

DESERT TORTOISE COUNCIL

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Via email only

April 15, 2020

Clint Helms
Bureau of Land Management
Ridgecrest Field Office
300 S. Richmond Rd
Ridgecrest, CA 93555
chelms@blm.gov

Re: Comment on Bureau of Land Management's Environmental Assessment: Spangler Hills OHV Area Expansion Fences (DOI-BLM-CA-D050-2020-0017-EA)

Dear Mr. Helms,

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.

The Council thanks Planning and Environmental Coordinator Caroline Woods for notifying us of this project. We appreciate this opportunity to provide comments on the above-referenced project. Given the location of the proposed project in habitats likely 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).

Proposed Action and Alternatives

BLM has prepared an Environmental Assessment: Spangler Hills OHV Area Expansion Fences (EA) in which it proposes to construct a 1.4-mile (2.25 km) and a 7-mile (11.17 km) fence along the recently expanded northeastern and southwestern boundaries of the Spangler Hills Off-Highway Vehicle (OHV) Open Area (Spangler Hills). Congress recently increased the area of Spangler Hills with passage of the 2019 Dingell Act (Public Law No: 116-9). The southern boundary of Spangler Hills was expanded into the Fremont-Kramer Area of Critical Environmental Concern (ACEC), and the northeastern boundary now borders with the Trona Pinnacles ACEC. Signs would be posted to inform the public of the presence and purpose of the barrier. BLM analyzes two alternatives, Alternative 1 – the No Action Alternative and Alternative 2 – the Proposed Action Alternative (Fence Project).

Purpose and Need

BLM would construct the fences "to clearly delineate the new Spangler Hills boundary" and "to enhance the protection of sensitive resources, such as desert tortoise (*Gopherus agassizii*) and Mohave ground squirrel (*Xerospermophilus mohavensis*), by limiting vehicle incursions into the Fremont-Kramer and Trona Pinnacles ACECs from Spangler Hills."

Comments

Section 1.5 Relationship to Statutes, Regulations, Other NEPA Documents

In this section, we found no mention of compliance with the Federal Endangered Species Act (FESA) or California Endangered Species Act (CESA). In *Section 1.2 Purpose and Need*, BLM identifies the Mojave desert tortoise and Mohave ground squirrel as occurring in the Fence Project area. Because both species are listed under FESA and/or CESA and the Fence Project has a construction component that is likely to adversely affect/incidentally take these species, BLM should include in this section of the EA these statutes, their relevant regulations (e.g., sections 7(a)(2) of FESA and 2081 of California Fish and Game Code), and how BLM is complying with them.

Section 2.2 Alternative 2 - Proposed Action Alternative

In this section, BLM says, "The fence materials will consist of wooden H-braces and anchor post, woven-wire fence with T-posts spaced at 10 to 15 ft. intervals. The fence will be designed and constructed using the BLM's manual *Fence Standards for Livestock and Wildlife* as guidance."

Unfortunately, we were unable to find BLM's Fence Standards document on line or in the Literature Cited section of the EA, and we were unable to find more information on the design of the fence in the remainder of the EA. Consequently, we are unable to comment on crucial aspects of the design of the fence that may adversely impact wildlife species. For example, if the woven wire fence were placed on/near the ground, would it impede/prevent desert tortoise and Mohave ground squirrel movements and movements of other small wildlife species and potentially trap them in Spangler Hills? If the opening size of the woven wire fence is small, would it trap small wildlife species (e.g., lizards, etc.) attempting to go through it, killing them from exposure/starvation or by attracting common ravens (*Corvus corax*) and other predators to the fence to feed/scavenge on them (please see CDFW and USFWS Annual Reports for the Hyundai Test Track Incidental Take Permits)? This may attract more tortoise predators to the Fremont-Kramer ACEC/Tortoise Conservation Area (TCA) and Fremont-Kramer Critical Habitat Unit.

