**DESERT TORTOISE COUNCIL**
4654 East Avenue S #257B
Palmdale, California 93552
www.deserttortoise.org
eac@deserttortoise.org

**Via email and BLM eplanning portal**

5 November 2020

Joanie Guerrero
Lands and Realty
Bureau of Land Management
Red Rock Canyon National Conservation Area
HCR 33 Box 5500
Las Vegas, NV 89161
jjguerrero@blm.gov

Re: Crown Castle Small Cell Network Project- Environmental Assessment, Clark County, NV (DOI-BLM-NV-S020–2020–0005–EA)

Dear Ms. Guerrero,

The Desert Tortoise Council (Council) is a non-profit organization comprised of hundreds of professionals and laypersons who share a common concern for wild desert tortoises and a commitment to advancing the public's understanding of desert tortoise species. Established in 1975 to promote conservation of tortoises in the deserts of the southwestern United States and Mexico, the Council routinely provides information and other forms of assistance to individuals, organizations, and regulatory agencies on matters potentially affecting desert tortoises within their geographic ranges.

We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the proposed project in habitats 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 authorized by the Bureau of Land Management (BLM). Please accept, carefully review, and include in the relevant project file the Council's following comments for the proposed action. Additionally, we ask that BLM respond to the Council 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.

**Description of Proposed Action and Alternatives**

Crown Castle, LLC has applied to BLM for a right-of-way (ROW) to construct a Small Cell Fiber Fed Communications System (SCFFCS), also referred to as a Small Cell Solution, in Red Rock Canyon National Conservation Area (RRCNCA), Clark County, Nevada. The purpose of the SCFFCS is to provide continuous cellular coverage in the area that currently has little or no cellular coverage.

The EA analyzes one Action Alternative and a No Action Alternative. BLM considered an alternative to use taller but fewer poles, but dismissed it because it would have adverse impacts to the visual quality of RRCNCA.

*Action Alternative*: This alternative would consist of installing six (6) new utility poles, seven (7) antenna nodes attached to newly installed and existing utility poles, and fiber-optic cable and supporting equipment to interconnect the system. It has two project components and associated actions:

1. Fiber-optic cable/electric installation by trenching:
    - Installation of new underground 4-inch Poly Vinyl Chloride (PVC) conduit;
    - Underground installation of fiber-optic cable into existing and newly installed conduit;
    - Installation of new fiber-optic cable on an existing power pole line;
    - Underground connection of network to one newly installed fiber-optic hub station;
    - Installation of pull boxes and hand holes; and
    - Splicing fiber-optic cable into facilities.

2. Installation of node poles and equipment cabinets:
    - Installation of six (6) new steel utility poles (Nodes 1, 2, 4, 5, 6, and 7);
    - Installation of seven SCS nodes containing three (3) antennae inside a concealment canister installed on the top of the six (6) new steel utility poles and one existing wooden utility pole (Node 3); and
    - Installation of fiber-optic equipment (i.e., optical conversion equipment, signal regeneration equipment, switching equipment, etc.) within above-ground equipment pedestals or underground equipment vault boxes at each node location.

Fifty-nine percent of the infrastructure would be on BLM-managed lands at RRCNCA, 39 percent would be within the regulatory boundaries of Clark County, and 2 percent would be within the City of Las Vegas. The Proposed Action route within BLM-managed lands would occur along the shoulder of SR 159 for 4.2 miles (installation of new conduit underground between mile markers 8.2 and 10.4, and installation of fiber in existing BLM-owned conduit between mile markers 12.5 and 14.5), Moenkopi Road, and existing utility ROWs. Crown Castle would negotiate and develop agreements with holders of existing road and utility ROWs to use their ROWs to install/operate its equipment.

Trenching activities would be approximately 37,000 feet in length and with a trench width of 1.5 feet and depth of 2.5 to 5 feet. During node/pole and equipment cabinet installation activities, about 500 square feet would be disturbed per node, for a total of 3,500 square feet or 0.080 acres

of disturbance for the seven (7) proposed nodes. Of this, 140 square feet (0.003 acre) of the disturbance would be permanent and 3,360 square feet (0.077 acres) would be temporary. These disturbances would occur within native habitat (creosote bush scrub). Elevations range from about 3,500 to 4,700 feet. BLM expects the construction process to take about 8 weeks to complete.

