August 31, 2022

*Submitted online via:*

[*https://cara.fs2c.usda.gov/Public//CommentInput?Project=62170*](https://cara.fs2c.usda.gov/Public//CommentInput?Project=62170)

Mr. Chris Ham

Recreation, Planning, Heritage and Wilderness Staff Officer

USDA Forest Service

Ouachita National Forest

100 Reserve Street

Hot Springs, AR 71902

# **RE: E-Bike Use on the Ozark-St. Francis and Ouachita National Forests Environmental Assessment, Project #62170**

Mr. Ham:

We appreciate the opportunity to provide the following scoping comments on the Environmental Assessment (EA) referenced above, which proposes to authorize the use of electric motorized bicycles (e-bikes) within three existing non-motorized trail systems in the following locations: Big Piney Ranger District in Newton County, Syllamo Bike Trails on Sylamore Ranger District, and Womble Trail on the Caddo-Womble and Mena-Oden Ranger Districts.

## Back Country Horsemen of America

Founded in 1973, Back Country Horsemen of America (BCHA) is a national 501(c)(3) non-profit service organization. Our mission is to perpetuate the common-sense use and enjoyment of horses in America's backcountry and Wilderness and to ensure that public lands remain open to recreational stock use. A large part of our mission includes assisting the various government agencies and non-profit organizations in the maintenance and management of public trails and horse camps.

## Arkansas Back Country Horsemen

Arkansas Back Country Horsemen (ABCH) is a not-for-profit organization dedicated to keeping trails open for all users, educating horse users in Leave-No-TraceTM practices, and providing volunteer services to resource agencies. ABCH is recognized as a valued community of volunteers and critical partners for federal and state agencies, working proactively for public lands, equestrian use and access across Arkansas. Its four chapters, including 333 members located throughout North Arkansas, contributed over 2,500 work hours valued over $100,000 in 2021 for service projects located within the Buffalo National River and the Ozark-St. Francis National Forest.

## Understanding of the Proposal

The purpose and need for the project as described in the Forest’s August 1, 2022, public scoping notice states in part:

E-bikes have become increasingly popular nationwide among outdoor recreationists…There is a need to develop a consistent framework that establishes criteria for evaluating trails on the…National Forests for e-bike designation. At present (the existing condition), e-bikes are only authorized on motorized trails. The e-bike use framework is being developed in response to the public interest for e-bike use and agency consideration of new technology.

Regarding the issue of e-bike use on these specific non-motorized trails, the Proposed Action described in the scoping notice includes the following:

Develop a framework that uses evaluation criteria established under the Travel Management Rule (36 CFR Part 212) and Travel Management Directives…and criteria developed from key concerns provided by the public to determine if e-bike use will be designated on select trails.

Yet the scoping notice does define what class or classes of e-bike use might be considered. It also does not disclose that current Forest Service policy categorizes all forms of e-bikes as motorized bicycles.[[1]](#footnote-2) It is our understanding that prior to the proposal taking effect, the Forest Service would be required (by the agency’s Travel Management Rule) to update the Forest’s relevant Motor Vehicle Use Maps to reflect this change—the formal process by which the agency would reclassify non-motorized trails to trails that allow a specific motorized use. **The EA for the project should describe the process necessary to designate otherwise non-motorized trails as open to motorized e-bike use**.

## Specific Comments for the EA Analyses

### EA Must Describe Forest Plan Direction for the Landscapes under Analysis

**The Forest Service should describe the current Recreation Opportunity Spectrum (ROS) classification for trail systems analyzed in the EA and include a table that summarizes these ROS classes and the amount of trail miles that pass within each.** For example, the 2005 Forest Plan for the Ozark-St. Francis National Forests assigns a ROS classification of Semi-Primitive Non-Motorized to the Upper Buffalo Dispersed Recreation Area. **The EA should include a map depicting relevant ROS classifications and include analysis of the relative compatibility or incompatibility of the proposed use of electric motorized bicycles with respect to guidance found in the Forest Plan and existing ROS classifications.** **It follows that the EA should include and analyze alternatives to the Proposed Action that, at a minimum, would not include the authorization of motorized use (e.g., e-bikes) for lands with a ROS classification of Semi-Primitive Non-Motorized**.

