

DESERT TORTOISE COUNCIL

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Via email only

March 31, 2020

Joan Patrovsky SCE LVRAS Project Bureau of Land Management, California Desert District 22835 Calle San Juan de Los Lagos Moreno Valley, CA 92553 jpatrovs@blm.gov

RE: Environmental Assessment for the Lugo-Victorville 500 kilovolt (kV) Transmission Line Special Protection Scheme (SPS) Project, San Bernardino County, CA and Clark County, NV

Dear Ms. Patrovsky,

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 the 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 action in habitats 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 Land Management (BLM) and National Park Service (NPS).

Purposed and Need

BLM and NPS would decide whether to approve and amend the transmission line right-of-way (ROW) to allow the installation of the proposed Lugo-Victorville 500 kilovolt (kV) Transmission Line Special Protection Scheme (SPS) Project, also referred to as Remedial Action

Scheme or LVRAS Project. Southern California Edison (SCE) would install about 85 miles of a new telecommunication line between the Eldorado Substation near Boulder City, Nevada and Pisgah Substation near Ludlow, California. Land ownership is – BLM (26.8 miles), NPS (51.3 miles), private (3.2 miles), and State of California (3.2 miles). The project is needed to reliably interconnect and integrate multiple generation facilities in the Southern Nevada/Eastern California area onto the electric grid.

Description of Alternatives

In the Draft Environmental Assessment (EA), BLM presented three alternatives:

- No Action Alternative The LVRAS Project would not be implemented. BLM would not process any ROW actions. The BLM ROW grant for SCE's 500kV transmission lines expired in 2016. SCE would obtain a ROW permit to operate its existing facilities on Mojave National Preserve lands. BLM would not renew the ROW permit for the Hector 12 kV distribution line. The ROW permit for this line expired in 2019.
- Alternative 1, Proposed Action Existing overhead ground wire would be replaced with optical ground wire or fiber-optic cable along the Eldorado-Lugo 500 kV transmission line ROW. Installation methods would be both aerial and ground. This would include the addition of 27 3-ft x 3-ft x 1-ft splicing boxes every 1.8 to 3.4 miles on towers about 30-feet above the ground. Ground disturbance would include grading existing roads and work areas, clearing and providing access to helicopter landing areas, and establishing pulling and tensioning sites and staging yards. SCE would trench and install some cables underground at locations near the three existing substations in the ROW. Existing roads would be used as much as possible for these activities. Operations and maintenance activities would include repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, repairing or replacing poles and towers, tree trimming, brush and weed control, access road, maintenance, and similar activities.
- Alternative 2 BLM would renew the Eldorado-Lugo 500 kV transmission line ROW and not approve the LVRAS Project. The Hector 12 kV right-of-way grant would be renewed and conform to the Federal Land Policy Management Act (FLPMA).

The BLM is the lead Federal agency responsible for preparing this EA and associated documents. This EA also addresses the requirements of the NPS as a cooperating agency for this National Environmental Policy Act (NEPA) process.

Difficulty Finding Relevant Sections/Information in the EA and Associated Documents – BLM provided 38 electronic files on its eplanning website (<u>https://bit.ly/37kA1db</u>) for the LVRAS project. In the EA file, BLM referred the reviewer to Appendices A through H for additional information. We were unable to find these appendices listed in the EA's table of contents. When the EA referred the reviewer to a lettered appendix for more information, frequently it was not the appropriate information or the information was not provided. We provide a few examples of this mislabeled or missing information below:

In the EA, BLM says:

- Appendix A contains the project area maps showing the locations of various "project components." The electronic file for Appendix A is seven electronic files numbered parts 1 through 7. While parts 1 through 6 contain "Exhibit 3 Project Components," the latter pages of part 6 and all of part 7 contain "Exhibit 4. Desert Tortoise Survey Results."
- Appendix B contains information about BLM's consultation with Federal, State, and local agencies for the proposed project, but the electronic file with Appendix B in its name is named Appendix B, C, and D. It contained the Biological Opinion for the General Management Plan for the Mojave National Preserve" (USFWS 2001), "Biological Opinion for Activities in the California Desert Conservation Area" (USFWS 2017) and "Programmatic Biological Opinion for Bureau of Land Management Activities Adversely Affecting 19 Listed Species and Critical Habitat" (USFWS 2013). It did not contain a biological opinion on the LVAS project, a California Department of Fish and Wildlife (CDFW) 2081 permit or permit application, or consultation with other State or local agencies.
- Appendix C contains information about the statutes and regulations relevant to the various resource areas affected by the proposed project, but the electronic file provided is a copy of the Mojave Population of the Desert Tortoise (*Gopherus agassizii*) 5-Year Review: Summary and Evaluation (USFWS 2010).
- Appendix D provides project description information, but we found no electronic file with appendix D in its name or with a title page that said Appendix D.
- Appendix E is about DRECP Conservation Management Actions; there is an electronic file name that includes "DRECP CMA" but no file with Appendix E in the name.
- Appendix F is about reports from SCE surveys for biological resources, but we found no electronic file named Appendix F or biological resources.
- Appendices G and H are about recreation and protected areas and list of preparers, respectively, but the electronic files named Appendices G and H contained only the title page for these appendices.
- Appendix I is a list of references. We presume these are the references used in preparing the EA and appendices. We found no electronic file called Appendix I or list of references on the eplanning webpage.

These multiple occurrences of mislabeled, improperly consolidated, and missing files made it unnecessarily difficult, confusing, and time-consuming for the public to review the EA and associated documents. Such an effort would discourage the public from reviewing the environmental documents and submitting comments on the LVRAS project.

40 CFR 1500.2(d) says, "Federal agencies shall to the fullest extent possible"... "Encourage and facilitate public involvement in decisions which affect the quality of the human environment." From the information we provided above, we contend BLM has failed to do this. Rather, BLM's release of the EA and associated documents in this incomplete, confusing, and disorganized manner discourages and hampers public involvement in reviewing the LVRAS project. *Therefore, we request that BLM reissue this EA and all appendices/associated with the EA but with the appropriate file names, title pages, and relevant information that correspond to each appendix named in the EA, and provide the public with another opportunity to comment on the LVRAS project.*

Biological Resources, Affected Environment

The LVRAS Project would occur in the Western and Eastern Mojave Recovery Units of the Mojave desert tortoise. In this section of the EA, BLM says, "During field surveys, 13 desert tortoises and 215 desert tortoise burrows were observed." "Estimated tortoise densities are 20.6 adult/subadult tortoises per square mile in the Western Mojave Recovery Unit and 17.5 adult/subadult tortoises per square mile in the Eastern Mojave Recovery Unit. [Ivanpah Valley] Critical habitat for the desert tortoise covers most of the project area."

BLM provides no citations for this information on the Mojave desert tortoise. In addition, we believe BLM's data are incorrect. Allison and McLuckie (2018) reported that estimated subadult and adult tortoise densities in the Western Mojave Recovery Units are 4.5 per square mile (2.8 per square kilometer) and in the Eastern Mojave Recovery Unit are 3.1/per square mile (1.9 per square kilometer). The minimum viable density for the Mojave desert tortoise population is 10 adult tortoises per mile² (3.9 adult tortoises per km²) (USFWS 1994a). Populations of Mojave desert tortoises with densities below this amount are in danger of extinction because they are not viable. From 2004 to 2014, desert tortoise densities in the Western Mojave Recovery Unit, the decline was 67.3 percent (Allison and McLuckie 2018).

Critical habitat was designated for the tortoise in 1994 (USFWS 1994b). BLM and NPS have adopted several resource/general management plans for implementation of land management actions that include the LVRAS project area. Although these management plans (e.g., Mojave National Preserve General Management Plan (NPS 2002) Northern and Eastern Mojave Desert Plan (NEMO) (BLM 2002), West Mojave Plan (WEMO) (BLM et al. 2005), and Las Vegas Resource Management Plan (BLM 1998) included a higher level of protection for designated critical habitat for the tortoise, the habitat conditions have worsened. All losses of tortoise numbers and densities reported by Allison and McLuckie (2018) occurred within federally designated critical habitat units for the tortoise. More development and increased human uses have occurred in these two recovery units since listing, resulting in substantial loss/degradation of habitat.