We request that BLM provide more information on: (1) the design of the fence; (2) its impacts to wildlife species, especially the direct and indirect impacts to the Mojave desert tortoise and Mohave ground squirrel; and (3) its effectiveness at managing the targeted recreational resources (as described in the Purpose and Need section). This information should be added to Section 3.3.3 Recreation Resources—Environmental Impacts—Proposed Action and Section 3.6.3 Wildlife/Threatened, Endangered or Candidate Species—3.6.3 Environmental Impacts-Proposed Action. The fence should be designed to eliminate all direct and indirect adverse impacts to wildlife species including the tortoise and Mohave ground squirrel and should be monitored to ensure this standard is met.

The Proposed Action Alternative does not include educating the recreational visitors to Spangler Hills about the purpose of the fence/adherence to BLM's land management rules, maintenance of the fence and signs, or monitoring/enforcement to determine their effectiveness. Because of documentation of recurring destruction of fences and signs within the first few years of their construction to deter OHV use [e.g., newly fenced areas for Hyundai Corporation of America's fenced mitigation lands, Desert Tortoise Research Natural Area (DTRNA) existing and added lands, Coolgardie Conservation Area for Lane Mountain mill-vetch (USFWS 2014), etc.], it is imperative that BLM add maintenance, monitoring, and enforcement to the Fence Project. For example, in an email dated 15 April 2020 from Ron Berger, President of the Desert Tortoise Preserve Committee (DTPC), which co-manages the DTRNA with the BLM, Mr. Berger indicated that the DTRNA and expansion areas experience, on average, a minimum of thirty fence incursions annually, not including damage to property or trail signs.

We strongly suggest that BLM implement a science-based approach throughout its design and implementation of the Fence Project and expand its use of recently development techniques (e.g., remote sensing using wireless trail cameras, etc.) to collect data to ensure that maintenance, monitoring, and enforcement are effective.

Page 10 of the EA indicates, "The southern expansion fence will primarily border BLM-designated routes; therefore, resulting ground disturbance should primarily be contained within the existing route disturbance. The northern expansion fence will be outside of any documented disturbance footprint." We cannot tell from this description how much of the fences will coincide with existing routes. One recent problem with installing new fences around mitigation parcels where no existing roads previously occurred is that new roads are created outside the fences resulting in greater impacts than occur during fence installation (CMBC 2020). In the case of these proposed fences, we expect that new roads, resulting from intensive use, will occur both inside *and* outside the new fences and likely result in excessive damage to tortoise habitats. As such, we ask that BLM reconsider the locations of the fences to be sure they coincide with existing roads to the maximum extent practicable to minimize loss of tortoise critical habitats to the south and likely tortoise-occupied habitats to the north.

Section 3.5.2 Vegetation—Environmental Impacts—Proposed Action

In the EA, BLM says "The northern expansion fence will be outside of any documented disturbance footprint. Project-related vehicles/equipment and foot traffic will result in some soil and vegetation disturbance along the fence alignments that could be of detriment to plant species. Tire or foot-related compaction could result in harm to plant species." Unfortunately, this information does not describe the impacts (see also CMBC 2020). We request that BLM add

information on the types of surface disturbance that would occur (e.g., cross-country travel of vehicle and equipment crushing vegetation, disrupting soil crusts, and compacting soils; excavation of post holes and installation of concrete footings at anchor posts; type of equipment used to drive T-posts and its impacts; etc.); the magnitude of this disturbance (e.g., how much linear surface area would be disturbed, etc.); and any indirect impacts from these activities (e.g., spread of non-native invasive plant species because of disturbance to the soil's surface and soil crusts, etc.). After providing this description of the types of impacts, BLM should analyze the direct and indirect effects of these described impacts on the vegetation resource.

BLM says, "A net benefit to vegetation is expected as a result of the boundary fences. A reduction in recreation-related disturbance (e.g., OHV) on illegal routes within the ACECs should lead to a significant increase in the protection of vegetation resources." We agree that it may provide some long-term benefit to adjacent ACECs, but only if the fences and signs are maintained, the land uses enforced, the impacts monitored, and management adjusted based on monitoring data to ensure this protection. In addition, we contend that BLM has provided no data in the EA to support its claim that the proposed construction of the Fence Project without maintenance, monitoring, and enforcement would "lead to a significant increase in the protection of vegetation resources in the ACECs." We request that BLM provide data and an analysis to support this conclusion and show how and where the vegetation resources would be protected. For the subsequent data to be meaningful, BLM must perform baseline surveys along each of the fence line rights-of-way to which the subsequent data can be compared.

