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PROTECTING NATURAL RESOURCES

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Director, Recreation Staff
1400 Independence Avenue SW
Washington, DC 20250–1124

cc: Ara Marderosian

Subject: **FSM 7700 and 7710 E-bikes #ORMS-2619 Comments on Behalf of Sequoia ForestKeeper**

Sequoia ForestKeeper appreciates the opportunity to address several issues in the Forest Service's proposed addition of e-bikes to its travel management directives. We provide the following comments in hopes that the Forest Service will make some adjustments and strengthen its rule on the use of e-bikes and other bicycle uses on NFS trails.

Issue #1 – The new directives in the FSM should not "establish promotion of ebike use on NFS lands as an objective." 85 Fed. Reg. 60129 (Sept. 24, 2020).

The new objective is located at FSM 7702 under OBJECTIVES, and adds Objective 8. Moreover, the same language is included in FSM 7715.03 under Policy as Policy 9.:

> To consider emerging technologies (such as e-bikes) that are changing the way people access and recreate on NFS lands. For example, where suitable for use, e-bikes may provide new opportunities for individuals who might otherwise be prevented from experiencing an NFS trail without assistance from an electrical motor.

Comment: The latter statement, as the Federal Register notice states, promotes use of e-bikes and other new technologies on NFS trails, which is not appropriate as an objective. None of the other objectives do this, and this promotion is inconsistent with and elevates such a new use over the purposes of the other objectives. In addition, it is not the agency's or federal government's role to provide "new opportunities" to "individuals who might otherwise be prevented" from using trails, or other NFS areas for that matter, in any form. This language is a slippery slope, which could be used to encourage new technologies to access and use other parts of the NPS where those uses may be inappropriate, such as Wilderness areas or wild rivers, but where the law does not explicitly prohibit such a new technology.

We would encourage a change in the objective and policy to be consistent with the others, such as:

> To consider emerging technologies (such as e-bikes) that provide alternative ways in which people travel and recreate on NFS lands. Where suitable, provide for the use of a

> new technology on trails only after adequate public involvement, within the environmental capabilities of the land, and where their use minimizes conflicts among other uses.

Emerging technologies pose unknown risks and conflicts on public trails, and decisions to allow their use (including e-bike use) should be determined on a case-by-case basis without the Forest Service putting their thumb on the proverbial scale by suggesting their promotion. An example of the unknown risks and conflicts that have evolved from emerging technology are those that are now evident from the use of drones, which are known to have caused conflicts with wildlife and visitors in search of quiet solitude, and which have caused agencies to prohibit use of on public lands. *See* https://nps.gov/policy/PolMemos/PM_14-05.htm. We urge the Forest Service to take a neutral position, similar to the ones in the other objectives under this section.

Issue #2 – The new directive properly categorizes e-bikes as motorized vehicles.

FSM 7711.3 under subsection "6." includes a new category "to identify classes of motor vehicles on an MVUM" to specify e-bikes on the Motorized Vehicle Use Map (MVUM):

> g. Trails Open to E-Bikes Only. Specify the class or classes of e-bikes allowed (Class 1, 2, and/or 3).

Although use by e-bikes, just like other bicycles, should be reviewed for use on trails on a case-by case basis with public involvement, proper environmental review, and should only allow their use where it minimizes conflicts among other uses, e-bikes are unquestionably motorized equipment. All classes of e-bikes, by definition, have a motor. A motor, even with Class 1 and 3 e-bikes, allows users to more easily pedal their bikes up trails, which could easily put them in increased conflict with down-hill riders (non-e-bikes), horses, and hikers. Allowing any class of e-bike on trails will likely increase bike use on trails and therefore increase the potential for conflicts.

The Forest Service properly analyzed and determined that e-bikes are motorized under its Travel Management Rule (TMR) in a 2015 briefing paper, in which it stated:

> E-bikes have a motor and are therefore self-propelled and are not covered by the exceptions in the definition [of 36 CFR 212.2, (1) & (2)]. Therefore, e-bikes are motor vehicles and are subject to regulation under the TMR, which requires designation of National Forest System (NFS) roads, NFS trails, and areas on NFS lands for motor vehicle use. 36 CFR 212.51(a). Direction on e-bikes has been included in a response in the Federal Register notice for the final over-snow vehicle rule. The response states: "New technologies that merge bicycles and motors, such as e-bikes, are considered motor vehicles under §212.1 of the TMR" 80 Fed. Reg. 4503 (Jan. 28, 2015). New trail riding opportunities for e-bikes may be considered as administrative units and ranger districts update their motor vehicle use map (MVUM) under travel management planning. These changes would involve appropriate environmental analysis and public participation.