We request that BLM update its information on tortoise densities in the EA and include information on the minimum viable density for the tortoise and declining tortoise numbers in these two recovery units. We request that BLM provide information on the current condition of critical habitat for the tortoise with respect to its ability to successfully provide the physical and biological features the tortoise requires for survival and recovery. According to the Council on Environmental Quality's regulations (40 CFR 1500–1508), this information is needed to provide the baseline from which BLM then analyzes the environmental consequences from implementing the LVRAS Project. When provided, this baseline information would show that the tortoise is already at a level in which it cannot survive the additional loss of individuals, and the Ivanpah Critical Habitat Unit cannot experience the loss/degradation of additional areas and provide the physical and biological features the tortoise needs to persist.

Biological Resources, Environmental Consequences

BLM provided the following text in this section of the EA to describe the impacts from implementing the LVRAS project to the desert tortoise:

"The Proposed Action would temporarily impact desert tortoise critical habitat (7.43 acres). Approximately 40.8 miles of the project area passes across desert tortoise critical habitat." "Desert tortoise protection measures included in both the BLM's Biological Opinion and the State's Incidental Take Permit would be followed to ensure minimal impacts to desert tortoise and desert tortoise habitat." "SCE would implement additional protection measures for general and special-status wildlife species and require project personnel to attend WEAP training. All walled holes or trenches deeper than 6 inches would be covered at the end of each workday or escape ramps provided for trapped animals. Prior to filling holes and trenches, they would be inspected by a biological monitor. Vehicles and equipment would travel at posted speed limits on public roads and follow a speed limit of 15 miles per hour on all non-public access roads to minimize vehicle collisions with wildlife."

We were not able to find in the EA a description of the direct and indirect impacts that would occur to the tortoise and its habitat from implementation of the LVRAS. We found no <u>analysis</u> in the EA of how the impacts would affect the current and future survival/persistence of the tortoise in the recovery units in which the LVRAS occurs. We found no analysis of how the degradation/loss of designated critical habitat would affect the Ivanpah Critical Habitat Unit with respect to providing the physical and biological features needed for the tortoise to survive and persist. We request that BLM provide this description and <u>analysis</u> in the EA. We contend that when provided, it will show that with steeply ongoing declining densities and numbers, densities below the minimum population viability density, and critical habitat not providing the physical and biological features to sustain current low population numbers and densities, the implementation of the LVRAS would result in a significant impact to the Mojave desert tortoise.

BLM says, "Desert tortoise protection measures included in both the BLM's Biological Opinion and the State's Incidental Take Permit would be followed to ensure minimal impacts to desert tortoise and desert tortoise habitat."

We request that BLM ensure that, in addition to protective measures provided in the description of the proposed action in the biological opinion for the LVRAS Project, the Terms and Conditions in this biological opinion, the biological opinion issued by the USFWS (2013), and conservation recommendations in these documents be implemented. In the 2013 biological opinion, USFWS required several terms and conditions to be implemented for proposed actions in southern Nevada in desert tortoise habitat. These include: Relevant Terms and Conditions listed under Reasonable and Prudent Measure 1 – Applies towards lands and realty, ROWs, and mining actions and other activities that involve vehicle and equipment use, excavations, or blasting; Relevant Terms and Conditions listed under Reasonable and Prudent Measure 3 – "Impacts to Desert Tortoise Habitat—Applies towards all actions that involve habitat impacts; and Relevant Terms and Conditions listed under Reasonable and Prudent Measure 7 – Compliance and Reporting—Applies towards all actions. If any of these terms and conditions conflict, we recommend that the term and condition that is more protective of the tortoise be implemented.

