequently, we are relying on the email notification we received from BLM that identified the due date for public comments as January 17, 2026.

Subsidized Tortoise Predation: The Council appreciates that much of the upgraded powerline will be placed underground. While this construction method may have been selected to reduce the likelihood of fires and other liability concerns, it also reduces the ability of common ravens to use these poles as substrates for nest and roost sites. Common ravens take advantage of human-made structures for roosting and nest building to increase their abundance and increase predation on the tortoise (Kristan and Boarman 2003). Ravens are effective predators of the tortoise. Removal of nesting and roosting substrates reduces this human-provided subsidy to the raven in tortoise habitats. 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).

However, during the construction phase of the proposed project, surface disturbance including digging would provide a new food source for common ravens and coyotes. The proposed project would kill or injure fossorial animals that would become a human subsidized food source for common ravens and coyotes. The water used to control dust and the waste generated during construction, including food brought to the project site by workers for meals, 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 where tortoise are known to occur. Examples of nesting subsidies are vertical structures such as buildings and poles. Common ravens can fly at least 30 miles daily in search of food and water (Boarman et al. 2006) and coyotes can travel an average of 7.5 miles or more daily (Servin et al. 2003). Nesting ravens have been documented to prey on tortoise more than one mile from the nest site. Thus, new sources of food, water, and nesting substrates would increase the predation pressure on tortoises in areas near the project footprint especially if construction occurs during heightened tortoise activity periods.

