



DESERT TORTOISE COUNCIL

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Via email only

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Re: Middle Mile Broadband Network (MMBN) (Project 09-39510 (CACA 106330197)) and (DOI-BLM-CA-C060-2024-0070-EA)

Dear Mr. Wiegmann, Ms. Alcalá,

The Desert Tortoise Council (DTC) 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 DTC routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

The Desert Tortoise Preserve Committee (DTPC) is a non-profit organization formed in 1974 to promote the welfare of the desert tortoise in its native wild state. DTPC members share a deep concern for the continued preservation of the tortoise and its habitat in the southwestern deserts and are dedicated to the recovery and conservation of the desert tortoise and other rare and endangered species inhabiting the Mojave and western Sonoran deserts. The DTPC has a long track record of protecting desert tortoises and their habitat through land acquisition, preserve management, mitigation land banking, and educational outreach.

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.”

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 DTTC (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. In its status review, California Department of Fish and Wildlife (CDFW) (2024) stated: “At its public meeting on October 14, 2020, the Commission considered the petition, and based in part on the Department’s [CDFW] petition evaluation and recommendation, found sufficient information exists to indicate the petitioned action may be warranted and accepted the petition for consideration. The Commission’s decision initiated this status review to inform the Commission’s decision on whether the change in status is warranted.”

Importantly, in their April 2024 meeting, the California Fish and Game Commission voted unanimously to uplist the tortoise from threatened to endangered under the California Endangered Species Act based on the scientific data provided on the species’ status, declining trend, numerous threats, and lack of effective recovery implementation and land management. Among other things, this determination means that the Mohave desert tortoise population in California is deemed by the California Fish and Game Commission to be closer to extinction than when it was listed as threatened in 1989. The only status more dire than “endangered” is “extinct,” and the state of California has formally determined based on its five-year status review (CDFW 2024) that the desert tortoise is closer to extinction than it was in 1989.

First, we would like to thank the Bureau of Land Management (BLM) for contacting us with information on this project (<https://eplanning.blm.gov/eplanning-ui/project/2033243/510>). Unless otherwise noted, the page numbers referenced herein pertain to the draft environmental assessment (DEA; DOI-BLM-CA-C060-2024-0070-EA) and its appendices available at the above link. Although the DEA was prepared by the Federal Highway Administration (FHWA), we see that it was prepared in cooperation with the BLM, to which these comments are directed. We are also taking this opportunity to provide our comments directly to the California Department of Transportation (Caltrans) at the contact information given in the BLM's eplanning website.

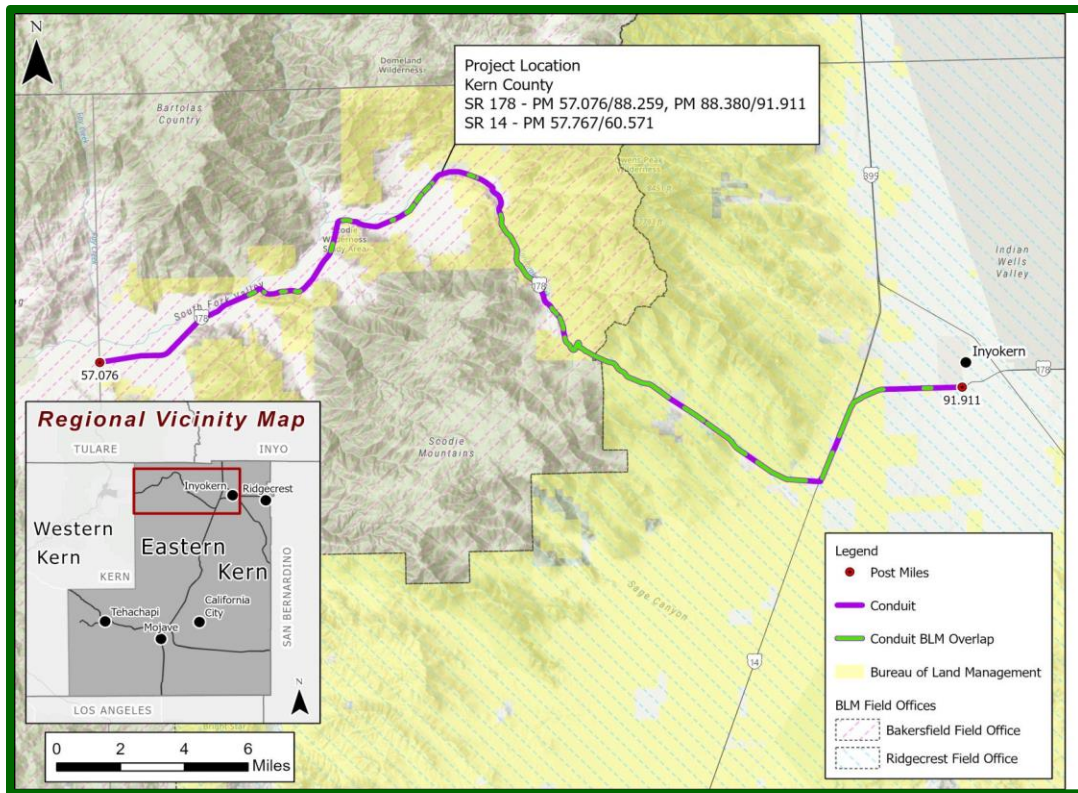
Pages 1 and 2 indicate, "This project extends along State Route 178 from the west at postmile 57.076 to 88.259, then on State Route 14 from postmile 57.767 to postmile 60.571, then on State Route 178 from postmile 88.380 to postmile 91.911 (see Figure 1-3). Once installed, fiber cable will connect to Hub #132 at Postmile 57.767 on State Route 14. Vaults will be located at approximately 2,400 feet intervals between hubs. Additional analysis has determined that splice points—where two strands of fiber meet—represent logical termini for projects within the network. The dark fiber between two adjacent splice points is the most granular portion of the network that can be independently operated; accordingly, any project of the network which is bound by a splice point meets the NEPA [National Environmental Policy Act] definition for independent utility. Additionally, the deployment of a splice-to-splice segment on the MMBN [Middle-Mile Broadband Network] would not restrict future improvement or expansion of the network. Simply put, any stretch of fiber between two splice points, which occur every 2.5 miles across the MMBN, could be constructed and operated as a standalone project."