Mitigation

<u>Mitigation Measures and Plans</u>: In the EA, BLM says, "Special status wildlife species would be potentially affected by the proposed project and other projects in the area. Cumulative impacts would be minimized by implementing mitigation measures to avoid, minimize, or compensate for impacts to species or their habitat."

We were unable to locate a description of the mitigation measures and plans that BLM would require SCE to implement for the LVRAS project or a reference to an appendix that describes these measures/plans. These plans have a direct bearing on the extent of impacts to special status species including the desert tortoise and its habitat, including critical habitat, from implementation of the LVRAS project. Their absence means the public and the decision maker are unable to review them to determine their adequacy to fully mitigate the direct, indirect, and cumulative impacts. Each plan should be <u>science-based</u> and include the following: (1) measurable goals and objectives that must be achieved; (2) actions that have been documented to be successful, will be implemented, and have a reasonable timeline to achieve them; (3) how enforcement of protective measures will be implemented; (4) a science-based monitoring component that will show whether the goals and objectives have been achieved; and (5) adaptive management implementation when the goals and objectives are not achieved. If these plans are not provided, it is not possible for the public or the decision maker to determine the environmental consequences of the LVRAS project to the tortoise and its habitat.

Below is a list of mitigation plans that BLM has failed to provide in the EA:

- Soils Conservation and Hydrology Plan (includes soil crusts)
- Plant and Wildlife Species Conservation Measures Plan
- Habitat Restoration and Monitoring Plan
- Habitat Compensation and Protection Plan (for long-term loss of tortoise habitat)
- Vegetation Management and Dust Control Plan
- Predation Management Plan (including common raven and coyote)
- Invasive Species Management Plan
- Spill Prevention, Control, and Countermeasure Plan
- Erosion, Dust Control, and Air Quality Plan
- Hazardous Materials Management Plan
- Fire Protection Plan
- Fire Prevention Plan
- Waste Management Plan
- Recreational Access Management Plan

We request that BLM add this information to the EA, clearly stating the measures for each mitigation plan and for each species.

<u>Tortoise Protective Measures</u>: Protective, minimization, or conservation measures in project descriptions and terms and conditions in biological opinions typically focus on minimizing direct impacts to tortoises; that is, direct causes of mortality during construction or the phase of a proposed project that has the most human activity and surface disturbance. These standard minimization measures for the tortoise have been used in NEPA documents and biological opinions for years. Given the status and trend of the tortoise (Allison and McLuckie 2018), it is apparent that these measures are not effective in substantially reducing tortoise mortality.

We recommend that mitigation/minimization measures include those that substantially reduce and fully mitigate the direct and indirect impacts to the tortoise and its habitat. To support these recommendations, we offer the following information (taken verbatim from USFWS 2013):

- Considerable habitat destruction or alteration occurs when pipelines and transmission lines are constructed and the impacts are repeated as maintenance operations or new pipelines or power lines are placed along existing corridors.
- Linear ROW action impacts to tortoise populations may affect tortoises at levels well beyond those of many point sources of impacts (Boarman 2002).
- Additional harassment of tortoises adjacent to the properties may occur as a result of increased levels of noise and ground vibrations produced by blasting, vehicles, and heavy equipment (Bondello 1976; Bondello, et al. 1979).
- Linear construction projects can negatively affect desert populations. Studies suggest that differences in the extent of the threat are related to the scale of the project, the ability of crews to avoid disturbing burrows, and timing of construction to avoid peak activity periods of tortoises (Boarman 2002). In addition to the discrete disturbance points formed by towers and lines, maintenance roads and repeated operations can (1) introduce continuous sources of disturbance and (2) provide potential sites for invasion of nonnative species. ROWs can cause habitat destruction and alteration where vegetation is minimal, possibly increasing mortality, directly or indirectly (Boarman 2002).
- Following construction, the public may use project access roads, which may result in adverse effects to tortoise populations. Humans use the desert for off-road exploration, casual shooting and target practice, personal or commercial collection of animals and plants, searches and digging for minerals and gems, geocaching (GPS guided stash hunts), and even the production of illegal drugs.
- Because recovery of vegetation in the desert can take decades or longer, we consider most ground-disturbing impacts to be long-term. Vasek et al. (1975) found that in the Mojave Desert, transmission line projects resulted in a unvegetated maintenance road, enhanced vegetation along the road edge and between tower sites (often dominated by nonnative species), and reduced vegetation cover under the towers, which recovered significantly but not completely in about 33 years. Webb (2002) determined that absent active restoration following extensive disturbance and compaction in the Mojave Desert, soils in this environment could take between 92 and 124 years to recover. Other studies have shown that recovery of plant cover and biomass in the Mojave Desert could require 50 to 300 years in the absence of restoration efforts (Lovich and Bainbridge 1999). Based on a quantitative review of studies evaluating post-disturbance plant recovery and success in the Mojave and Sonoran deserts, Abella (2010) found that it takes 76 years for full reestablishment of total perennial plant cover and an estimated 215 years for the recovery of species composition typical of undisturbed areas. He also found that a number of variables likely affect vegetation recovery times, including but not limited to climate (e.g., precipitation and temperatures), invasion by nonnative plant species, and the magnitude and extent of ongoing disturbance.