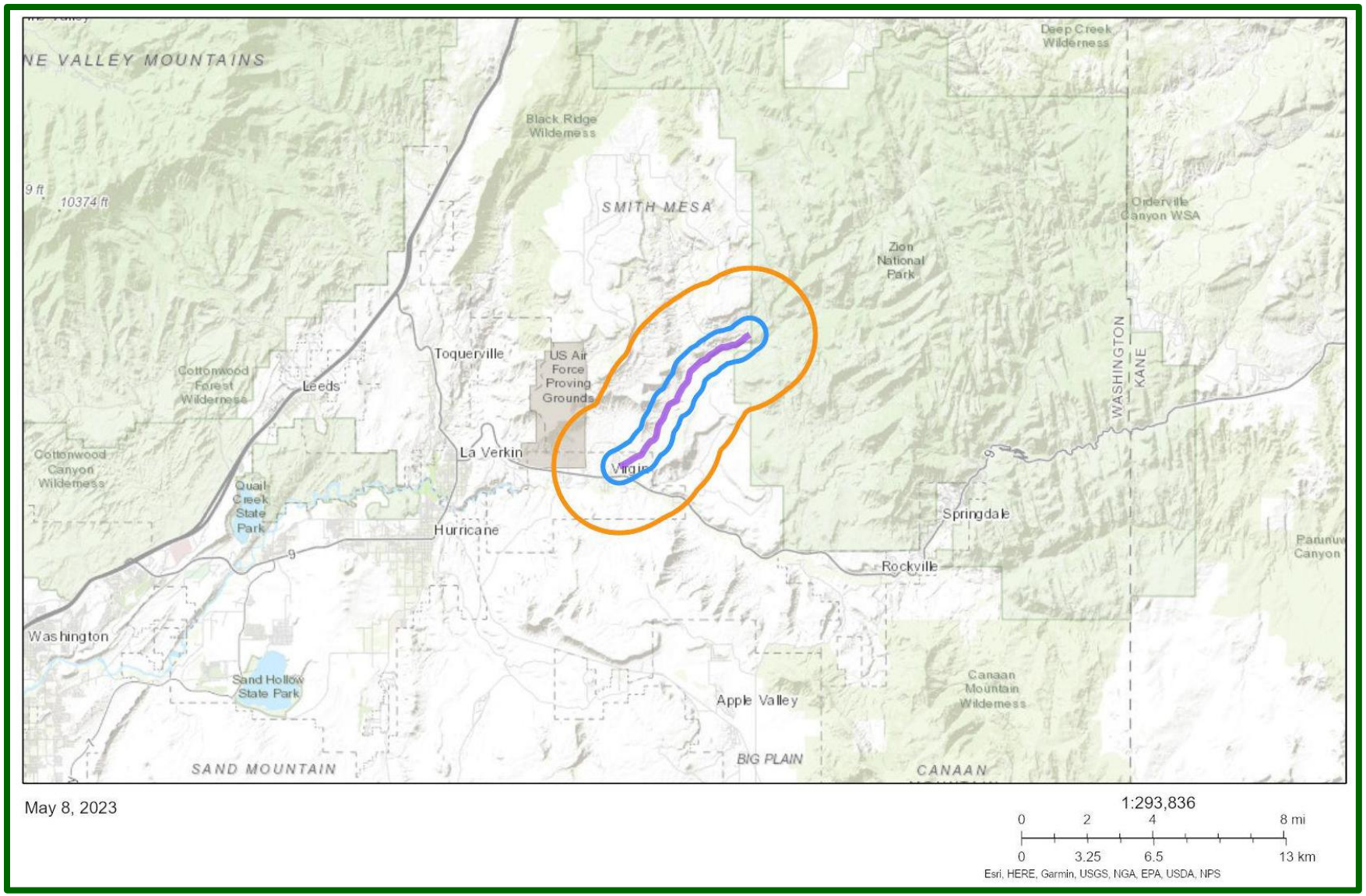


Figure 1. Location of the Kolb Terrace Road water pipeline and powerline in Washington County, Utah with 0.5 and 2-mile radii (Utah Natural Heritage Program Online Species Search Report).

