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Via NPS's Planning, Environment & Public Comment website

21 July 2023

Charles F. Sams III
Director
Electric Bicycle Programmatic EA
National Park Service
1849 C Street NW, MS-2472
Washington, DC 20240
Attn: Electric Bicycle Programmatic EA
https://parkplanning.nps.gov/document.cfm?parkID=442&projectID=117364&documentID=129840

RE: Programmatic EA - Use of Electric Bicycles Within the National Park System

Dear Director Sams,

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.

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

The Mojave desert tortoise is among the top 50 species on the list of the world's most endangered tortoises and freshwater turtles. The International Union for Conservation of Nature's (IUCN) Species Survival Commission, Tortoise and Freshwater Turtle Specialist Group, now considers the Mojave desert tortoise to be Critically Endangered (Berry et al. 2021) "… based on population

reduction (decreasing density), habitat loss of over 80% over three generations (90 years), including past reductions and predicted future declines, as well as the effects of disease (upper respiratory tract disease/mycoplasmosis). *Gopherus agassizii* (*sensu stricto*) comprises tortoises in the most well-studied 30% of the larger range; this portion of the original range has seen the most human impacts and is where the largest past population losses had been documented. A recent rigorous rangewide population reassessment of *G. agassizii* (*sensu stricto*) has demonstrated continued adult population and density declines of about 90% over three generations (two in the past and one ongoing) in four of the five *G. agassizii* recovery units and inadequate recruitment with decreasing percentages of juveniles in all five recovery units."

This status, in part, prompted the Council to join Defenders of Wildlife and Desert Tortoise Preserve Committee (Defenders of Wildlife et al. 2020) to petition the California Fish and Game Commission in March 2020 to elevate the listing of the Mojave desert tortoise from threatened to endangered in California.

Given the location of the proposed project in habitats likely occupied by Mojave desert tortoise (*Gopherus agassizii*) (synonymous with Agassiz's desert tortoise) and Sonoran desert tortoise (*G. morafkai*) (synonymous with Morafka's desert tortoise), our comments pertain to enhancing protection of this species during activities funded, authorized, or carried out by the National Park Service (NPS), which we assume will be added to the Decision Record for this project as needed. Please accept, carefully review, and include in the relevant project file the Council's following comments and attachments for the proposed project.

Description of Proposed Action

The NPS proposes to implement a rule to address the increasing use of electric bicycles (e-bikes) in the National Park System units (NPS units). This programmatic environmental assessment (PEA) is needed to address inadequacies in the National Environmental Policy Act (NEPA) compliance associated with an earlier NPS final rule governing use of e-bikes within the National Park System (85 FR 69175) issued on November 2, 2020, and to assess the impacts of the rule on a national level. The purposes for issuing the rule are: "1) to provide visitors with an additional option for accessing areas in park units that are accessible by traditional bicycles, as determined appropriate for each park unit, particularly for those who want to ride a bicycle but might not otherwise do so because of physical fitness, age, disability, or the nature of the environment; 2) to resolve regulatory uncertainty about how e-bikes are managed so that the NPS may exercise clear management authority over e-bikes, thus providing clarity to visitors and stakeholders such as visitor service providers; and 3) to comply with Secretarial Order 3376 which instructed the NPS to promulgate a rule consistent with its policy direction with respect to e-bikes."

Two alternatives were identified in the PEA, the No Action Alternative and the Proposed Action Alternative.

No Action Alternative: Management of e-bikes would return to the status quo prior to the 2019 NPS policy and the 2020 final rule. At that time, NPS regulations did not specifically mention e-bikes and there was no nationwide policy about the use of e-bikes in NPS units. The NPS would remove the definition of e-bikes in 36 CFR section 1.4 and the regulations

governing their use in paragraph (i) of 36 CFR. section 4.30. In most park units, visitors likely would be allowed to use e-bikes on public roads and parking areas where motor vehicle use is allowed. In some NPS units, e-bike use also could occur on some administrative roads and trails where traditional bicycles are authorized due to the lack of policy direction about how to use existing authorities to manage e-bikes.