Specific Comments

Section 2. Issues

Page 5: Operations and maintenance activities are first described in the EA in *Table 2-1: Key Issues*. Their impacts are described under 5.1 Visual Resources, Cumulative Impacts:

"Operations and maintenance activities associated with the Proposed Action would be similar to those conducted on existing facilities, therefore visual resource impacts would be minor."

The next section to mention operation and maintenance activities is 5.6 Wilderness, Protected, and Recreation Areas Environmental Consequences.

"Operations and maintenance would include various activities including repairing conductors, washing or replacing insulators, repairing or replacing other hardware components, repairing or replacing poles and towers, tree trimming, brush and weed control, access road, maintenance, and similar activities."

We found no description or analysis of impacts from implementation of operations and maintenance activities for the LVRAS project in the Biological Resources section of the EA. We request that it be added, especially for the tortoise.

Section 3. Proposed Action

Page 8: "There are 409 towers along the transmission line. Splices would be installed on approximately 27 existing structures." We understand these splicing boxes are 3-ft x 3-ft x 1-ft and would be placed about 30-feet above the ground. We are concerned that these boxes would provide additional or enhanced sites for common ravens (*Corvus corax*) to use as nest and roost sites.

Common ravens are known predators of the Mojave desert tortoise, and raven numbers have increased substantially because of human subsidies of food, water, and sites for nesting, roosting, and perching to hunt (Boarman 2003). Knight and Kawashima (1996) reported common ravens in southern California nested on utility structures in greater numbers than expected based on the availability of potential nest substrates. Because non-breeding ravens are able to fly at least 30 miles in search of food and water on a daily basis (Boarman et al. 2006) and coyotes (*Canis latrans*), another predator of the tortoise, can travel an average of 7.5 miles or more daily (Servin et al. 2003), the analysis of impacts of tortoise mortality from ravens and coyotes should extend at least 30 miles from the LVRAS project.

We request that the splicing boxes and any other item that provides the common raven with a nesting substrate be designed/modified to prevent nesting by ravens. This would include modifications to towers and poles when serviced or replaced during operations and maintenance activities.

Section 4. Land Use Plan Conformance and Relationship to Statutes, Regulations and Other Plans

Page 9: - In this section, BLM lists the BLM Las Vegas Resource Management Plan (LVRMP). Because part of the LVRAS project is in Nevada, we request that the relevant information from the LVRMP for the tortoise be included in the EA.

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Page 10: "The Proposed Action would also comply with applicable statutes and regulations. The statutes and regulations relevant to the various resources areas affected by the Proposed Action are identified in Appendix C." Please provide a copy of "Appendix C."

Section 5. Environmental Consequences of the Proposed Action

Page 10: "Additional mitigation measures are described Appendix E." Please provide a copy of this appendix.