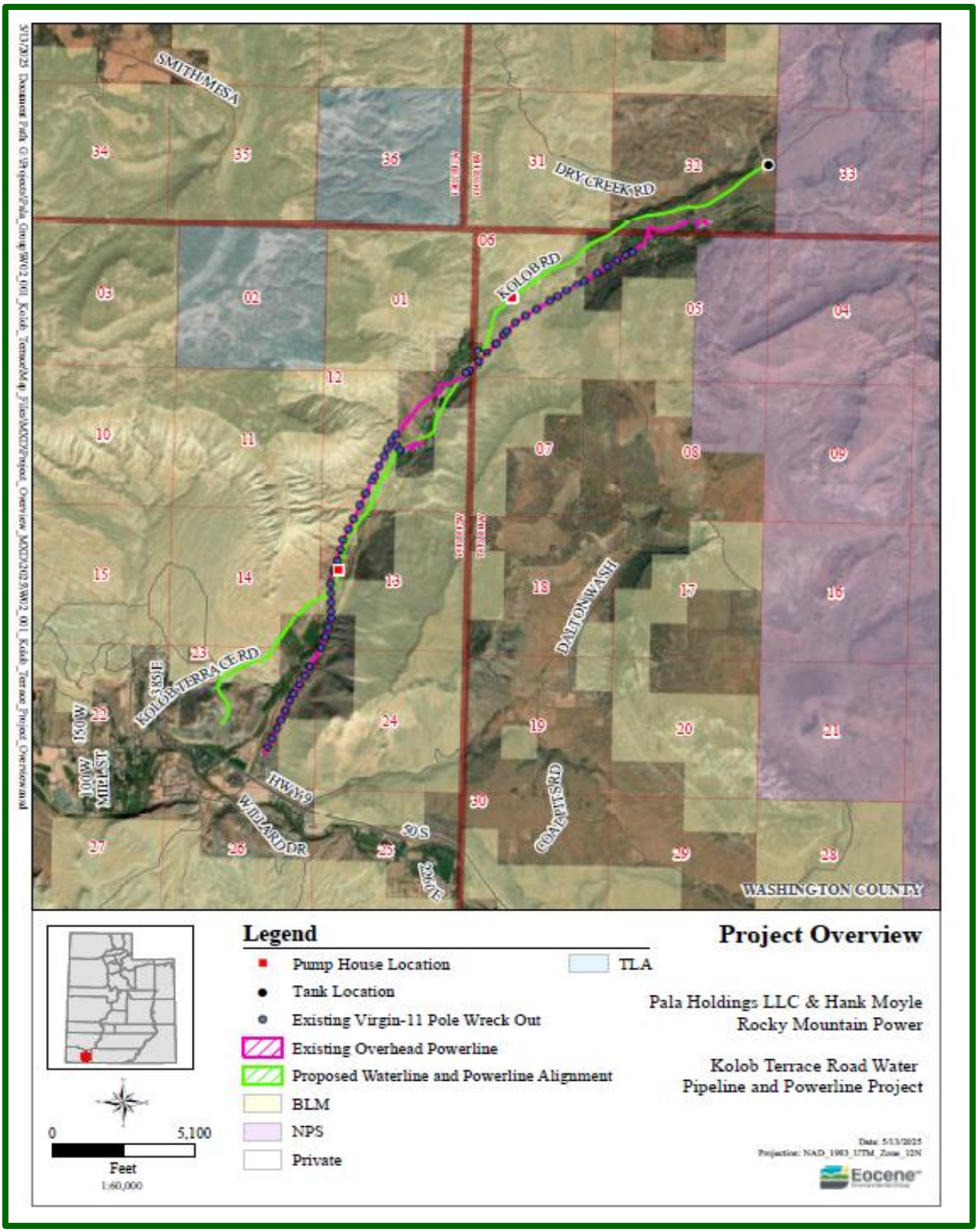


Figure 2. Project overview from the Biological Evaluation for the Kolob Terrace Road Water Pipeline and Powerline Right-of-Way Project.

BLM should require the Applicants to implement Best Management Practices (BMPs) to minimize these human-provided subsidies to common ravens and coyotes. Examples of BMPs include limiting the use of water for dust suppression so it does not form puddles, requiring waste containers that are predator-proof and wind-proof to be regularly maintained by the Applicants, and ensuring that any vertical structures associated with the project do not provide substrates for common ravens to use as nest sites and/or installing deterrents so common ravens cannot roost or nest on them.

Cumulative Impacts: On page 3 of the EA BLM says, "The Project would serve the town of Virgin, Utah, as well as the surrounding communities, including the Under Canvas Zion glamping resort." "Virgin, Utah, is experiencing steady population growth, increasing by 1.55 percent annually and 7.92 percent since 2020 (World Population Review, 2025a). Washington County as a whole has grown even more rapidly, with a 2.28 percent increase in the last year and a total growth of 53.11 percent since 2010 (World Population Review, 2025b)." "[H]ousing and business development has accelerated to meet demand, increasing the need for essential services, particularly reliable water and power."

Although the purpose of the project is to support this growth and development in areas adjacent to the project and BLM indicates that the project is needed to support this growth and development, there are no analyses of cumulative or growth-inducing impacts to resources including the tortoise, which should in included in the final EA.

On page 9 of the EA, BLM said, "The following resources and resource uses were determined by the ID Team to be present within the Proposed Action area but [will] not be impacted to the degree that would require detailed analysis in the EA: . . . invasive, non-native species; threatened, endangered, or candidate animal species; . . ." This statement appears to reinforce BLM's decision to not address indirect and cumulative impacts of the project in the EA. Two types of impacts that have substantially contributed to the declining status of the tortoise are failure to mitigate for indirect and cumulative impacts. On a project-by-project basis, the impacts appear to be small but when considered with all other past, present, and reasonably foreseeable impacts, they are substantial.

BLM has an obligation to comply with court decisions that require the analysis of cumulative impacts in environmental assessments, and to comply with BLM's National Environmental Policy Act (NEPA) Handbook (BLM 2008). Therefore, the Council requests that BLM revise the EA and add an analysis of cumulative impacts to tortoises and tortoise habitat, including habitat that can be used for connectivity, as well as other special status species and their habitats, from the construction of the project and the growth and development that would occur as a result.

Compliance with Procedures for Federal Endangered Species Act Compliance for the Desert Tortoise: On page 7 of the EA (Table 1-2. Management Goals and Decisions SGFO ROD/RMP) under St. George Field Office Resource Management Plan (RMP), Management Goals and Decisions, Fish and Wildlife-39, BLM says "Biological surveys would be conducted to identify sensitive species occurrence, nesting sites (for the northern goshawk and ferruginous hawk), and special habitat requirements (RMP page 2.32)."