Operations, maintenance, and repair would be done by Crown Castle. A maintenance crew would conduct quarterly inspections of the installed system to determine if any components of the system are in need of repair or replacement. Repairing buried conduit would require a backhoe crew to expose a hand hole or a collapsed section of conduit so the repair could take place. Repair time would be about 1 to 2 days.

The Action Alternative is the Proposed Action.

*No Action Alternative*: "Under the No Action Alternative, the ROW would not be granted and neither the communications facility nor the power line would be constructed. Current and Proposed Projected land uses would continue in this area." Current and Proposed Projected land uses would continue in this area.

**Comments on the EA**

In reviewing this EA, we found numerous places in the document with information that was confusing, incomplete, or outdated, especially with respect to the Mojave desert tortoise and its habitats. BLM likely carried forward this flawed information in analyzing impacts of the Proposed Action and developing mitigation requirements in the EA, especially with respect to the tortoise.

In addition, this confusing, incomplete, and outdated information in the EA compromises the ability of the public to understand the Proposed Action and its direct, indirect, and cumulative impacts, and review and provide meaningful comments to BLM. It also compromises the ability of the decisionmaker to review the Proposed Action and determine the adequacy of mitigation measures with respect to its direct, indirect, and cumulative impacts and compliance with other environmental laws and regulations. The purpose of the National Environmental Policy Act (NEPA) is to "insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken. The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA" [40 Code of Federal Regulations 1500.1(b)].

For these reasons and the examples provided below, we believe BLM should revise the EA to correct the flawed information in the Proposed Action, Affected Environment, and Environmental Effects sections and appendices. When BLM provides statements or assumptions in the EA, they should be supported by data that are provided or referenced in the EA. The EA should provide the current requirements/actions that will be implemented to comply with relevant environmental laws and regulations, especially with respect to NEPA and the Federal Endangered Species Act (FESA).

**Comments on Section 2.0 Proposed Action and Alternatives**

Page 8: Staging Areas "No staging areas would be required during project construction. All equipment and supplies would be brought to the project work areas on a daily basis, and would be removed at the end of each workday," and "Staging areas are not expected to be necessary during Project Action implementation. Contractors would use their existing offsite equipment yards for their equipment and transport the equipment and materials needed for the Proposed Project to the site daily." However, on page 19, BLM says Crown Castle would locate "staging areas for the use of equipment storage, machine and vehicle parking, or any other area needed for the temporary placement of people, machinery, and supplies. These staging areas would be selected from locations that are relatively weed-free." In addition, on page 27, "Staging areas should be approved by a qualified biologist prior to use for staging activities."

Please clarify whether Crown Castle will require staging areas, and if so, what are the requirements for identifying these areas to assure that they will not adversely impact the tortoise/tortoise habitat. For example, staging areas "will be approved by an authorized biologist prior to their use", not "should be approved," as currently written.

Page 17: "The speed limit of 15 mph for construction vehicles would be implemented on unpaved 'field roads' within the right-of-way and in construction yards." Later in the EA (page A-6), BLM says, "A speed limit of 25 miles per hour shall be required for all vehicles travelling on existing roads." We find these requirements confusing. We were unable to find a definition for "field road" on the internet. We assume it is a type of existing unpaved road. Please clarify when each speed limit would be implemented in the revised EA. Additionally, we recommend that the slower speed limit of 15 miles per hour be adopted for all roads, as conditions allow.

Page 18, Fuels/Fire Management and Page A-3, Fuels and Fire: We were unable to find language in these sections that prohibited parking vehicles with catalytic converters on dried vegetation, especially nonnative annual grasses. To reduce the likelihood of the Proposed Action starting fires, this should be a mandatory requirement/stipulation to prevent the destruction of desert vegetation/tortoise habitat and tortoise mortality/injury from fire. We request that this prohibition be added to the revised EA.

Pages 18–19, Invasive Species/Non-Native Weeds: "A Weed Management Plan (Plan) would be implemented by Crown Castle to control the spread of noxious weeds throughout construction and reclamation."

We were unable to find a copy of this Plan in the EA, and request that a copy be included in the revised EA. This Plan should include approved (e.g., through NEPA and section 7 consultation) methods that will be implemented to reduce/remove non-native plant species, success criteria, and methods to avoid/minimize direct, indirect, and cumulative impacts to the tortoise, and monitoring.