Section 5.2. Air Quality – Environmental Consequences

Page 13: "A Dust Control Plan will be prepared, and dust control measures implemented. The focus would be on reducing PM10 levels from earthmoving activities, loading and unloading of soil and geological materials, and vehicle travel on unpaved roads." Any water pooling or forming puddles on the ground attracts common ravens because it provides a subsidized water source for them (Boarman 2002). Because common ravens are a predator or the desert tortoise, we request that the Dust Control Plan direct that no standing water (i.e., puddles) would result from implementation of these procedures within a few minutes of its application.

Section 5.3. Biological Resources, Environmental Consequences

Page 15: Please explain the following sentence "Temporary vegetation would occur in areas where vegetation is cleared and revegetated and in areas where vehicles drive over and crush vegetation."

Page 15: Table 5.2: Other species that should be included in this section are ringtail cat (Bassariscus astutus) – Fully protected in California; Gila monster (*Heloderma suspectum*) – a California Species of Special Concern; Glided Flicker (Colaptes chrysoides) – listed as endangered in California; and the desert kit fox (*Vulpes macrotis arsipus*) – protected by California Code of Regulations Title 14 section 460. Since these species are missing from the draft EA, it needs to be amended to document their presence within the Project area, analyze the full range of impacts affecting each of them, and identify protective measures that will be implemented during construction and subsequently during operations and maintenance.

Page 16: "The Proposed Action would temporarily impact desert tortoise critical habitat (7.43 acres). Approximately 40.8 miles of the project area passes across desert tortoise critical habitat." We contend that, while the immediate action causing the impact may be temporary, the persisting impact, including operations and maintenance activities, is long-term. Please see information supporting this claim under "Mitigation," the sixth bullet on page 7 of this letter. Please change the EA to reflect that the impacts are long-term and mitigation is necessary for this long-term loss/degradation.

Page 17: "Additional information on project activities is provided in Appendix D." Please provide this appendix.

Page 17: "Special-status mammal species occur in the project area (see Table 5-2)." However, the table is a list of special status mammal, bird, and reptile species. This is followed with a description of two "protection measures." We request this paragraph be rewritten to clarify that these protection measures apply to special status <u>wildlife</u> species and the measures are a subset of the measures that BLM will require SCE to implement during construction and operations and maintenance of the proposed project.

Page 10: In Table 5-1: Cumulative Effects Area, BLM lists six resource categories and its rationale for Distance Used to Establish Cumulative Effects Area (CEA). For biological resources, BLM asserts, "5 miles is the maximum extent of any impact." CEQ (1997) says, "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 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." CEQ lists eight principles of cumulative impact analysis, three of which include:

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.

Additionally, under Cumulative Impacts, the following question should be addressed: Will the Project enable additional solar facilities to be built in the future and/or result in growth-inducing impacts that may affect tortoises, their habitats, and other desert resources distant from the identified Project area? If so, these impacts should be documented and addressed.

Page 23: Table 5-3: Here it states the Project will pass though both State lands and private lands. Who will be the lead agency for the California Environmental Quality Act (CEQA)? The CDFW will need to be contacted to obtain an Incidental Take Permit, and no impacts may occur until that project-specific permit has been acquired.

We request that BLM implement CEQ's guidance on cumulative impact analysis and not assume that five miles from the LVAS project ROW is sufficient to analyze the impacts to the tortoise, its critical habitat, and its past, present, and future needs. Herein, we have provided data to show that BLM's 5-mile limit is arbitrary with regards to the common raven and coyote (please see our comments on *Section 3. Proposed Action*, Page 8).

We appreciate this opportunity to provide input and trust that our comments will further protect tortoises if this Project is authorized. Herein, we ask that the Desert Tortoise Council be identified as an Affected Interest for this and all other BLM projects that may affect species of desert tortoises, and that any subsequent environmental documentation for this Project is provided to us at the contact information listed above.