Proposed Action Alternative: The NPS would implement the 2020 final rule, which gives superintendents discretionary authority to allow the use of e-bikes, or classes of e-bikes, on a case-by-case basis, on park roads, parking areas, administrative roads, and trails that are otherwise open to traditional bicycle use. The rule specifically excludes e-bikes from the definition of "motor vehicle" and defines an "electric bicycle" as a two- or three-wheeled cycle with fully operable pedals and a cap on the wattage of the motor. It defines three classes of e-bikes and limits the motor assisted maximum speed to 28 mph. the rule prohibits using the electric motor exclusively to move an e-bike for an extended period of time without pedaling. Each superintendent has the authority to limit, restrict, or impose conditions on e-bike use, or to close any park road, parking area, administrative road, trail, or portion thereof to e-bike use, after taking into consideration public health and safety, natural and cultural resource protection, and other management activities and objectives. Superintendents who allow e-bike use on administrative roads and trails could establish monitoring protocols to collect data regarding e-bike impacts.

NPS considered other alternatives, but they were dismissed from further analysis. These were grouped into two types of alternatives:

1. Limit superintendent discretion to allow the use of e-bikes. These included:
   - Prohibit the use of Class 2 and 3 e-bikes on non-motorized trails where traditional bicycles are allowed.
   - Allow Class 1 e-bikes on administrative roads and improved surface trails, but not single-track trails.
   - Allow Class 2 e-bikes only on administrative roads.
   - Allow Class 3 e-bikes only in locations open to public motor vehicle traffic.
   - Prohibit Class 2 and 3 e-bikes on natural surface trails.
   - Prohibit the use of three-wheeled e-bikes with a combined tire tread width wider than 15 inches on trails where traditional bicycles are allowed.
   - Prohibit e-bikes on trails with groomed snow that are also used by over-snow vehicles.
   - Allow e-bikes only on paved trails.
   - Prohibit Class 2 e-bikes on all improved surfaces and shared use trails open to traditional bicycles due to their throttle-only capabilities.

2. Allow the use of e-bikes unless prohibited or restricted by the superintendent.

Comments on the Proposed Action

Request for Analysis of Other Action Alternatives

The NPS NEPA Handbook (NPS 2015) says, "When the Responsible Official determines that there are no unresolved conflicts about the proposed action with respect to alternative uses of available resources, an EA need only consider the proposed action and does not need to consider

additional alternatives, including the no-action alternative." We request that the PEA comply with this direction and analyze other action alternatives to the proposed action.

Alternatives to the proposed action could include:

- limiting e-bikes to roads in NPS units including roads closed to the public – suggested because of the sustained speeds at which that e-bikes can operate.
- *requiring* (emphasis added) scientific studies to monitor the impacts of e-bike use to regional and sensitive natural and cultural resources of the park unit and adjusting e-bike use based on the monitoring results – monitoring is suggested, not required in the proposed action alternative and there is no requirement for the monitoring to be science-based.
- requiring scientific studies of natural and cultural resources before authorizing new e-bike use to determine baseline conditions, and a few years after authorization of e-bike use to determine the changes that occurred, if any.
- considering e-bikes to be a motorized vehicle, because they are a vehicle that has a motor.

We identify this last alternative to help the NPS clarify how other small, motorized vehicles would be managed in NPS units. If they are not, what is to prohibit the use of mopeds from using roads and trails open for use by e-bikes. At some NPS units, roads are seasonally closed to automobiles and trucks to reduce high traffic and provide for a safer visitor experience. Under the proposed action alternative, these closed roads could be open to e-bikes that can travel at speeds greater than 28 mph and potentially to mopeds, that can travel 30 mph or faster. Trails could also be open to mopeds.

Clarification of Terms

In the PEA, the NPS uses the term "traditional bicycle use" but does not define it. The Council interprets "traditional bicycle use" as using a traditional bicycle on a dirt or paved road or paved walkway/trail. Mountain bikes are not traditional bicycles, and their use, which we do not consider traditional, includes these locations, plus riding on unpaved or dirt trails and off trails.

