

October 30, 2023

Todd Stiles
District Ranger
Jackson Ranger District, Bridger-Teton National Forest
Attn: E-Bike Use Designation on Select Jackson Area Trails Project
P.O. Box 1689
Jackson, WY 83001

Dear Todd Stiles,

Thank you for the opportunity to comment on the Electric Bicycle (E-Bike) Use Designation on Select Jackson Area Trails project within the Jackson Ranger District of the Bridger-Teton National Forest.

On behalf of the PeopleForBikes Coalition, we applaud the Jackson Ranger District's efforts to designate existing trails for use by Class 1 e-bikes, thereby creating accessible recreation opportunities and managing the forest to adapt to changing technologies and recreation patterns. We support the E-Bike Use Designation on Select Jackson Area Trails project as it proposes to allow Class 1 e-bike use on 27.5 miles of existing trail in the Teton Pass area and extend the season for e-bike use on Horsetail Creek Trail and trails in the Munger Mountain area. We support the designation of Class 1 electric bicycles on existing non-motorized natural surface trails where traditional mountain bikes are already allowed.

The PeopleForBikes Coalition is the national advocacy group and industry association that works for better policies and infrastructure for bike riding. We strive to make bike riding a safer and more inclusive activity for everyone, including those who ride mountain bikes and electric mountain bikes on natural surface, bicycle-optimized singletrack trails.

PeopleForBikes supports Jackson Ranger District's project vision of designating existing recreation trails for use by e-bikes, as demand for natural surface single-track trails is urgently needed to help support current levels of recreation on public lands. Federal land management agencies are critical to recreation infrastructure, as many of the best mountain biking and bicycling trails in the U.S. are on federal public lands. We encourage the allowance of mountain bikes and pedal-assist Class 1 electric bicycles on new and existing trails within the Jackson Ranger District.

Research from the East Zone Connectivity and Restoration Project in Tahoe National Forest indicates that pedal-assist Class 1 electric bicycles can be successfully incorporated into trails with non-motorized uses.¹ Included in the East Zone Connectivity's final decision

¹ USDA Forest Service. "Tahoe National Forest East Zone Connectivity and Restoration Project Draft Decision Notice." (2021).

notice was the designation of 35 miles of existing non-motorized trails as open for Class 1 electric bicycles. With the introduction of Class 1 electric bicycles on natural surface trails where mountain bikes are already allowed in the East Zone, staff found that they do not significantly alter public enjoyment or affect the patterns of use on those trails. In most places, traditional mountain bikes and Class 1 electric bicycles have similar effects on the physical trails and public use patterns.² Based on the findings from the East Zone Connectivity Project, the Tahoe National Forest also completed a Preliminary Environmental Assessment for the Pines to Mines Project, which would open up access to 68 miles of singletrack trails for Class 1 e-bikes. As noted in the Preliminary Environment Assessment for the Pines to Mines Trail Project, the impacts to trail tread and speed differentials have not been shown to be affected by Class 1 electric bicycles compared to analog mountain bikes:

“Effects on trails are not considered to be significantly different between traditional mountain bikes and Class 1-E-Bikes. Their equipment components are similar including wheel size, tire tread, gearing, chain, brakes, and gear shifting mechanisms. Impacts to trails in terms of tread wear, soil movement, erosion, and contribution to sediment delivery have also been shown to be similar (Wilson and Seney 1994; Weaver and Dale 1978; IMBA 2015). Finally, a review of literature, consideration of current user trends, and USFS observations of use characteristics during the 2019 season when Class 1 E-Bikes were allowed on all non-motorized trails on the forest, determined there are no significant differences between the two vehicle classes with respect to relative speeds (Langford et al. 2015; TNF Unpublished 2020) and user behavior (Langford et al. 2015).”³

Pedal-assist Class 1 electric bicycles are an emerging technology that makes the activity of mountain biking more accessible and enjoyable to users with different levels of experience, skill, and physical ability. Class 1 electric bicycles look, are equipped, and ride like traditional bicycles and simply give riders – regardless of age, physical, or cognitive ability – an extra assist while pedaling. When introduced on- or off-road, studies have shown that there appear to be minimal conflicts between e-bike riders and other user groups, with no material safety distinctions between e-bikes and conventional bicycle use.⁴

With the addition of e-bikes allowed on select Jackson area trails, their effect can be profoundly positive on the community. E-bikes allow more people to ditch fossil fuels and instead of driving or shuttling, ride to the trailhead. Thereby also having positive impacts on parking, traffic congestion, and cutting down on emissions at popular trail destinations. Pedal-assist Class 1 e-bikes also allow people of all abilities to access these routes and keep older riders biking, staying active, and feeling connected to their public lands.