Page 23, Migratory Bird Mitigation Measures – In this section, BLM says, for active nests "Example buffer distances for various species are listed in the BLM's Southern Nevada Nesting Bird Management Plan (2019) (Appendix X)." We could not find this document online or its citation in the EA. We are unsure whether it is referring to Appendix X in the Nesting Bird Management Plan or the EA. If the latter, we found no Appendix X in the EA.

Pages 23, Migratory Bird Measures and Pages 24-25, Desert Tortoise Protection: BLM reports that construction of the Proposed Action can be completed in 8 weeks. To reduce the probability of encountering the Mojave desert tortoise or breeding birds during construction of the Proposed Action, we request that construction be implemented and completed in the late fall and winter (e.g., between late November and early February) during the less active season for the tortoise and non-breeding season for migratory birds.

Pages 24 and 25, Desert Tortoise Protection: BLM says, "to mitigate potential direct impacts to desert tortoises, the following measures shall be implemented to minimize the potential for 'take' of tortoises during Proposed Project implementation." NEPA requires an analysis of direct, indirect, and cumulative impacts of the proposed action to the resource issues (e.g., Mojave desert tortoise). We are unsure of BLM's reason to limit mitigation to offset only direct impacts and not include indirect and cumulative impacts. We request this section be revised to include measures that will be implemented to mitigate indirect and cumulative impacts to the tortoise/tortoise habitat.

Page 25, Vegetation: This section describes seeding certain areas that are disturbed by the Proposed Action. We were unable to find assurances that this "revegetation" effort would be successful.

We thank BLM for requiring revegetation, and recommend that a plan be prepared and implemented that identifies the palette of native perennial and annual plant species that will be planted, methods of planting, success criteria to determine when implementation of the plan is deemed successful and complete (e.g., densities, cover, and diversity of species that were established, and a time frame in which the success criteria would be achieved), and monitoring. Because the Proposed Action is occurring in tortoise habitat, the native species selected for planting should include species that provide cover from temperature extremes and predators and annual forbs that provide nutritious forage for tortoises. To assist BLM with ensuring the revegetation effort is successful, we are providing links to the Council's Habitat Restoration Best Management Practices (Abella and Berry 2016).

**Comment on Section 3.0 Affected Environment**

Page 42, Fuels/Fire Management: In this section, BLM says, "[v]egetation in the project area consists primarily of creosote bush scrub where historical spacing between shrubs was too high to carry a large fire. Today, there are noxious weeds or invasive plant species such as red brome and puncture vine within the inter-shrub spaces to provide fuel loads sufficient to carry a potentially destructive fire. The BLM has been working to control invasive annual grass in Calico Basin, Moenkopi Road Campground, fire station, and Visitor Center."

On page 43, Invasive Species/Noxious Weeds, BLM refers to the Nevada Revised Statutes (NRS) (https://www.leg.state.nv.us/nac/nac-555.html) for defining noxious weeds. Neither red brome nor puncture vine is on the NRS list.

On page 44, BLM says, "[t]here are also species in RRCNCA that are non-native and invasive yet have not been legally designated as noxious by the State of Nevada." For example, the NRS do not include "tumble mustard (*Sisymbrium irio*), crossflower (*Chorispora tenella*), African mustard (*Malcolmia africana*), curveseed butterwort (*Ranunculus testiculatus*), common dandelion (*Taraxacum officionale*), Jersey cudweed (*Gnaphalium luteoalbum*), and Russian thistle (*Salsola* spp.)" that according to BLM "have been documented along the project route."

We request that all invasive plant species identified by BLM on pages 42 and 44 of the EA be included in the list of plant species that the Weed Management Plan will manage. In addition, we request that foxtail brome (*Bromus diandrus*), cheat grass (*Bromus tectorum*), and Mediterranean grass (*Schismus barbatus*) be added to the list of invasive plants and included in the Weed Management Plan. These non-native annual grasses are invasive species in many areas of the Mojave Desert and continue to expand their range. Vehicles travelling along roadways provide a conduit for the transport and establishment of these non-native species (Brooks and Matchett 2006). Once established, they outcompete native forbs resulting in a substantial reduction in the number/densities of native annual plants that the tortoise needs for adequate nutritional quality and quantity. This is due in part to their fast seed germination times in areas with disturbed soils/soil crusts. Further, they are assisted from the enhanced nitrogen deposition in soils from the exhaust from internal combustion engines (e.g., along roadways) (Allen et al. 2009). Once established, these invasive plants provide an enhanced fuel source to carry fires that degrade/destroy native perennial and annual vegetation. As the impacts of climate change increase, one result is an increase in the occurrence, numbers, and densities of these non-native invasive grasses and the frequency, size and intensity of natural and human-caused wildfires in the Mojave Desert.