We request that NPS define in the PEA "traditional bicycle use" including where it is authorized to occur in NPS units.

Compliance with the NPS Organic Act and Other Directives

We agree that the purpose and intent of establishing and managing each NPS unit differs from the next and collectively they span a broad range of management purposes. In addition, we agree that the natural resources present in each NPS unit vary from a highly developed urban setting to pristine wilderness. However, in the analysis in the PEA we were disappointed that the PEA did not remind the public of its requirement to comply with the NPS Organic Act and NPS *Management Policies 2006*, which set forth the NPS interpretation of the Organic Act, "and prohibit the NPS from taking any action that would result in impairment of park resources or values (NPS *Management Policies 2006,* 1.4.4). Furthermore, while the NPS has discretion to allow adverse impacts, NPS managers must always seek ways to avoid, or to minimize *to the greatest extent practicable*, (emphasis added) adverse impacts on park resources and values (NPS *Management Policies 2006*, 1.4.3)" (NPS 2015). In addition, the NPS's "Management of National

Park System Programs" (2006) provides the following statement, "The National Park Service preserves unimpaired the natural and cultural resources and values of the national park system for the enjoyment, education, and inspiration of this and future generations." "Section 1.4.6 of Management Policies 2006 identifies the park resources and values that are subject to the no-impairment standard: The "park resources and values" that are subject to the no-impairment standard include:

> the park's scenery, natural and historic objects, and *wildlife*, and the processes and conditions that sustain them, including, to the extent present in the park: the *ecological, biological, and physical processes* that created the park and continue to act upon it; scenic features; natural visibility, both in daytime and at night; natural landscapes; natural soundscapes and smells; water and air resources; soils; geological resources; paleontological resources; archeological resources; cultural landscapes; ethnographic resources; historic and prehistoric sites, structures, and objects; museum collections; and *native plants and animals*" (emphasis added).

However, in the PEA, the NPS says that under 36 CFR 4.30, traditional bicycles (and therefore e-bikes) may not be allowed on an existing trail if such use would cause a significant impact. Superintendents may mitigate impacts to vegetation and wildlife. This statement appears to not align with the directive described above that prohibits impairment. Please clarify this discrepancy.

The PEA has a general discussion of NPS's requirement to consult with the U.S. Fish and Wildlife Service under section 7(a)(2) of the Federal Endangered Species (FESA) if the proposed used of e-bikes would adversely impact threatened and endangered species listed under the Federal Endangered Species Act. However, we were unable to find a discussion in the PEA of how the NPS would comply with section 7(a)(1) of the FESA in the consideration of the use of e-bikes in NPS units. This section states that all federal agencies "…shall… utilize their authorities in furtherance of the purposes of this Act by carrying out programs for the conservation of endangered species and threatened species listed pursuant to Section 4 of this Act." In Section 3 of the FESA, "conserve," "conserving," and "conservation" mean "to use and the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition…"

The NPS is a signatory to the Sonoran Desert Tortoise Candidate Conservation Agreement (Agreement) (USFWS et al. 2015). In this Agreement, NPS states it will " survey for, protect, and strive to recover all species native to national park system units. The [National Park] Service will fully meet its obligations under the NPS Organic Act and the ESA to both proactively conserve species and prevent detrimental effects to these species."

Please add a discussion in the PEA of how NPS would comply with requirements such as section 7(a)(1) of the FESA and agreements with other agencies in determining the use of e-bikes on NPS units.

Decisions Using the Results of Scientific Studies and Monitoring

In the PEA, NPS says, "Superintendents are most familiar with the natural and cultural resources, operating budgets, and visitor use patterns in the park units they manage, and therefore are in the best position to determine whether e-bikes, or specific classes of e-bikes, should be allowed or prohibited in certain locations." The Council believes the decisions about e-bike use should be made using data collected from the completion of scientific studies on the ecological impacts from mountain bikes in the NPS units.