### EA Must Disclose Relevant Trail Management Objectives

**The EA should include tables that describes the Forest Service-approved Trail Classification Standards and current Trail Management Objectives (TMOs) for trails identified in the Proposed Action. The table should identify the relevant ROS class; the Designed, Managed and Prohibited uses of each trail segment under analyses; and details on Other Use (i.e., “Accept,” “Discourage” and/or “Eliminate”) and any “Special Considerations” as specified in the approved TMOs.** One purpose of this exercise is to disclose to the public the degree to which those national forest trails, or segments thereof, under analysis are currently managed for use by Hiker/Pedestrians and use by Pack & Saddle.

### EA Should Disclose the Range of Potential Impacts of E-Bike Use

We are concerned about the agency’s apparent desire to authorize motorized trail use on otherwise non-motorized trails. It is our view that designating non-motorized trails for use by (motorized) electric bicycles should be conducted only for those trails where the administering agency can clearly demonstrate that there exists little to no potential for e-bike use to pose conflicts on trails currently shared by hikers, equestrians and others. Our primary concerns are safety, user conflict and the potential for the displacement of traditional non-motorized users should such user conflict with e-bike use occur.

Under existing Forest Service policy, e-bikes are considered “motorized bicycles” as per the 2005 Travel Management Rule while agency policy declares that “Consistent with 36 CFR 212.1, the Forest Service is managing e-bikes as motor vehicles.”[[2]](#footnote-3) **These facts must be detailed in the forthcoming EA.**

**The EA should also disclose the fact that the motorized “assist” provided by e-bikes is aided by an electric motor** which, according to one major U.S. manufacturer of a Class 1 e-bike declares: “At peak assist, it’s like having four of you powering the pedals—amplifying your input by up to 410%.”[[3]](#footnote-4) While not an internal combustion-driven motor, the powerful electric motor contained within such a Class 1 e-bike is a motor nonetheless—more equivalent to that found in an electric motorcycle than what comprises the drivetrain of a regular mountain bike. As such, **the EA should contain a sufficient level of scrutiny to each and every trail proposed for e-bike use following guidelines established via the Travel Management Rule**. In other words, **the EA analysis of e-bike use cannot be based on the presumption that the potential impact of e-bike use is no different than that of regular (non-motorized) mountain bike use on the trails in question.** There is no definitive or peer-reviewed science available to support such a conclusion.

**The EA must disclose the potential social and physical impacts of e-bike use in terms of its unique effects on other forest visitors and forest resources.** While the available science is scant regarding the relative physical impacts of e-bike use compared to that of regular mountain bikes, **the EA should cite relevant peer-reviewed studies in order to support any conclusions that use of e-bikes on the non-motorized trails would not result in impacts in excess of those anticipated from the ongoing use of regular mountain bikes**. The EA analysis should give little, if any, weight to studies or interviews of trail users that were prompted, supported or undertaken by proponents of e-bike use or the e-bike industry. Moreover, caution should be taken in applying in the EA the results of any e-bike related biophysical studies of impacts if such studies were undertaken in ecological regions different from those found within the greater Ozark Plateau.

### EA Should Disclose Potential Safety Impacts Associated with E-Bike Use

**The EA must address the potential for recreational conflict on existing and proposed trail networks, including the recognition of potential safety hazards associated with the use of e-bikes on otherwise non-motorized trails.** For example, **the EA must disclose existing Forest Service policy, which states that “E-bikes travel at speeds of 20 to 28 mph, compared to pedestrians and non-motorized bicycles, which typically travel at speeds ranging from 3 to 10 mph.”[[4]](#footnote-5)**

The Forest Service scoping document for this project is unclear whether the current e-bike proposal is intended to be limited to those e-bikes that fall within the U.S. Consumer Products Safety Commission’s (CPSC’s) definition of a Class 1 e-bike. The CPSC defines a Class 1 e-bike as a bicycle with a motor that cannot exceed 750 watts and that limits the maximum speed that can be attained when the motor is engaged to 20 mph. Yet capable riders can, and do, exceed the maximum motor-assisted speed of 20 mph; therefore, **the EA must disclose and analyze the safety impacts associated with this inevitability.**