We recommend BLM revise the information on page 43, Invasive Species/Noxious Weeds, to include: (1) information on the occurrence of these non-native annual plant species in/near the Proposed Action; (2) the direct, indirect, and cumulative impacts of the Proposed Action on their occurrence and density, especially with respect to the availability of native vegetation and fuel for fires; and (3) appropriate mitigation to prevent/deter the establishment and spread of non-native species from implementation of the Proposed Action (e.g., Weed Management Plan).

Page 52, Threatened, Endangered and Special Status Animal and Plant Species – Methods: "Information regarding special status species within the Proposed Project Area is based on the results of biological studies conducted in support of the Proposed Project in 2011 and 2016 (Synthesis Environmental Planning, 2016). A reconnaissance-level survey of the Proposed Project site was conducted on June 28 and 29, 2011, and August 29 and 30, 2016. Surveys were conducted along transects spaced 30 to 50 feet apart within the Proposed Project site and buffer areas." "Surveys were conducted within the Proposed Project sites as well as a buffer area approximately 250 feet wide around the Proposed Project site."

From this information, it is unclear whether the USFWS' protocol-level pre-project surveys for the tortoise (USFWS 2019) were conducted. As per this guidance, USFWS is to be consulted to see if survey results that are more than a year old would remain valid at the time the environmental documents are written. Please provide additional information in the revised EA on whether the USFWS accepted these surveys as protocol-level surveys and if earlier survey results are considered to still be valid.

Page 55, Reptiles, Desert Tortoise: BLM says, "They may live in a variety of soil types, including those of sand dunes, rocky hillsides, washes, sandy soils, and desert pavements] [sic] for the desert tortoise was identified primarily within the buffer area of the Proposed Project site, and within small patches within the Proposed Project site during biological surveys." In reading this sentence, it appears there is missing information, perhaps with respect to the results of tortoise surveys. Please include this missing information in the revised EA.

Page 55, Reptiles, Desert Tortoise: BLM says, "Recorded observances of this species have been documented within the Proposed Project area (see Figure 8, see Appendix B) (NNHP 2016)." We were unable to find Figure 8 in Appendix B of the EA. Please include this figure in the revised EA.

Page 57, Vegetation, Methods: "Habitat types encountered during the surveys were characterized primarily by dominant and subdominant plant species. The Biological Assessment Report can be found in Appendix D." We were unable to locate this information in Appendix D in the EA. Please include this missing information in the revised EA.

**Comments on Section 4.0 Environmental Effects**

Page 6 or 67, Potential Impacts to Desert Tortoises from Proposed Project Activities: This section describes some potential direct impacts to tortoises and their burrows (i.e., crushing). However, we were unable to find a discussion/analysis of indirect impacts to tortoises from implementation of the Proposed Action. For example, the Proposed Action includes surface disturbance (e.g., grading, blading, excavating) that promotes the establishment of non-native invasive species with low nutritional value, and reduces the availability of native annual forbs that provide the tortoise with adequate nutrition. The Proposed Action includes the installation of poles and associated above-ground features that provide new/improved substrates for common ravens (*Corvus corax*) to use as nest or perch sites for hunting tortoises. The Proposed Action includes the use of water trucks for dust abatement throughout the construction phase of the Proposed Action. When this water pools on the ground, it may attract common ravens and other tortoise predators to the Proposed Action Area and increase tortoise predation. Please include an analysis of these and other indirect impacts to the tortoise/tortoise habitat from implementation of the Proposed Action with citations to support this analysis.

BLM should revise the EA to include mitigation for the indirect impacts to the tortoise/tortoise habitats. For increased predation, BLM should develop and implement a Predator Management Plan. This Plan should require implementation of measures to reduce/eliminate human subsidies for food, water, and sites for nesting, and perching during all phases of the Proposed Action, include success criteria, and monitor the Plan's effectiveness. Because BLM is requiring revegetation, we requested earlier in this letter the development, implementation, and monitoring of revegetation efforts to ensure success (please see our comments on page 5, Vegetation).