In a recent comparison of the existing research on the ecological impacts of conventional mountain biking and electric mountain biking, Kuwaczka et al. (2023) reported impacts to the following resources:

Soils – mountain bikes

Soil compaction
Erosion

e-bikes

More impacts per time due to covering longer distances
More impacts on soil due to creation of informal trails
Higher soil erosion due to preference for climbing slopes

Vegetation – mountain bikes

Damage of plants results in loss of vegetation cover, density, species richness, and altered species composition
Spread of plant pathogens

e-bikes

Greater spatial impacts than mountain bikes because of longer distances traveled
More trampling damage from new informal trail creation
Steeper sections of trails are preferred and steeper climbs
Longer distance traveled for seed dispersal of invasive plants to larger areas
Longer distance traveled for plant pathogen dispersal to larger areas
Increase in trail use, therefore more damage associated with e-bikes

Wildlife – mountain bikes

Avoid trails or areas frequently used for mountain biking
Lower food abundance resulting in need for larger territory

e-bikes

Stronger immediate wildlife responses on slopes due to faster uphill riding
Increase off-trail riding and the use of formerly unreachable areas, this will increase the chance for habitat loss or reductions as a result of spatial avoidance responses by wildlife species
Increase of activity and frequency may lead to the avoidance of whole areas by individuals or entire populations
Increases the frequency of disturbance may increase shifting temporal activity patterns
More immediate wildlife responses (also of less tolerant individuals), spatial or temporal habitat avoidance
Population dynamics of remnant rare protected species may be very reactive to disturbances, particularly in sensitive time periods.

In summary, the e-bike use results in greater impacts to soils, vegetation, and wildlife than mountain bike use because of increased speeds, distances traveled, steeper slopes climbed, and greater number of informal trails created.

Given the potential impacts to ecological resources from mountain bike and e-bike uses, the Council strongly encourages NPS units to first conduct scientific studies of the ecological effects of proposed or already authorized conventional mountain bike use in that unit before the NPS authorizes the use of e-bikes in any National Park unit. These studies are necessary as NPS units span a broad range of management purposes and ecological conditions. Current research is limited in its studies of impacts to various soils, vegetation communities, and wildlife species. Thus, conclusions reached in this PEA are based on limited data and may not reflect accurately the impacts to soils, vegetation, and/or wildlife in a specific NPS unit from e-bike use.

In addition, NPS should not presume, as it has in the PEA that "the use of e-bikes and traditional bicycles on trails would not cause significant adverse impacts if significant adverse impacts would not occur from traditional bicycle use alone." The impacts reported from e-bike use are greater than from use of traditional mountain bikes (Kuwaczka et al. 2023). These greater impacts could rise to the level of significance especially if the impacts are cumulative, synergistic, and/or interactive (please see "Cumulative Impacts" section below).

The results of these scientific studies will help determine whether it is appropriate to allow the use of e-bikes, as their use would result in greater ecological impacts especially to many threatened and endangered species. We request that this requirement be added to the proposed action alternative and that NPS delete its conclusion that the use of e-bikes and traditional bicycles on trails would not cause significant adverse impacts if significant adverse impacts would not occur from traditional bicycle use alone.

Cumulative Impacts

The PEA has a cumulative impacts section for the four resource issues analyzed in the document – soil, vegetation, visitor use and experience, and wildlife. In the PEA, the NPS concludes there would be no cumulative impacts from implementation of the proposed action because the impacts "would be "localized," and would not cause impacts that have a geographic or shared ecological nexus to wildlife in other park units. Because of this, and because administrative roads and trails that would allow e-bike use typically have limited connectivity with other National Park System trails, the proposed action would not result in any "national-level" collective impacts to wildlife across the National Park System."

However, we do not believe the analysis followed the Council on Environmental Quality's (1997) guidance on "Considering Cumulative Effects under the National Environmental Policy Act."

In the cumulative effects analysis of the PEA, please ensure that the CEQ's 1997 guidance is followed, including the eight principles (listed below), when analyzing cumulative effects of the proposed action to the affected resource issues that include the tortoise.