Regards,

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Edward L. LaRue, Jr., M.S. Chair, Ecosystems Advisory Committee

Literature Cited

- Abella, S.R. 2010. Disturbance and plant succession in the Mojave and Sonoran deserts of the American Southwest. International Journal of Environmental Research and Public Health 7:1248-1284.
- Allison, L.J. and A.M. McLuckie. 2018. Population trends in Mojave desert tortoises (*Gopherus agassizii*). Herpetological Conservation and Biology 13(2):433–452.
- Boarman, W.I. 2002. Threats to Desert Tortoise Populations: A Critical Review of the Literature. U.S. Geological Survey, Western Ecological Research Center, San Diego Field Station, San Diego, CA. Prepared for West Mojave Planning Team, Bureau of Land Management.
- Boarman, W.I. 2003. Managing a subsidized predator population: Reducing common raven predation on desert tortoises. Environmental Management 32(2):205–217. https://doi.org/10.1007/s00267-003-2982-x. https://link.springer.com/article/10.1007/s00267-003-2982-x
- Boarman, W.I, M.A. Patten, R.J. Camp, and S.J. Collis. 2006. Ecology of a population of subsidized predators: Common ravens in the central Mojave Desert, California. Journal of Arid Environments 67 (2006) 248–261.
- Bondello, M. C. 1976. The effects of high-intensity motorcycle sounds on the acoustical sensitivity of the Desert Iguana, *Dipsosaurus dorsalis*. M.S. thesis, California State University, Fullerton, California, 38 pp.
- Bondello, M. C., A. C. Huntley, H. B. Cohen, and B. H. Brattstrom. 1979. The effects of dune buggy sounds on the telechephalic auditory evoked response in the Mojave Fringe-toed Lizards, *Uma scoparia*. Report, Contract No. CA-060-CT7-2737, U.S. Bureau of Land Management, Riverside, California, 31 pp.
- [BLM] Bureau of Land Management. 1998. Las Vegas Resource Management Plan and Final Environmental Impact Statement. Las Vegas Field Office. May 1998.

- [BLM] Bureau of Land Management. 2002. Proposed Northern and Eastern Mojave Desert Management Plan and Final Environmental Impact Statement. California Desert District Office, Riverside, CA. July 2002.
- Bureau of Land Management, County of San Bernardino, and City of Barstow. 2005. Proposed West Mojave Plan Final Environmental Impact Report and Statement. BLM/CA/ES-2004-005 + 1790 -1600. Moreno Valley, CA
- Council on Environmental Quality. 1997. Considering Cumulative Effects under the National Environmental Policy Act.
- Knight, R.L. and J.Y. Kawashima. 1993. Responses of ravens and red-tailed hawk populations to linear right-of-ways. Journal of Wildlife Management 57:266–271.
- Lovich, J.E., and Bainbridge, D., 1999, Anthropogenic degradation of the southern California desert ecosystem and prospects for natural recovery and restoration: Environmental Management, v. 24, p. 309–326.
- [NPS] National Park Service. 2002. Mojave National Preserve General Management Plan.
- Servin, J., V. Sanchez-Cordero, and S. Gallina. 2003. Distances traveled daily by coyotes, Canis *latrans*, in a pine–oak forest in Durango, Mexico. Journal of Mammalogy 84(2):547–552.
- Vasek, F. C., H. B. Johnson, and D. H. Eslinger. 1975. Effects of pipeline construction on creosote bush scrub vegetation of the Mojave Desert. Madroño 23:1-13.
- [USFWS] U.S. Fish and Wildlife Service. 1994a. Desert tortoise (Mojave Population) Recovery Plan. U.S. Fish and Wildlife Service, Region 1, Portland, Oregon. 73 pages plus appendices.
- [USFWS] U.S. Fish and Wildlife Service. 1994b. Determination of critical habitat for the Mojave population of the desert tortoise. 59 *Federal Register* 5820-5866.
- [USFWS] U.S. Fish and Wildlife Service. 2013. Programmatic Biological Opinion for Bureau of Land Management Activities Adversely Affecting 19 Listed Species and Critical Habitat. Las Vegas, Nevada. FILE NO. 84320-2010-F-0365.
- Webb, R.H., 2002, Recovery of severely compacted soils in the Mojave Desert, California, USA: Arid Land Research and Management, v. 16, p. 291–305.