Page 12 or 73, Cumulative Impacts on Affected Resources: BLM says, "These actions include projects identified within the spatial (geographic) and temporal (timeframe) boundaries of the action considered in this EA. For this project, the spatial limits are bound by a one (1.0) mile radius of the Proposed Action."

We found no explanation for BLM's selection of a 1-mile radius for the boundary in which to conduct a cumulative impacts analysis. Consequently, this appears to be an arbitrary decision.

The Council on Environmental Quality (CEQ) states, "Determining the cumulative environmental consequences of an action requires delineating the cause-and-effect relationships between the multiple actions and the resources, ecosystems, and human communities of concern. The range of actions that must be considered includes not only the project proposal but all connected and similar actions that could contribute to cumulative effects." The analysis "must describe the response of the resource to this environmental change." Cumulative impact analysis should "address the sustainability of resources, ecosystems, and human communities."

The CEQ provides eight principles of cumulative impacts analysis (CEQ 1997, Table 1-2). These are:

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 need 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**.
   Analysts tend to think in terms of how the resource, ecosystem, and human community will be modified given the action's development needs. The most effective cumulative effects analysis focuses on what is needed to ensure long-term productivity or sustainability of the resource.

In addition, CEQ (1997) states, "The consequences of human activities will vary from those that were predicted and mitigated." "[M]onitoring for accuracy of predictions and the success of mitigation measures is critical." "Adaptive management provides the opportunity to combine monitoring and decision making in a way that will ensure protection of the environment and societal goals."

Please provide an analysis with citations in the revised EA that support this 1-mile radius and complies with all eight principles listed above, especially #8 with respect to the Mojave desert tortoise and its habitat as an affected resource (e.g., invasive species/noxious weeds, fuels/fire management, predation, etc.).

**Comments on Appendix A, Stipulations for Crown Castle – Small Cell Network Project**
Page A-4, Invasive Species and Noxious Weeds: All stipulations in this section only address noxious weeds. Please add invasive species to these stipulations.

Pages A-6 and A-7, Threatened, Endangered or Candidate Species: We found no mention that an Authorized Biologist would be present to remove tortoises from trenches, pits, or other excavations. Please explain this omission for a Proposed Action in tortoise habitat that include up to 1000 feet of trenching a day.

Page A-7: "All drivers must check underneath vehicles and equipment before moving to ensure no tortoise has taken cover underneath parked vehicles." Please add information describing the action the drivers are required to take upon finding a tortoise underneath a vehicle or equipment; e.g., an Authorized Biologist would be called to the site to remove the tortoise(s) as needed.

**Comments on Appendix D, Biological Report for Crown Castle – Small Cell Network Project**

Appendix D: This document is titled "Biological Report for Crown Castle – Small Cell Network Project." However, we were only able to find information pertaining to the Mojave desert tortoise, with most of the information under "Proposed Minimization Measures" for the Mojave desert tortoise.

It appears there is missing information from this appendix. We conclude this because:

- page 41 of the EA says, "appendix D (Biological Report) provides a list of animals observed on the Proposed Project site;"
- page 53 says "Information on the special-status species (plants and wildlife) that have been documented within the vicinity of the Proposed Project area are presented in Appendix D (Biological Report);"
- page 55 says, "Common plant species observed during field surveys are listed in Appendix D – Biological Report;" and
- page 57 says, "Habitat types encountered during the surveys were characterized primarily by dominant and subdominant plant species. The Biological Assessment Report can be found in Appendix D" to provide a few examples.

We request BLM revise the EA and include this missing information.

Pages D-2 to D-5, Proposed Minimization Measures: Although labeled Proposed Minimization Measures, these measures appear to be from an old biological opinion. We surmise this because (1) on page A-7, BLM says, "[t]he Biological Opinion is on file at the Bureau of Land Management, Southern Nevada District Office. The terms and conditions are in Appendix D;" (2) the wording requires rather than proposes the minimization actions be implemented; (3) some of the USFWS and Desert Tortoise Council documents to be implemented have been updated/ superseded; and (4) the top of page D-2 includes a formal consultation number from fiscal year 2004.