An e-bike, which is capable of rapid acceleration and speeds in excess of a standard mountain bike could represent a danger to other trail users, particularly along relatively flat or uphill terrain where higher than normal speeds could be attained via the motor assist**. The EA must include an analysis in keeping with published scientific literature regarding trail conflict, including literature reviews published by the federal government, which clearly state that “Speed is a major source of conflict between trail users.”**[[5]](#footnote-6)

A study in *Injury Prevention[[6]](#footnote-7)* found thate-bike riders were more than three times more likely to be involved in a collision with a pedestrian, as compared to traditional bike riders. Not surprisingly, speed was found to represent the most critical factor in such collisions. The study found that an increase from 10 mph to 20 mph significantly increases the kinetic energy and risk for injury upon impact. **The study concluded that** e-bike use and injury patterns differ from more traditional pedal operated bicycles. **These and other facts regarding the relative safety of e-bike use must be referenced in the EA. At a minimum, the EA needs to address the difference in speed of travel between e-bikes and non-motorized trail users and its implications for visitor safety, including that of pedestrians (hikers) and horsemen (equestrians).**

It is our view that the proposal to authorize any type of e-bike use throughout the three trail systems in question would result in such trails becoming viewed by hikers and equestrians as either less desirable, less compatible for shared use, or outright unsafe for shared use. Hikers and equestrians, and particularly those with children, often will choose to avoid trails where there is a potential for encounters with fast-moving bicycles. For example, when selecting among trails available in a given area, a key criterion shared by equestrians is safety concerns and the sometimes unpredictable response of their horses or mules in the event of a surprise on-trail encounter. The ability of e-bikes to travel at relatively high speeds, combined with their often silent approach, elevate the potential for dangerous encounters. **These facts should be acknowledged in the EA.**

### EA Must Cite Guidance Promulgated via the 2005 Travel Management Rule

The EA must comport with guidance contained within the 2005 Forest Service Travel Management Rule (TMR).[[7]](#footnote-8) Specifically, **the EA must describe how the Proposed Action, and any action alternatives, comply with the agency’s broad definition of off-road vehicle (ORV) and the requirement that all ORVs be subject to travel management planning and the so-called “minimization criteria.”** As described previously, it is U.S. Forest Service policy to treat e-bikes as motorized vehicles. **The EA should make specific mention of the governing travel management Executive Orders (EOs)**.[[8]](#footnote-9) The U.S. Forest Service codified theminimization criteria in its travel management regulations at 36 C.F.R. § 212.55(b), whichprovide:

***“Specific criteria for designation of [motorized] trails and areas***. In addition to the criteria in paragraph (a) of this section, in designating National Forest System trails and areas on National Forest System lands, the responsible official shall consider effects on the following, **with the objective of minimizing**:

(1) Damage to soil, watershed, vegetation, and other forest resources;

(2) Harassment of wildlife and significant disruption of wildlife habitats;

(3) **Conflicts between motor vehicle use and existing or proposed recreational uses of National Forest System lands or neighboring Federal lands**; and

(4) Conflicts among different classes of motor vehicle uses of National Forest System lands or neighboring Federal lands. In addition, the responsible official shall consider:

(5) Compatibility of motor vehicle use with existing conditions in populated areas, taking into account sound, emissions, and other factors.” [bold added for emphasis]

The Forest Service is obligated to consider and document compliance in the EA with these specific criteria regarding the designation of trails for motorized (e-bike) use. Case law confirms the Forest Service’s substantive obligation to meaningfully apply and implement—not simply identify or consider—the minimization criteria when designating each area or trail, and demonstrate in the administrative record how the agency did so.[[9]](#footnote-10) As a recent circuit court of appeals decision confirmed, the Forest Service must “document how [they] applied [relevant] data on an area-by-area [or route-by-route] basis with the objective of minimizing impacts.”[[10]](#footnote-11) Consequently, **the EA must include these elements as they relate to Special Vehicle designations proposed for e-bike use**, as they would in the designation of any trail for use by either motorcycles, ATVs, or other off-road vehicles.