Based on the map on the following page, we judge that the eastern ± 15 miles of the alignment occur in habitats potentially occupied by the desert tortoise, Mohave ground squirrel (*Xerospermophilus mohavensis*), and Joshua tree (*Yucca brevifolia*), the latter of which is a candidate for state listing by the California Fish and Game Commission.

On page 4, we read, "The four methods for underground installation of fiber optic conduit are plowing, trenching, trenching in pavement, and horizontal directional drilling:

- Plowing (4 inches wide) – under this method conduits, are installed with the use of a tracked vehicle with cable reel in front and plow blade in back. As the vehicle moves, it furrows the soil and installs the conduit simultaneously.
- Trenching (6 to 12 inches wide) – under this method, a trencher with rock-wheel blade or similar is used to cut a trench for conduit installation. Trenching in pavement (3 to 6 inches wide and a minimum depth of 2 feet) – under this method, a specialty saw blade is used to cut a narrow trench in asphalt pavement for conduit installation.
- Horizontal directional drilling (8 inches in diameter and minimum depth of 4 feet and maximum depth of 6 feet unless otherwise authorized) – under this method, conduits are installed by digging a trench on each side of the crossing to allow the guiding and retrieval of a drill stem or directional boring device.
- Install vaults (30"x48"x36") approximately every 2,400 feet (maximum spacing). Every 5th vault will be larger for splicing (48"x48"x48"). Vaults will be flush with the ground or buried."

Given these installation methods, the most likely impacts to desert tortoise are minor disruption of habitats that are likely already degraded by road construction and vehicle use along road shoulders and potential crushing of tortoises temporarily crossing the right-of-way (ROW). Situating the cable alongside the road likely diminishes potential for these impacts, as habitats are typically already compromised, but given the tortoise's mobility, they may wander into the ROW where they may be harmed by installation activities.



The excavation of 36” to 48” deep holed for installation of vaults has the potential to entrap tortoises and other wildlife if they fall into the holes. We recommend that these excavations be covered when not being worked on to prevent tortoises and other wildlife from falling into these excavations because this could result in injury or entrapment. For species listed under the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA), this would be a form of “take” that is prohibited without prior authorization. If any wildlife is found in these excavations, the animals should be carefully removed and relocated to a safe location away from the road and work area. For species listed under the FESA (e.g., desert tortoise) or CESA (e.g., desert tortoise, Mohave ground squirrel), we further recommend that an authorized biologist or monitor be available to remove these species and relocate them to a safe location with appropriate environmental conditions and monitor their behavior.