Because these terms and conditions do not appear to be current [e.g., USFWS-approved protocol in the 2009 Desert Field Manual (USFWS 2009)] and may be from a 16-year old biological opinion, we request that BLM contact the USFWS to update the terms and conditions to ensure BLM and Crown Castle are implementing the correct and current terms and conditions.

Page D-3, Education Program: "A BLM/Service-approved biologist (as defined below) shall present a tortoise education program to all foremen, workers, permittees and other employees or participants," and "Specific and detailed instructions will be provided on the proper techniques to capture and move tortoises that appear onsite if appropriate, in accordance with Service-approved protocol. Currently, the Service-approved protocol is Desert Tortoise Council 1994, revised 1999."

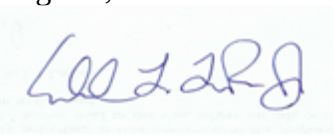
This wording suggests it is acceptable for employees to capture and move tortoises that appear onsite. We believe this is incorrect. Please coordinate with USFWS regarding who is authorized to handle a desert tortoise. Note also, that the 1994-1999 revised guidelines created by the Council were replaced in 2009 by the Desert Field Manual (USFWS 2009), and that these later guidelines should be followed.

Finally, we recommend BLM review the EA for sentences that are difficult to understand or not relevant with respect to the Proposed Action. Some examples include:

- Crown Castle would consult with Crown Castle prior to conducting these [special status plant] surveys to ensure compliance with these survey protocol.
- However, vehicles traveling to and from the power plant would increase dust in the air, and impacts would occur as described for construction.
- Under the No Action Alternative, the ROW would not be granted and neither the communications facility nor the power line would be constructed.
- Red Rock Canyon National Conservation Area does lack more recent survey data but it is assumed to support a low density of tortoises due to low burrow population...

We appreciate this opportunity to provide input and trust that our comments will further protect tortoises if the Proposed Action 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 Proposed Action is provided to us at the contact information listed above.

Regards,



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

**Literature Cited**


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

Allen, E.B., L.E. Rao, R.J. Steers, A. Bytnerowicz, and M.E. Fenn. 2009. Impacts of atmospheric nitrogen deposition on vegetation and soils at Joshua Tree National Pages, in Webb, R.H.,

Desert Tortoise Council. 1999 (revised from 1994 version). Guidelines for handling desert tortoises during construction projects. Edward L. LaRue, Jr., editor. San Bernardino, California.

Fenstermaker, L.F., Heaton, J.S., Hughson, D.L., McDonald, E.V., and Miller, D.M. (eds.), The Mojave Desert: ecosystem processes and sustainability: Reno, University of Nevada Press, .p. 78–100.

Brooks, M.L. and J.R. Matchett. 2006. Spatial and temporal patterns of wildfires in the Mojave Desert, 1980–2004. Journal of Arid Environments 67 (2006) 148–164.

Council on Environmental Quality (CEQ). 1997. Considering Cumulative Effects under the National Environmental Policy Act.

Desert Tortoise Council. No date. Best management practices: Restoring perennial plants. https://deserttortoise.org/wp-content/uploads/BMP_fact_sheet_1_restore_perennials.pdf

Desert Tortoise Council. No date. Best management practices: Enhancing forage. https://deserttortoise.org/wp-content/uploads/BMP_fact_sheet_2_forage.pdf

Desert Tortoise Council. No date. Best management practices: Salvaging topsoil. https://deserttortoise.org/wp-content/uploads/BMP_fact_sheet_3_topsoil.pdf

Desert Tortoise Council. No date. Best management practices: Rehabilitating severe disturbance. https://deserttortoise.org/wp-content/uploads/BMP_fact_sheet_4_severe_disturbance.pdf

Desert Tortoise Council. No date. Best management practices: Reducing impacts of roads. https://deserttortoise.org/wp-content/uploads/BMP_fact_sheet_5_roads.pdf

U.S. Fish and Wildlife Service. 2009. Desert Tortoise (Mojave Population) Field Manual: (*Gopherus agassizii*). Region 8, Sacramento, California.

U.S. Fish and Wildlife Service. 2019. Preparing for any action that may occur within the range of the Mojave desert tortoise (*Gopherus agassizii*). USFWS Desert Tortoise Recovery Office. Reno, NV.

**Attachment**

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