### EA Must Disclose the Ability of Law Enforcement to Ensure Compliance of E-Bike Riders

In addition to Class 1 e-bikes, there are other classes of e-bike defined by the CPSC that apparently might be considered by the Ouachita and Ozark-St. Francis National Forests in the current EA. This includes:

1. Class 2 e-bikes that come with the distinction that the motor assist can be attained either via the rider peddling or in the complete absence of peddling by use of a throttle (i.e., it can be propelled up to speeds of 20 mph in a fashion similar to a motorcycle), and;
2. Class 3 e-bikes that provide assistance only when the rider is pedaling, and which cease to provide assistance when the bikes reach the speed of 28 mph. For all three classes, the CPSC limits the maximum power output of the e-bike to 750 watts.

**Regardless of the scope of the e-bike proposal, the EA must describe the significant challenges to law enforcement in their ability to differentiate in the field between the various classes of e-bikes that might be used by the public on the proposed trail system.** It is difficult to determine in the field which class a given e-bike conforms to, as identifying stickers, decals or other information are not required and few manufacturers do so. In addition, there are e-bikes that can be programmed to function as either a class 1, 2 *or* 3 with only minor adjustments. Even more daunting, YouTube contains numerous videos with tips and work-arounds to negate the speed governor found on most e-bikes. **These facts and their implications to proper enforcement among the trail systems in question must be disclosed in the EA.**

Further compounding enforcement challenges, in a new and rapidly evolving market, there are a great number of commercially available e-bikes that do not fall within the CPSC’s technical specifications. For example, there exist e-bikes (with functional pedals) that are similar in appearance to CPSC-defined e-bikes yet possess motors that exceed 1,000 watts and can achieve speeds exceeding 50 miles per hour.[[11]](#footnote-12) Importantly, some e-bikes currently on the market cannot be distinguished via appearance alone from traditional non-motorized bicycles.[[12]](#footnote-13) It would be extremely difficult, if not impossible, to distinguish these e-bikes in the field from the class (or classes) of e-bikes that the Forest Service proposes to authorize for use on non-motorized trails throughout the three trail systems in question. **The EA should include disclosure about the range of e-bikes that have capabilities in excess of the CPSC’s class specifications and its implications for adequate enforcement and monitoring of e-bike use throughout the three otherwise non-motorized trail systems.**

**The EA must disclose current law enforcement priorities and capability and the likelihood of adequate enforcement of e-bike regulations.** Stated plainly, the Forest Service’s attempt to prohibit one or more class of e-bikes—or any of the other non-CPSC classified e-bikes—on the proposed trail systems is nearly impossible to enforce. Any decision by the Ouachita and Ozark-St. Francis National Forests to allow specific types of e-bikes on a given trail while simultaneously expecting to prohibit other e-bike classes on the same trails would prove fallacy. **The implementation and enforcement issues described above, and their associated environmental impacts, must be analyzed and disclosed in the EA.**

## Conclusions

We do not dispute the important fact that e-bikes have the potential to introduce people to the wonder and excitement of exploring their national forests and, in particular, create opportunities for people who would not otherwise have the physical ability to strike out on their own without the motor assist provided by an e-bike. We understand that e-bikes have their place on public lands and we embrace their potential benefits to the recreating public. Our chief argument remains that e-bikes should not be allowed on trails or in landscapes designated and long-managed for non-motorized recreational use. For example, the relatively low speed that currently characterizes uphill travel by mountain bikes would become a relic of the past if e-bikes were introduced to non-motorized trails. Even riders of Class 1 e-bikes have the potential to approach 20 miles per hour when traveling on both flat and modest uphill grades, while riders of Class 3 e-bikes could reach speeds that approach 28 miles per hour.

Thank you for allowing us this opportunity to submit public comments.