Page 5 indicates, “Staging areas for construction equipment, materials, fuels, lubricants, and solvents will be established along the project routes during construction to allow more efficient use and distribution of materials and equipment. Staging areas are typically locations where materials or equipment are stored for more than two days. Temporary parking areas may also be established to park vehicles and equipment during the workday or overnight. No new staging areas would be established in undisturbed areas.”

We recommend, depending on how long a particular staging area is used, enclosing heavy equipment within temporary tortoise-proof fences (USFWS 2009) to preclude tortoises from crawling beneath vehicles, equipment, and materials and being crushed when they are moved. Alternatively, Caltrans-approved biologist(s) (designated biologist) should check beneath all vehicles and heavy equipment for tortoises before they are moved, as per LUPA-BIO-IFS-8 on page 53 of Appendix C.

On page 32, we read, “The Biological Study Area for the project covers the Project Impact Area and includes fifteen feet from edge of pavement. Reconnaissance surveys and general flora and fauna surveys were conducted in April of 2023. During the surveys, no special status species were observed within the Biological Study Area.” It is predictable and to be expected that no desert tortoises would burrow within 15 feet of the paved roadways unless earthen berms are present.

However, there is no indication that the “action area” was surveyed, which encompasses adjacent areas. The “action area” is defined in 50 Code of Federal Regulations 402.2 and the USFWS Desert Tortoise Field Manual (USFWS 2009) as “all areas to be affected directly or indirectly by proposed development and not merely the immediate area involved in the action” (50 Code of Federal Regulations §402.02). Thus, the 100% coverage survey area is larger than the project footprint/project site. CDFW has adopted the USFWS’s 100% coverage survey as the methodology to use (<https://wildlife.ca.gov/Conservation/Survey-Protocols#377281283-reptiles>) to determine tortoise presence/use of the action area and whether take would occur.

Under the Migratory Bird Treaty Act (MBTA), migratory birds and their active nests are protected from take. For example, to determine if burrowing owls (*Athene cunicularia*) occur in the project area, the California Department of Fish and Wildlife (CDFW) guidance (CDFG 2012) is that transects be surveyed at 30-, 60-, 90-, 120-, and 150-meter intervals on either side of the ROW. Information that this protocol was implemented and the results should be include in the DEA along with any needed mitigation.

Was CDFW contacted about the need to perform protocol trapping surveys for Mohave ground squirrel (CDFW 2013) along the eastern reaches of the ROW up to about Walker Pass on Highway 178? We are concerned that “reconnaissance” surveys would not fulfill the more rigorous survey methods required for tortoises (USFWS 2019), Mohave ground squirrel (CDFW 2023), burrowing owl (CDFG 2012), and special status plant species (CDFW 2018), as required by LUPA-BIO-PLANT-1, LUPA-BIO-SVF-1, LUPA-BIO-SVF-5, and LUPA-BIO-VEG-1 given on page 52 of Appendix C. We were unable to find any reports documenting completion of any protocol surveys, leaving us to conclude that only reconnaissance surveys were performed.

Did Caltrans complete a Natural Environment Study? We recommend that an appendix be added to the Final EA that includes all biological study reports completed for this project so that we and the public have a better idea of methodologies employed. In the event that the recommended appendix reveals that the reconnaissance surveys were inadequate or not performed, we ask that these additional surveys be performed.

We do not recognize the following paragraph at the bottom of page 34 to constitute an adequate cumulative impacts *analysis*: “All impacts to biological resources will be avoided through Best Management Practices and project design specifications described above. No impacts to biological resources are anticipated, therefore the proposed action would not result in cumulative impacts to biological resources.” For example, and among other things, it is not clear from the DEA what growth-inducing impacts, if any, may result from the project; will any new project-related impacts occur offsite or in distant areas as a result of this project (e.g., “spur lines” to new locations)? Such planned or projected future occurrences would be considered connected actions and should be included in the EA.

Please see *Grand Canyon Trust v. F.A.A.*, 290 F.3d 339, 345-46 (D.C. Cir. 2002) in which the court ruled that agencies must analyze the cumulative impacts of actions in environmental assessments. We request that the agencies amend the Final EA to include a section that analyzes the cumulative impacts of the proposed action.

In the cumulative effects analysis, please ensure that the Council on Environmental Quality's (CEQ) "Considering Cumulative Effects under the National Environmental Policy Act" (1997) is followed. BLM refers to this document in its NEPA Handbook (BLM 2008a). BLM's analysis should include CEQ's eight principles when analyzing the cumulative effects of the proposed action on the tortoise and its critical habitat/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* [emphasis added] of resources, ecosystems, and human communities." For example, the Draft EA should include data on the likelihood that the tortoise population in the Colorado Desert Recovery Unit will be sustained into the future given its status and trend.