Section 3.5.3 Vegetation—Cumulative Effects—Proposed Action

BLM says, "Within the project vicinity, loss of vegetation and soils have led to adverse impacts to some plant species densities and demographics within the creosote and salt bush shrub communities. Decrease in quality of these resources may result from one or more of the following land uses: grazing, non-recreational off-highway vehicle use, recreational off-highway vehicle use, and invasions of non-native plants. By following the operating and conservation measures outlined in this document the effects of other existing and reasonably foreseeable future activities, including the outlined Proposed Action Alternative, would not significantly adversely affect an environmental resource or the continuation of existing land uses."

We were unable to find a definition of "project vicinity" with respect to vegetation and soils or other resource issues that were identified as being impacted in the EA. For each resource that is impacted, we request that BLM "...establish and describe the geographic scope for each cumulative effects issue, which will help bound the description of the affected environment" (BLM 2008a). This area is sometimes referred to as the "area of potential effects." For vegetation resources and other resources considered in this EA, BLM should use the "project vicinity" or "area of potential effects" identified for each resource issue in its analysis of the impacts to that resource issue from implementation of the Fence Project.

Section 3.5.3 Vegetation—Cumulative Effects

We were unable to find an analysis of the cumulative impacts of the Fence Project on vegetation resources. Please see our comments on pages 7 and 8 under *Section 3.6.4 Wildlife/Threatened, Endangered, or Candidate Species—Cumulative Effects.* We request that BLM apply our comments to Section 3.5.3 and add the required information and analysis to this section.

3.6 Wildlife/Threatened, Endangered or Candidate Species: Although the title of this section includes wildlife, we were unable to find a description of wildlife species other than the desert tortoise and Mohave ground squirrel. We request that BLM add information to the Affected Environment section that describes the more prevalent wildlife species in the Fence Project area and the Special Status Species (BLM 2008b) that may be affected by the Fence Project. At a minimum, this should include a review of the latest version of the California Natural Diversity Data Base for special status plant and animal species reported from the vicinities of the two fence lines.

Section 3.6.1 Wildlife/Threatened, Endangered or Candidate Species—Affected Environment—Proposed Action: The Fence Project would occur in the Western Mojave Recovery Unit of the Mojave desert tortoise and Fremont-Kramer Tortoise Conservation Area (TCA) and critical habitat unit (USFWS 1994b). For the description of the Mojave desert tortoise, BLM says "the US Fish and Wildlife Service (2011) estimate a decrease in density of tortoises from 92/km² in 1979 to 6.1/km² in 2011."

For BLM to analyze accurately the impacts of the Fence Project on the desert tortoise, it must include recent information on its status. 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). For the Fremont-Kramer ACEC/TCA, the subadult and adult densities are 4.2 per square mile (2.6 per square kilometer)(Allison and McLuckie 2018). The minimum viable density for the Mojave desert tortoise as determined using environmental data from the early 1990s is 10 adult tortoises per square mile (3.9 adult tortoises per square km) (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 declined 50.7 percent and, in the Fremont-Kramer ACEC/TCA, the decline was 50.6 percent (Allison and McLuckie 2018). During this same 10 years, adult and subadult tortoise numbers declined 51 percent in the Western Mojave Recovery Unit.

Critical habitat was designated for the tortoise in 1994 (USFWS 1994b). BLM has adopted several land/resource management plans for implementation of land management actions that include the Fence Project area. Although these management plans [e.g., West Mojave Plan (WEMO; BLM et al. 2005) and Desert Renewable Energy Conservation Plan (DRECP; BLM 2016)] 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 this recovery unit since listing, resulting in substantial loss/degradation of tortoise habitat.

We request that BLM update its information on the status of the tortoise in the EA and include information on the minimum viable population density for the tortoise and declining tortoise densities and numbers in this recovery unit and Fremont-Kramer ACEC/TCA. We request that BLM provide information on the current condition of the Fremont-Kramer Critical Habitat Unit 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 (CEQ) regulations (40 CFR 1500–1508), this information is needed to provide the baseline from which BLM then analyzes the environmental consequences from implementing the Fence 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 in this recovery unit and ACEC/TCA, and the Fremont-Kramer Critical Habitat Unit cannot experience any additional loss/degradation of habitat and provide the physical and biological features the tortoise needs to persist.