In "Preparing for Any Action that May Occur within the Range of the Mojave Desert Tortoise (*Gopherus agassizii*)" (USFWS 2019), the USFWS says, "Section 7(a)(2) of the ESA requires Federal agencies to consult with the U.S. Fish and Wildlife Service (USFWS) on any action that they fund, authorize, or implement that ***may affect*** [emphasis added] the desert tortoise." The effects used to make this determination are "direct and indirect effects of the action and effects of any actions that are interrelated or interdependent with the proposed action" (50 CFR 402.33(a)(2)). The "action area" is not merely the immediate area involved in the action. The extent of the action area is not limited to the "footprint" of the action nor is it limited by the authority of the federal, state, or local agency or any other entity proposing the project.

The USFWS (2019) protocol survey of the project area should cover the entire action area for the proposed action. The USFWS also recommends that proponents or their consultants discuss the extent of the action area for each action with local USFWS biologists prior to beginning surveys to reduce the likelihood that the USFWS will request additional surveys later.

We were unable to find any results of a USFWS (2019) pre-project protocol level survey for the tortoise that was conducted in the action area. Please include results of the formal protocol survey in the final EA.

Indirect and Cumulative Impacts: On pages 7 and 8 of the EA, BLM said that it used an internal scoping process and identified four resource issues to discuss and analyze in the EA. Threatened and endangered wildlife species were not identified as issues in this scoping process and were not analyzed in the EA.

We were unable to find information in the EA about the science used and the process implemented during this internal scoping process that resulted in the determination that threatened and endangered wildlife species were not a resource issue that should be analyzed. The science and the process should have included information on the indirect and cumulative impacts to the tortoise and tortoise habitats and other listed species. Instead, in the EA we found information only on direct impacts to listed species, that is, whether there was information on the occurrence/occupancy of the species or likely occupied habitat occurring in the project footprint/area of disturbance. The terms "indirect impact" and "cumulative impact" were not found in the EA.

Some indirect impacts to the tortoise that may result from the implementation of the project include human activities that result in the destruction, degradation, and/or fragmentation of tortoise habitats including habitat used for connectivity or fragmented tortoise populations in the Upper Virgin River Recovery Unit; surface disturbance and introduction/spread/proliferation of non-native invasive plant species via construction and maintenance equipment, vehicles, and other sources; replacement of nutritious native forbs with low nutritional non-native invasive grasses (Drake et al. 2016); increased occurrence of size, intensity, and frequency of human-caused wildfires from fuels associated with abundances of non-native invasive plant species (Brooks and Esque 2002); and increased predation from increased numbers of predators that utilize subsidies of food, water, and nesting locations (Boarman 2003).

We remind BLM of its obligation to implement its Special Status Species Management Policy (BLM 2024). In this Policy BLM states, "This policy establishes an agencywide emphasis on proactive, landscape- and ecosystem-level, scientifically informed conservation and recovery of special status species and their habitats." BLM identified five objectives:

- Focus on Proactive Conservation and Recovery for Special Status Species;
- Use ESA Section 7(a)(2) Consultation to Support Conservation and Recovery;
- Promote Healthy Species Populations and Biodiversity through Landscape- and Ecosystem-Level Management – including promoting ecosystem resilience and landscape intactness, including habitat connectivity especially with regard to climate change;
- Use Science and Adaptive Management to Advance Conservation and Recovery; and
- Engage Stakeholders through Internal and External Involvement.

For the first bullet, the project would change most of the aboveground powerline to an underground powerline. Although this may be viewed as a proactive conservation action for the tortoise and other species, one major reason for the project is to provide necessary resources (i.e., water and electricity for the development of the area) that may lead to growth-inducing impacts, including the loss of tortoise habitat. Thus, the project cannot be considered a proactive conservation or recovery action.

For the second objective, BLM should explain in the revised EA how it is complying with Section (7)(a)(2) of the FESA for species including the desert tortoise that may be affected directly or indirectly by any phase of the proposed project. As mentioned earlier in this letter, Section 7(a)(2) of the FESA requires federal agencies to consult with the USFWS on any action that they fund, authorize, or implement that ***may affect*** [emphasis added] the desert tortoise. The effects of the proposed action may be direct, indirect, interrelated, and/or interdependent.