Sincerely,



Sherry L. Copeland, Chairman

**Back Country Horsemen of America**

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Columbia Falls, MT 59912

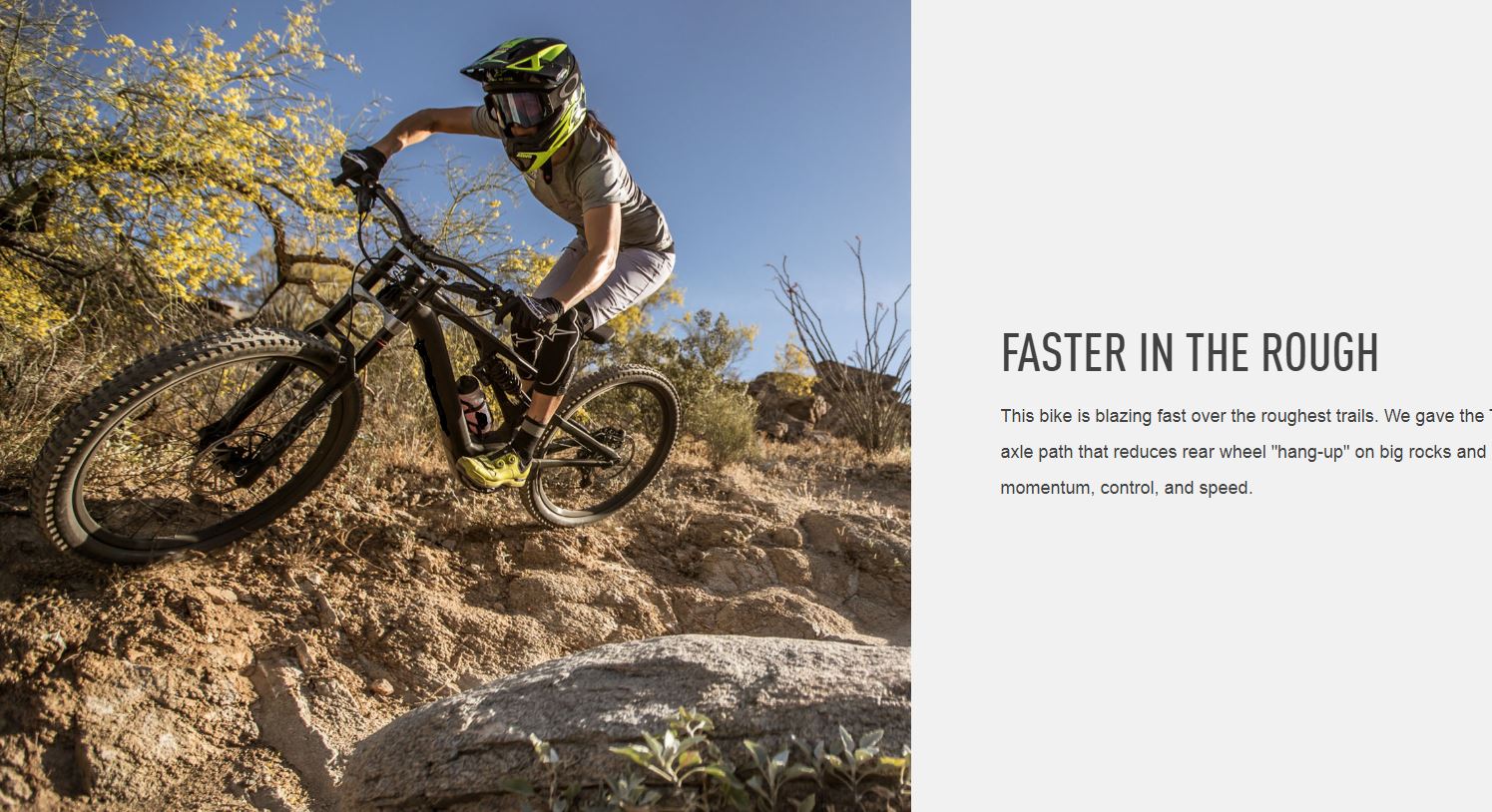
Evelyn Mills, President

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Post script:



The picture and caption above are taken from an advertisement that promotes the sale of a Class 1 motorized electric bicycle. In this instance, the manufacturer clearly targets a young and adrenalin-seeking demographic through the use of statements such as:

* The e-bike is “blazing fast over the toughest trails,”
* Its design “(makes) it easy to maintain speed in dicey conditions,”
* Its motor “amplifies your pedaling input by a mind blowing 410%,”
* “At peak assist, it’s like having four of you powering the pedals…,” and
* “This is the bike that lets you summit the longest, nastiest climbs with energy to spare so that you can bomb down the longest, nastiest descents.”