Section 3.6.3 Wildlife/Threatened, Endangered or Candidate Species—Environmental Impacts—Proposed Action: This section describes impacts to the desert tortoise and Mohave ground squirrel. We were unable to find an analysis of impacts to other wildlife species including BLM special status species. We request that BLM include this analysis in an updated and redistributed EA.

BLM says "Project-related vehicles/equipment and foot traffic will result in some soil and vegetation disturbance along the fence alignment that could be of detriment to the desert tortoise or Mohave ground squirrel. Tire or foot-related compaction could result in harm to the species by destroying burrows or causing a direct mortality. Human presence and fencing activities could also impede the species seasonal behavior patterns (e.g., breeding, hibernation, etc.)." "No additional impacts to wildlife resources are anticipated."

We disagree with BLM's last sentence. We request that BLM substantially add to its description and analysis of direct and indirect impacts to the desert tortoise. The Fence Project includes actions that may result in mortally, injury, harm, or harassment to tortoises (see Berry et al. 2016, Boarman 2002, Lovich and Bainbridge 1999) from:

- The use of vehicles that, when used on roads or cross country travel, can hit and kill/injure tortoises, crush tortoises in their burrows, collapse unoccupied burrows needed by tortoises for shelter from predators and temperature extremes, and hit and kill/injure other wildlife resulting in food subsidies for tortoise predators [e.g., common raven, coyote (*Canis latrans*), etc.].
- The use of vehicles and/or equipment that disturbs the soil's surface, disrupts soil crusts, and aids in the proliferation of non-native invasive plants that reduce the availability of native annual forbs needed by tortoises for adequate nutrition; holes/trenches that are constructed that may entrap tortoises.
- The presence of humans and their associated food and trash that attracts tortoise predators to the Fence Project area and increases the likelihood of increased predation on tortoises.
- The loss/degradation of tortoise habitat, including critical habitat in the Fremont-Kramer Critical Habitat Unit, because the fence line would "be off set from the routes by at least 25 to 50 feet" and "to the south of the designated boundary routes."

These and other impacts to the tortoise and critical habitat should be analyzed. We request that BLM add this analysis in the EA.

BLM says, "A net benefit to wildlife is expected as a result of the boundary fences. A reduction in recreation-related disturbance (e.g., OHV) on illegal routes within the ACECs should lead to a significant increase in the protection of wildlife resources."

As stated above under Section 3.5.2 Vegetation - Environmental Impacts—Proposed Action, we agree that the Fence Project may provide some long-term benefit to vegetation and to the tortoise and Mohave ground squirrel, but only if the fences and signs are maintained, the land uses enforced, the impacts monitored, and management quickly adjusted, based on monitoring data to ensure this protection. In addition, we contend that BLM has provided no data in the EA to support its claim that the proposed construction of the Fence Project without maintenance, monitoring, and enforcement would lead "to a significant increase in the protection of wildlife." We request that BLM provide data and an analysis to support this conclusion and show how and where wildlife resources, including the tortoise, would be protected. We request that a fence monitoring and remediation plan be developed and added to the EA.

3.6.4 Wildlife/Threatened, Endangered or Candidate Species—Cumulative Effects: BLM says, "Within the project vicinity, loss of habitat, vegetation, and soils have led to adverse impacts to desert tortoises and creosote and salt bush shrub communities. Soil loss may be contributing to decreased air and water quality although no data specific to the project area are available. Decrease in quality of these resources may result from one or more of the following land uses: grazing, non-recreational off-highway vehicle use, recreational off-highway vehicle use, and invasions of non-native plants. By following the operating and conservation measures outlined in this document the effects of other existing and reasonably foreseeable future activities, including the outlined Proposed Action Alternative, would not significantly adversely affect an environmental resource or the continuation of existing land uses."