For the third objective, BLM should demonstrate how it has (1) analyzed and incorporated habitat connectivity for the tortoise and other special status species in the analysis of impacts and (2) developed appropriate mitigation to offset these impacts and ensure that habitat connectivity is maintained. Habitat connectivity is necessary to support demographically viable populations and long-term gene flow for the tortoise.

In the Biological Evaluation, Eocene Environmental Group, Inc. (2025) reports that "The action area is within a valley that leads north to Zion National Park, surrounded by large mesas and mountains on the east and west." Tortoises and tortoise habitat occur both northeast, east (e.g., in the southern part of Zion National Park), and west of the proposed project (Thoma and Shovic 2013, Feinberg et al. 2019, Gray et al. 2019). The USFWS (2012) and researchers (Averill-Murray et al. 2021) have reported on the importance of providing linkage habitat for the tortoise within and between Tortoise Conservation Areas to provide for population connectivity throughout the range of the tortoise. Providing linkage habitats for tortoises to move in response to climate change is also critically important for their long-term survival.

In analyzing habitat connectivity for the tortoise, Averill-Murray et al (2021) stated, "Ignoring minor or temporary disturbance on the landscape could result in a cumulatively large impact that is not explicitly acknowledged (Goble 2009); therefore, understanding and quantifying all surface disturbance on a given landscape is prudent." The authors found that effective linkage habitats are not long narrow corridors. In addition, any development within or adjacent to them has an edge effect (i.e., indirect impact) that extends from all sides into the linkage habitat further narrowing or impeding the use of the linkage habitat, depending on the extent of the edge effect – again demonstrating the importance of analyzing indirect impacts to the tortoise from implementation of all phases of the proposed project.

To help maintain tortoise residency and permeability across all other non-conservation-designated tortoise habitat, Averill-Murray et al. (2021) recommended that all surface disturbance should be "limited to less than 5-percent development per square kilometer because the 5-percent threshold for development is the point at which tortoise occupation drops precipitously (Carter and others 2020a)." They cautioned that the upper threshold of five percent development per square kilometer may not maintain population sizes needed for demographic or functional connectivity; therefore, development thresholds should be lower than five percent.

When analyzing whether a project may impact areas on the landscape used/needed by tortoises, BLM should include that the lifetime home range for the Mojave desert tortoise is more than 1.5 square miles (3.9 square kilometers) (Berry 1986) and that tortoises may make periodic forays of more than seven miles (11 kilometers) at a time (Berry 1986).

For the fourth objective in the final EA, the BLM should explain how it analyzed project impacts using the best available science for direct, indirect, and cumulative impacts of the project, and used this information to develop effective mitigation for the tortoise and other listed species that would be affected by direct, indirect, and cumulative impacts from implementation of all phases of the project.

In addition to its Special Status Species Management Policy, BLM is directed in other documents to use science in its decision-making processes. Congress declared that federal agencies shall "[u]tilize a systematic, interdisciplinary approach which will ensure the integrated use of the natural and social sciences . . . in planning and in decisionmaking." To comply with this requirement, the draft EA should have used the latest information from scientific journals and reports on the demographic status of the tortoise, the needs of the tortoise for its survival and recovery in the Upper Virgin River Recovery Unit and rangewide, and how the direct, indirect, and cumulative impacts of the action alternative would affect the future survival and recovery of the tortoise in this Recovery Unit and range-wide. This analysis and any conclusions stated in the EA regarding the tortoise should be supported with citations from the scientific literature rather than by unsupported conclusions. The BLM's "Advancing Science in the BLM: An Implementation Strategy IB 2015-040" (BLM 2015) reinforces the need to use science in decision-making.

For the fifth objective, from the information provided in the draft EA, it appears that BLM did not engage stakeholders (i.e., the Council was not contacted to provide scoping comments). BLM should comply with the fifth objective and engage the Council as a Stakeholder for this and other projects in the range of the tortoise.