The e-bike depicted has “the most powerful motor on the market” at 250W nominal and a 700 watt-hour battery. As such, it falls well within the parameters of a Class 1 e-bike as defined by the Forest Service.

The picture above appears to underscore a break-the-rules mentality by depicting this “blazing fast” e-bike rider as either uninterested or incapable of traveling within the trail tread (thereby failing any test of the minimum impact ethic). Any message encouraging “share the trail” with other users or to yield or exercise caution when approaching hikers or equestrians is absent.

While perhaps appropriate on a closed-course e-bike park, an encounter with a thrill-seeking rider on such a machine is the last thing an equestrian wants to encounter while trying to enjoy non-motorized trails throughout Arkansas’ national forests.

1. Hale Lake Area Management Project, Scoping Document (page 6), Smokey Bear Ranger District Lincoln National Forest, Lincoln County, New Mexico, August 2019 and which included a proposal to authorize Class 1 e-bike use on non-motorized trails. Available at: <https://www.fs.usda.gov/project/?project=56577> [↑](#footnote-ref-2)
2. U.S. Forest Service Briefing Paper: Classification of E-bikes Under the Travel Management Rule (TMR). February 15, 2017. [↑](#footnote-ref-3)
3. See: <https://www.specialized.com/us/en/turbo-kenevo>, which describes a Class 1 e-bike. Ironically, the video that accompanies this ad includes the following claim:

   “Specialized Turbo is not like anything you’ve ever experienced. It’s not even a bike! It’s two wheels of hair-raising power that will revolutionize the way you move. It’s you, only faster. It’s distance being shorter. Up hills, easier. Downhills, crazier.” It is this potential for riders of e-bikes, who wish to display their extraordinary speed and capabilities, that creates a high potential for conflict with hikers, equestrians and other trail users. [↑](#footnote-ref-4)
4. *Ibid*. [↑](#footnote-ref-5)
5. Federal Highway Administration (FHWA) and the National Recreational Trails Advisory Committee, 1994. Conflicts on Multi-Use Trails: Synthesis of the Literature and State of the Practice. <https://safety.fhwa.dot.gov/ped_bike/docs/conflicts.pdf> [↑](#footnote-ref-6)
6. DiMaggio CJ, Bukur M, Wall SP*, et al*. Injuries associated with electric-powered bikes and scooters: analysis of US consumer product data. *Injury Prevention,*Published Online First: 11 November 2019. doi: 10.1136/injuryprev-2019-043418. Note: The study reviewed e-bike use on primarily urban roads and bike paths. [↑](#footnote-ref-7)
7. 36 CFR § 212, 251, 261, and 295. Travel Management; Designated Routes and Areas for Motor Vehicle Use; Final Rule. [↑](#footnote-ref-8)
8. *See* Exec. Order No. 11644, §§ 1 & 3 (Feb. 8, 1972), as amended by Exec. Order No. 11989 (May 24, 1977); 36 C.F.R. § 212.55(b). [↑](#footnote-ref-9)
9. *See, e.g., Idaho Conservation League v. Guzman,* 766 F. Supp. 2d 1056, 1072-73 (D. Idaho 2011) (consideration of the minimization criteria insufficient where agency failed to demonstrate that the criteria “were then implemented into the decision process”). [↑](#footnote-ref-10)
10. *WildEarth Guardians v. U.S. Forest Serv.*, 790 F.3d 920, 931 (9th Cir. 2016). [↑](#footnote-ref-11)
11. Nargess Banks, Looking For The Ultimate Urban Toy? Introducing SWIND EB-01 Hyperbike, Forbes (Feb. 27,

    2018), available at: <https://www.forbes.com/sites/nargessbanks/2018/02/27/swindeb01-hyperbike/#122a56b73a0a> (“Designed for the urban adventurer and cross-country adrenalin junkie, the $21,000 (£15,000) bicycle has an electric motor to help boost pedal power and deliver speeds of over 60 mph”). [↑](#footnote-ref-12)
12. See, for example, *Goat Track SLX*, Goat Bikes, at: <https://www.goatbikes.com/section811575_327663.html>. [↑](#footnote-ref-13)