We do not find this to be an adequate cumulative impacts analysis. CEQ defined cumulative impacts as "...the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such actions" (40 CFR 1508.7)(BLM 2008a). 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. These 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. DTC/Comment Letters/Path 46 Transmission Line Clearance Project EA. 4-3-2020 (2) 9

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.

BLM (2008a) provides direction on how to prepare a National Environmental Policy Act (NEPA) document. In Section 6.8.3, Cumulative Effects, BLM says, "The purpose of cumulative effects analysis is to ensure that Federal decision-makers consider the full range of consequences of actions." The preparer of a NEPA document should "Be aware that minor direct and indirect effects can potentially contribute to synergistic cumulative effects that may require analysis."

We request that BLM implement CEQ's and BLM's guidance in the analysis of cumulative impacts in the EA and address the sustainability of resources, especially with respect to the tortoise and designated critical habitat in the Fremont-Kramer Critical Habitat Unit and Western Mojave Recovery Unit.

Section 3.6.5 Wildlife/Threatened, Endangered or Candidate Species—Mitigation and Residual Impacts: BLM says, "Precautions will be taken to avoid harm to desert tortoises and Mohave ground squirrels, and protective stipulations must be followed (see Appendix F)." We found no mention in the EA of "protective" stipulations from the CDFW's 2081 permit for the tortoise and Mohave ground squirrel or the USFWS' biological opinion for the tortoise regarding the Fence Project. Please include all these measures and a copy of the biological opinion and 2081 permit for the Fence Project in the EA. In addition, because of the serious declining status and trend of the tortoise, BLM should implement measures to fully mitigate for the temporal and geographical degradation/loss of tortoises and tortoise habitat/critical habitat from the direct and indirect impacts of the Fence Project.

Specific Comments

Page 11, with regards to the following statement, "Fencing activities might occur during active periods in the seasonal cycles of desert tortoise and Mohave ground squirrel," we request that BLM construct the fence either during July-August or November-January to avoid the heightened tortoise and Mohave ground squirrel activity periods.

Page 16, Appendix B—Invasive, Non-native Species: "There are not any known invasive / non-native species in the project area. As the fence is being surveyed / constructed, BLM staff will identify any areas which may have Invasive / Non-native plant species." We request that BLM provide documentation that non-native species such as Sahara mustard (Brassica tournefortii), red brome (Bromus madritensis rubens), Mediterranean split grass (Schismus spp.), and cheatgrass (Bromus tectorum) are not present in the project area. If BLM's statement is correct, BLM should implement management actions to ensure that these and other non-native species do not become established in the project area. If not correct, BLM should revise the EA to include these species and the impacts from them by implementing the Fence Project. In addition, the EA should include regularly scheduled removal of non-native plant species from areas impacted by the Fence Project as a mitigation measure.

Page 18, *Appendix B–Recreation Resources*: "A fence line would create a temporary impediment to travel by non-motorized and non-mechanized traveler (i.e., bicycle, equestrian, and hunters/hikers)." We are unsure why the fence line would be temporary. Is BLM planning on constructing the fence for a few years and then removing it? Please explain this statement.

Page 28, Appendix F –Biological Resource Stipulations and Conservation Measures, General: "8. Construction equipment and vehicles should be washed off prior to ingress onto BLM lands to minimize spread of invasive weed species." We thank BLM for requiring this measure and strongly encourage this measure be required for all BLM projects and authorized activities that result in surface disturbance.

Page 28, Appendix F-Biological Resource Stipulations and Conservation Measures, Tortoise Stipulations: "9. All trenches and holes will be inspected daily for the presence of desert tortoise and before being filled." We request that BLM add a description of the required action if a tortoise or other wildlife species is trapped in a trench or hole. For the tortoise, the required action should follow USFWS handling protocols, temperature restrictions, release conditions and locations, and tortoise monitoring following release, etc., and be authorized by a CDFW 2081 permit before handling can occur.

We appreciate BLM providing notification of this EA to the Council. In addition, we appreciate this opportunity to provide input and trust that our comments will help protect tortoises during any authorized project activities. 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 particular project is provided to us at the contact information listed above.

Regards,

600 22RA

Edward L. LaRue, Jr., M.S.

Desert Tortoise Council, Ecosystems Advisory Committee, Chairperson

Literature Cited

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