Consistent with these findings and determinations, the Forest Service should not deviate from this regulation or interpretation of e-bikes now or in the future.

In the Giant Sequoia National Monument, specifically, the Monument Proclamation and the Monument Management Plan prohibit the use of motorized vehicles on NFS trails. Therefore, a change in the designation or definition of e-bikes as non-motorized would have an adverse effect on trails and trail users in the Monument. For that reason alone, the definition should be retained as it is currently proposed and as it has been interpreted in the Forest Service's briefing paper.

Issue #3 – E-bikes on trails will likely increase the displacement of other trail user that do not want the conflict or disruption of their experience of hiking or riding horses on trails without fear of conflict or potential collisions.

Most hikers that have encountered mountain bikes descending down single track trails, even at lower speeds, have experienced the apprehension of the encounter, conflict, and fear of a collision with a bicycle, and do not wish to repeat it. Horseback riders have even greater apprehension of such an encounter. To avoid the conflict, many hikers and horseback riders will seek out trails where they will not encounter the conflict, and therefore are displaced from trails that have been opened up to mountain bikes.

With the potential for increased bike use from e-bikes, which could more easily ride uphill, the displacement of hikers and horseback riders will likely increase.

In the past, the Forest Service has unilaterally opened up NFS trails to bicycles without public involvement and without any environmental analysis or analysis of potential conflicts. This failure has been detrimental to hikers and horseback riders who have not been given any say about this change in use, which has often led to their displacement from popular hiking trails.

For example, in the Giant Sequoia National Monument of the Sequoia National Forest, the Nelson Trail is now so heavily used by mountain bikes that hikers and horseback riders avoid the trail altogether. Moreover, bike riders have even altered trail features to install jumps and even use downed giant sequoia logs to ride on. These are unsanctioned activities that also have environmental consequences, which have never been analyzed under NEPA.

Issue #4 – All bicycles uses on trails should be subject to the same requirements for public involvement and environmental review as e-bikes, and this review should be done retroactively.

A "Bicycle" definition has now also been included under FSM 7705, which is long overdue. Non-motorized bicycles or mountain bikes, however, are not included in the criteria section at FSM 7715.5 for public involvement or environmental analysis when their use is allowed on a NFS trail, which we believe is a major oversight. The "7715.5 – Criteria" should be enlarged to include other types of technologies that are not motorized, including human-powered bicycles or mountain bikes. The conflicts, displaced users, and adverse environmental effects have been

clearly documented, and similar to motorized or e-bike uses, have the same potential effects on NFS trails.

Because most trails that have been designated for bicycle use on NFS trails in the past have not gone through the proper public involvement or environmental analysis process, the Forest Service must first go through a public and environmental review process for bicycles before it even considers allowing e-bikes on NFS trails.

We urge the following changes to the FSM 7715.5 Criteria to include bicycle uses:

> Add at end of introductory paragraph: "Moreover, in considering use by bicycles, the specific criteria in 36 CFR 212.55(b) apply to trails."
>
> Add under "1. General Criteria for Roads, Trails, and Areas":
>
> > d. In designating NFS trails for bicycle use, consider effects on NFS natural and cultural resources, public safety, provision of recreation opportunities, access needs, conflicts among uses of NFS lands, the need for maintenance and administration of roads, trails, and areas that would arise if the uses under consideration are designated, and availability of resources for maintenance and administration.
>
> Change text in "2. Specific Criteria for Trails and Areas" to read (changes underlined):
>
> > In addition to the general criteria in FSM 7715.5, paragraph 1, when designating bicycle use, motor vehicle use, or OSV use on NFS trails and areas on NFS lands, consider and document the effects on the following, with the objective of minimizing:
> > * * *
> > c. Conflicts between bicycle use, motor vehicle use, or OSV use and existing or proposed recreational uses on NFS lands or neighboring Federal lands; and
> >
> > d. Conflicts among non-mechanized uses, bicycle uses, and different classes of motor vehicle uses or OSV uses on NFS lands or neighboring Federal lands.
> > * * *
> > e. Compatibility of bicycle use, motor vehicle use, or OSV use with existing conditions in populated areas, taking into account sound, emissions, and other factors, such as traffic-generated dust and the proximity of residences, parks, and schools.
>
> Change text in "3. Specific Criterion for Trails" to read (changes underlined):
>
> > In addition to the general and specific criteria in FSM 7715.5, paragraphs 1 and 2, consider and document existing Trail Management Objectives (TMOs) before making designations of bicycle use, motor vehicle use under Subpart B, or OSV use under Subpart C that would add vehicle classes on NFS trails.