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* (emphasis added), ecosystems, and human communities.”

CEQ’s guidance on how to analyze cumulative environmental effects contains eight principles listed below:

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

2. Cumulative effects are the total effect, including both direct and indirect effects, on a given resource, ecosystem, and human community of all actions taken, no matter who (federal, non-federal, or private) has taken the actions.
Individual effects from disparate activities may add up or interact to cause additional effects not apparent when looking at the individual effect at one time. The additional effects contributed by actions unrelated to the proposed action must be included in the analysis of cumulative effects.

3. Cumulative effects need to be analyzed in terms of the specific resource, ecosystem, and human community being affected.
Environmental effects are often evaluated from the perspective of the proposed action. Analyzing cumulative effects requires focusing on the resources, ecosystem, and human community that may be affected and developing an adequate understanding of how the resources are susceptible to effects.

4. It is not practical to analyze the cumulative effects of an action on the universe; the list of environmental effects must focus on those that are truly meaningful.
For cumulative effects analysis to help the decision maker and inform interested parties, it must be limited through scoping to effects that can be evaluated meaningfully. The boundaries for evaluating cumulative effects should be expanded to the point at which the resource is no longer affected significantly or the effects are no longer of interest to the affected parties.

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

ecological boundaries and analysis of human communities must use actual sociocultural boundaries to ensure including all effects.

6. Cumulative effects may result from the accumulation of similar effects or the synergistic interaction of different effects.
Repeated actions may cause effects to build up through simple addition (more and more of the same type of effect), and the same or different actions may produce effects that interact to produce cumulative effects greater than the sum of the effects.

7. Cumulative effects may last for many years beyond the life of the action that caused the effects.
Some actions cause damage lasting far longer than the life of the action itself (e.g., acid mine damage, radioactive waste contamination, species extinctions). Cumulative effects analysis 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 the Final PEA, please revise the analysis of cumulative impacts of each alternative for the resource issues identified by applying these eight principles.

Note that CEQ recognizes that synergistic and interactive impacts as well as cumulative impacts should be analyzed in the NEPA document for the resource issues analyzed.

In addition, we request that NPS create a database and geospatial system on a regional or national scale that tracks the decisions of individual NPS units on the locations and use, both authorized and unauthorized, of e-bikes. This data base and geospatial tracking system should also track the resulting impacts (e.g., change in surface disturbance, loss/degradation of native plants, unpaved routes, invasive species occurrence, wildfires, litter, etc.), management decisions, and effectiveness of mitigation for each NPS unit. Without such a tracking system, NPS is unable to analyze cumulative impacts to many resource issues including wildlife (e.g., tortoises/tortoise habitat) with any degree of confidence.

Enforcement and Mitigation

The PEA describes certain conditions or limitations that, if implemented, would potentially minimize impacts to ecological resources. These include:

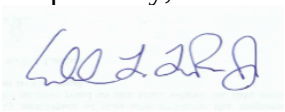
- limiting the motor assistance to a maximum speed to 28 mph
- prohibiting the use of the electric motor exclusively to move an e-bike for an extended period of time without pedaling

- possibly encouraging bike cleaning between rides to minimize non-native seed and plant pathogen dispersal

Our question is how would the NPS enforce these conditions, especially the last limitation for parks in the southwest deserts where water is not readily available to clean bikes? If minimization measures are suggested but are not reasonable to implement or enforce, they should not be described in the PEA.

We appreciate this opportunity to provide comments on this project and trust they will help protect tortoises during any resulting authorized activities. Herein, we reiterate that the Desert Tortoise Council wants to be identified as an Affected Interest for this and all other projects funded, authorized, or carried out by the NPS 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. Additionally, we ask that you respond in an email that you have received this comment letter so we can be sure our concerns have been registered with the appropriate personnel and office for this Project.

Respectfully,



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

cc: Acting Regional Director, Region 8, National Park Service; pwr_regional_director@nps.gov

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