Application of "Action Area" to the Project: BLM used the term "action area" in the EA, but we were unable to find information on what BLM determined the action area to be for the project. On page 4 of the Biological Evaluation, Eocene Environmental Group, Inc. (2025) states, "[t]he action area is defined [50 Code of Federal Regulations (CFR) 402.02] as all areas to be affected directly ***or indirectly by the federal action*** [emphasis added] and not merely the immediate area involved in the action." Eocene Environmental Group, Inc. concluded, "the action area is any area where all permanent and temporary ground disturbance may occur in addition to any species-specific buffers put in place." Unfortunately, they provided only part of the definition of "action area" and neglected to include "actions that are interrelated or interdependent with the proposed action." When applying the definition in the Biological Evaluation, they narrowed the definition of the action area in the CFRs by not including all indirect impacts from the proposed project or impacts from actions that are interrelated or interdependent with the proposed action.

From the information provided in the Biological Evaluation, it appears that limited information was used to determine the action area for the project. This information failed to indicate if there were sightings in the project footprint or suitable habitat for species of greatest conservation concern. Because the project is linear, documented sightings of species in the project footprint may be minimal. Most species are cryptic in coloration or behavior making it unlikely that they would have been seen and reported. For habitat present in the limited action area, the Biological Evaluation describes the dominant vegetation as consisting of "cottonwood (*Populus fremontii*), salt cedar (*Tamarix* Spp.), creosote bush (*Larrea tridentata*), prickly pear cactus (*Opuntia* Spp.), and red brome (*Bromus madritensis*)." BLM should include that desert tortoise have been observed in cottonwood-dominated riparian habitat (LaRue pers. comm.) as well as creosote bush in other parts of its range. The Utah Division of Wildlife Resources' Wildlife Habitat Analysis Tool (WHAT) identifies southwestern willow flycatcher and Mojave desert tortoise as occurring within a two-mile radius of the action area, including a tortoise sighting recorded in 2020 within two miles of the project. The limited occurrence of typical tortoise habitat or absence of occurrence data within a project footprint does not mean that tortoises do not occur in or near the project area and would not be impacted by the project.

Lastly, connectivity habitat may not have been included in formulating the boundary of the action area for this project. By not including the connectivity habitat needs of the tortoise and indirect impacts, the tortoise and perhaps other listed species and species of greatest conservation need were not included in the EA in the analysis of impacts from implementation of all phases (i.e., construction, use, and maintenance phases) of the proposed project.

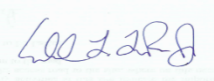
We request that BLM revise the EA and the Biological Evaluation to use the full definition of action area and apply it to the tortoise and other species of greatest conservation need when analyzing direct and indirect impacts and impacts from interrelated or interdependent actions.

Discrepancy in the Location of the Proposed Project: There appears to be a discrepancy in the maps that show the location of the proposed project. On page 73 of the BLM's pdf documents that include the EA (January 2025) and Biological Evaluation (August 2025), there is a map that shows the location of the project including a winding road (which we presume the pipeline would follow) that terminates at the water tank. However, the map on page 3 of the Biological Evaluation shows the tank at a different location and no winding road included in the map of the proposed project. We found no map in the EA that showed the location of the water tank. In the revised EA and associated documents, BLM should clarify the discrepancy among these maps and ensure that all maps in these documents are accurate.

We appreciate this opportunity to provide the above comments and trust they will help protect tortoises during any resulting authorized activities. Herein, we reiterate that the Council wants to be identified as an Affected Interest for this and all other projects funded, authorized, or carried out by the BLM that may affect desert tortoises, and that any subsequent environmental documentation for this project is provided to us at the contact information listed above. Additionally, we ask that you notify the DTC at eac@deserttortoise.org of any proposed projects that BLM may authorize, fund, or carry out in the range of any species of desert tortoise in the southwestern United States (i.e., *Gopherus agassizii*, *G. morafkai*, *G. berlandieri*, *G. flavomarginatus*) so we may comment on them to ensure that BLM fully considers and implements actions to conserve these tortoises as part of its directive to conserve biodiversity on lands managed by BLM.

Please respond in an email that you have received this comment letter so we can be sure our concerns have been registered with the appropriate personnel and office for this Project.

Respectfully,



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

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