Change heading in "4. Specific Criteria and Guidance for Designating E-Bike Use on Trails" to read: "4. Specific Criteria and Guidance for Designating Bicycle or E-Bike Use on Trails."

Change text under heading 4. to read (changes underlined):

> In addition to the general and specific criteria in FSM 7715.5, paragraphs 1 through 3, when designating trails for bicycle or e-bike use (FSM 7705), consider and document the following:

Add under heading 4.:

> d. Whether the potential exists that bicycle or e-bike use will conflict with other non-mechanical uses (such as hikers and horseback riders), the extent to which effects from bicycle or e-bike use are comparable to effects from non-mechanical uses, accounting for, as appropriate, differences in speed; potential effects from increased or concentrated use; and any site-specific considerations.
>
> e. Apply the consideration of bicycle use retroactively to trails that have been designated for bicycle use where public involvement and the consideration of effects from differences in speed; potential effects from increased or concentrated use; and any site-specific considerations have not previously been considered.

We urge that the following criteria be deleted because all decisions should be site-specific and not generally applied in a programmatic analysis:

> "c." regarding programmatic environmental analysis regarding similarity of effects.

Change the following paragraph to read (changes underlined):

> Only after full consideration of trails for bicycle use, ~~C~~consider designating a class or classes of e-bike use, as appropriate, on NFS trails managed for bicycle use or where bicycle use is allowed, where effects from e-bike use would be comparable to effects from bicycle use.

Issue #5 – E-bikes pose additional hazards that regular bicycles do not because they all have flammable and potentially explosive lithium-ion batteries, leading to increases in fire risk.

All e-bikes also have a battery, which is almost always a lithium-ion battery. Lithium-ion batteries are normally safe to use, but most of these batteries can potentially become a serious fire-risk if they are punctured. There have been documented cases in which e-bike batteries have caused flames and even fires. Given severe drought conditions in our national forests, especially

in the southern Sierra Nevada and Sequoia National Forest, these batteries pose a real risk and have the potential to cause forest fires.

The following are examples of incidents of e-bike batteries exploding or causing fires:

Battery Fires Create Concerns For Every Electric Bike Owner

See: http://jimmymacontwowheels.com/battery-fires-create-concerns-for-every-electric-bike-owner/

Why Do E-Bikes Catch Fire?

Lyft Suspended E-Bike Service In San Francisco Following Four Battery Fires. Then, A Lime E-Bike Caught Fire In Seattle. We Investigated The Reasons Why Electric Bike Lithium-Ion Batteries Burn Up.

See: https://www.bicycling.com/bikes-gear/a28778383/electric-bike-explosion/

E-Bike Battery Explodes, Burning 79-Year-Old Cyclist and Causing Bushfire

Witnesses Said The Flames Reached As High As 10 Feet In The Air.

See: https://www.bicycling.com/news/a25890860/electric-bike-explodes/

See also: https://www.youtube.com/watch?v=OIAi2BbKHtA

Electric hire bike bursts into flames while being ridden

See: https://road.cc/content/news/264640-electric-hire-bike-bursts-flames-while-being-ridden

Fire brigade called after 'eBike' bursts into flames in traffic

See: https://www.stickybottle.com/latest-news/fire-brigade-called-after-ebike-bursts-into-flames-in-traffic/

If you should have any question, please contact the undersigned.

For Sequoia ForestKeeper,

René Voss – Attorney at Law

Exhibit A

U.S. Forest Service
National Forest System
Briefing Paper

Date: May 13, 2015

Topic: Managing E- Bikes on National Forest System Trails

Background

Electric bicycles, known as "e-bikes," have been around for years overseas and were first used by commuters on roadways in Europe. There are two basic types of e-bikes, pedal assist and throttle twist. On pedal assist e-bikes, the motor does not have to be on the entire time the bicycle is being ridden and can be activated by pedaling to augment human power. Throttle twist e-bikes are activated by twisting the handle grip to propel the bike with or without pedaling. In addition to the motor, e-bikes have a battery and a controller to operate specific options such as "pedal with power assistance" (PAS) or the use of a throttle to "twist and go" (TAG) automatically.

Bicycle companies such as Trek, Giant, Cannondale, and Scott are producing e-bikes. Customers of e-bikes are looking for trails to ride. Pedal assist e-bikes are thought to be acceptable on more trails than throttle twist e-bikes or other types of motor vehicles. However, many characteristics of e-bikes, such as their top speed, type, and wattage, are proving to be challenging for federal land managers. A question has arisen about whether e-bikes should be regulated as motor vehicles on federal lands. The Bureau of Land Management (BLM) is categorizing e-bikes as motor vehicles, and controversy has arisen in BLM's Moab District, where e-bikes are prohibited on non-motorized trails. This management decision has sparked a discussion in the media on management of e-bikes on federal lands.