CEQ's eight principles are listed below:

1. Cumulative effects are caused by the aggregate of past, present, and reasonable future actions.

The effects of a proposed action on a given resource, ecosystem, and human community, include the present and future effects added to the effects that have taken place in the past. Such cumulative effects must also be added to the effects (past, present, and future) caused by all other actions that affect the same resource.

2. Cumulative effects are the total effect, including both direct and indirect effects, on a given resource, ecosystem, and human community of all actions taken, no matter who (federal, non-federal, or private) has taken the actions.

Individual effects from disparate activities may add up or interact to cause additional effects not apparent when looking at the individual effect at one time. The additional effects contributed by actions unrelated to the proposed action must be included in the analysis of cumulative effects.

3. Cumulative effects need to be analyzed in terms of the specific resource, ecosystem, and human community being affected.

Environmental effects are often evaluated from the perspective of the proposed action. Analyzing cumulative effects requires focusing on the resources, ecosystem, and human community that may be affected and developing an adequate understanding of how the resources are susceptible to effects.

4. It is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.

For cumulative effects analysis to help the decision maker and inform interested parties, it must be limited through scoping to effects that can be evaluated meaningfully. The boundaries for evaluating cumulative effects should be expanded to the point at which the resource is no longer affected significantly or the effects are no longer of interest to the affected parties.

5. Cumulative effects on a given resource, ecosystem, and human community are rarely aligned with political or administrative boundaries.

Resources are typically demarcated according to agency responsibilities, county lines, grazing allotments, or other administrative boundaries. Because natural and sociocultural resources are not usually so aligned, each political entity actually manages only a piece of the affected resource or ecosystem. Cumulative effects analysis on natural systems must use natural ecological boundaries and analysis of human communities must use actual sociocultural boundaries to ensure including all effects.

6. Cumulative effects may result from the accumulation of similar effects or the synergistic interaction of different effects.

Repeated actions may cause effects to build up through simple addition (more and more of the same type of effect), and the same or different actions may produce effects that interact to produce cumulative effects greater than the sum of the effects.

7. Cumulative effects may last for many years beyond the life of the action that caused the effects.

Some actions cause damage lasting far longer than the life of the action itself (e.g., acid mine damage, radioactive waste contamination, species extinctions). Cumulative effects analysis needs to apply the best science and forecasting techniques to assess potential catastrophic consequences in the future.

8. Each affected resource, ecosystem, and human community must be analyzed in terms of its capacity to accommodate additional effects, based on its own time and space parameters.

We request that the Final EA include these eight principles in its analysis of cumulative impacts on the Mojave desert tortoise. The EA should include an analysis of all proposed mitigation and how its implementation during all phases of the proposed action (including monitoring for effectiveness and adaptive management) would result in “no net loss in quantity and quality of Mojave desert tortoise habitat...and using offsite mitigation (compensation) for unavoidable residual habitat loss.”

BLM should also demonstrate in the Final EA that it is fully complying with its policies on Special Status Species (BLM 2008b), Mitigation (BLM 2021a,b,c), Habitat Connectivity (BLM 2022), and Advancing Science (BLM 2015, Kitchell et al. 2015) – a strategy that describes BLM to be “science-informed,” that “enables managers and staff to apply science in decision making and adaptive management, at every level and in every program” with respect to the tortoise.

In addition, we request that BLM add this project and its impacts to a database and geospatial tracking system for special status species, including Mojave desert tortoises, which track cumulative impacts (e.g., surface disturbance, paved and unpaved routes, linear projects, invasive species occurrence, herbicide/pesticide use, wildfires, etc.), management decisions, and effectiveness of mitigation for each project. Without such a tracking system, BLM is unable to analyze cumulative impacts on special status species (e.g., desert tortoises) with any degree of confidence.

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 DTC and DTTC want to be identified as Affected Interests for this and all other projects funded, authorized, or carried out by the BLM and FHWA 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 request that you notify the DTC (eac@deserttortoise.org) and DTTC (roger.dale@tortoise-tracks.org) of any future proposed projects that the BLM or FHWA may authorize, fund, or carry out in the range of the desert tortoise in California.

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



Roger Dale
President
Desert Tortoise Preserve Committee, President

cc. Diana Gomez, Director, District 6, Caltrans, diana.gomez@dot.ca.gov
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