The Forest Service's Travel Management Rule (TMR) and E-Bikes

The TMR defines "motor vehicle" as "any vehicle which is self-propelled, other than: (1) a vehicle operated on rails; and (2) any wheelchair or mobility device, including one that is battery-powered, that is designed solely for use by a mobility-impaired person for locomotion, and that is suitable for use in an indoor pedestrian area." 36 CFR 212.1. E-bikes have a motor and are therefore self-propelled and are not covered by the exceptions in the definition. Therefore, e-bikes are motor vehicles and are subject to regulation under the TMR, which requires designation of National Forest System (NFS) roads, NFS trails, and areas on NFS lands for motor vehicle use. 36 CFR 212.51(a). Direction on e-bikes has been included in a response in the *Federal Register* notice for the final over-snow vehicle rule. The response states: "New technologies that merge bicycles and motors, such as e-bikes, are considered motor vehicles under §212.1 of the TMR." 80 Fed. Reg. 4503 (Jan. 28, 2015). New trail riding opportunities for e-bikes may be considered as administrative units and ranger districts update their motor vehicle use map (MVUM) under travel management planning. These changes would involve appropriate environmental analysis and public participation.

Enforcement of E-Bike Designations under the Travel Management Rule (TMR)

The Law Enforcement and Investigations staff (LEI) has expressed concerns regarding enforcement of designations for e-bike use under the TMR with regard to distinguishing e-bikes from non-e-bikes and identifying different types of e-bikes.

International Mountain Bicycling Association (IMBA) Position on E-Bikes

The International Mountain Bicycling Association (IMBA) position on e-bikes is stated on their website:

"Electric bicycles are a welcome addition to the cycling community. They allow for carrying heavy loads and offer assistance to those who could not otherwise experience much of the fun of cycling and add a de minimums amount of additional impact. However, the use of a motor whether internal combustion or electric would require changing the classification to a motorized use. IMBA would support the use of e-Bikes anywhere that we could also support other motorized uses."

Disability and Motorized Devices

Questions have been raised in relation to people with disabilities requesting use of e-bikes as an assistive device. The only exception for a person with a disability for use of a device that is self-propelled is if that device meets both parts of the legal definition of a wheelchair or mobility device as defined above in 36 CFR 212.1 and also defined the same way in FSM 2353.05 and in 42 U.S.C. 12107. Under that definition any device that is both designed solely for mobility for a person with disability and which is suitable for use on an indoor pedestrian may be used anywhere foot travel is allowed. E-bikes were not solely designed for individuals who have mobility impairments and their suitability for indoor use would be highly questionable. Therefore they don't qualify for an exception and may only be used where the MVUM allows that use by all people. An e-bike remains a motor vehicle regardless of who is using it. It is essential that exceptions not be made to the TMR designations. Restrictions on motor vehicle use that are applied consistently to everyone have been repeatedly found not to be discriminatory.

Other Power Driven Mobility Devices

In 2010 the Department of Justice released their Rule on Other Power Driven Mobility Devices (OPDMD). An OPDMD is defined as any vehicle or device that is powered by batteries, fuel or other engines including those not primarily designed for people with disabilities. Under the Rule a person who has a disability is to be allowed to operate an OPDMD anywhere, unless that area has been previously determined to not be appropriate for use of that type for device/vehicle and the information as to what if any devices/vehicles may be operated in that location has been posted. The criteria within the Rule for such a determination includes the same parameters as were used for the FS designations under the TMR. Therefore the use of any OPDMD is limited to where the use of that specific type of device/vehicle is designated for use by all. It is essential that exceptions not be made to the TMR designations. Approved FS Talking Points are available to assist in the explanation to visitors with disabilities who allude to the OPDMD Rule, when

requesting an exception for use of any type of device/ vehicle in a location not designated for that use.

Future Management of E-Bikes on NFS Trails

E-bikes should continue to be managed as motor vehicles under the TMR and reflected on the units MVUM. Opportunities exist under the regulations of the current TMR using designations on the Forest MVUM, these consist of:

Roads open to all vehicles
Trails open to all vehicles
Trails open to vehicles 50" or less
Motorcycles only
Special Designation*

*Decisions to add e-bike special designations on NFS trails may be considered at the local level when MVUMs are updated in accordance with the TMR.