Additionally, research shows that prohibiting a certain use without providing adequate opportunities elsewhere is ineffective. Electric mountain bikes are bicycles. Users are looking for the same experience on singletrack trails, therefore motorized routes created

² USDA Forest Service. “Tahoe National Forest East Zone Connectivity and Restoration Project Draft Decision Notice.” (2021).

³ USDA Forest Service. “Preliminary Environmental Assessment: Pines to Mines Trail Project.” (2023).

⁴ [Jefferson County, Colorado Electric Bicycle Study \(2017\)](#)

for OHVs and motorcycles are not sufficient for this user group and the experiences they seek.

Examples of communities and entities that have undertaken significant studies of electric bicycle impacts, rider behavior, perceptions, etc. from other user groups are attached to this letter. We believe an objective examination of the facts leads to the conclusion that Class 1 pedal-assist electric bicycles should be treated like conventional bicycles on natural surface trails throughout the Jackson Ranger District.

PeopleForBikes believes the proposed permitting system is redundant based on the current policy for e-bikes within Wyoming and across the nation. Currently, 49 states and the federal government define e-bikes as bicycles, with states also creating mandatory labeling for e-bike manufacturers. In fact, under Wyoming Senate Bill 81, the same law that defines e-bikes as bicycles, the law states:

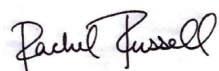
“On and after January 1, 2020, every manufacturer or distributor of an electric bicycle shall ensure that a label is permanently affixed in a prominent location on each electric bicycle sold or distributed by the manufacturer or distributor. The label shall indicate the class number as defined in W.S. 31-1-101(a)(xxxiv), the top assisted speed and motor wattage of the electric bicycle and shall be printed in at least nine (9) point font.”

Therefore, the permit and sticker program is redundant and unnecessary, because it would only duplicate the label that manufacturers are already creating and permanently affixing to every e-bike.

We are supportive of education for all recreational users, and providing an educational opportunity to promote responsible and respectful ethics on trails and on the road. [E-Bike Smart](#), a new electric bicycle rider safety education program created by PeopleForBikes, the League of American Bicyclists, and Bicycle Colorado, was launched to the public on August 30, 2023. The program is designed to help riders of all ages and experience levels learn best practices for safely and responsibly riding an e-bike, and the program has already garnered widespread support from the bike industry and advocacy groups across the country. As part of the E-Bike Smart Program, the safety guidance takes participants through a series of short videos that explain what an electric bicycle is, how to handle their e-bike battery, where users can ride e-bikes, and best practices for rider safety and etiquette when on their e-bike. After each video, participants can take a brief quiz to test their knowledge. We would be excited to work with the Bridger-Teton National Forest, the Teton EMBT Coalition, and local bike shops to help educate users and riders on e-bike safety.

Thank you for your consideration of our comments. I would welcome the opportunity to provide further information on the studies I've included, the E-Bike Smart program, and the designation of singletrack trails for use by pedal-assist Class 1 electric bicycles on Jackson Ranger District trails and public lands.

Sincerely,



Rachel Fussell

eMTB Policy & Program Manager
PeopleForBikes Coalition
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Additional Information on Electric Bicycle Speed, Safety, and Studies

USDA Forest Service NEPA Analysis indicates Class 1 electric bicycles can be successfully incorporated into trails with non-motorized uses.

- A. The observations and data collected by TNF staff, relative to Class 1 electric mountain bikes' impact on trails, are consistent with the findings from other studies in this topic area. These studies were conducted by varying institutions, universities, and industry groups that performed research on trail impacts from recreational uses. Data from the scientific literature is consistent on several key points:
 - a. Greater sediment yields are produced by equestrians and pedestrians when compared to wheeled modes of transportation. ([East Zone Connectivity and Restoration Project Decision Notice & FONSI 2021](#))
 - b. Horse traffic produces the greatest force (weight per unit area) among hikers, equestrians, mountain bikers, and motorcyclists. ([East Zone Connectivity and Restoration Project Decision Notice & FONSI 2021](#))
 - c. Horses cause greater increases in soil compaction, litter, trail width, and trail depth compared to hikers and motorcycles. ([East Zone Connectivity and Restoration Project Decision Notice & FONSI 2021](#))
- B. TNF's observations related to trail impacts are also consistent with a study conducted by the International Mountain Bicycling Association (IMBA) which found similar effects between Class 1 electric mountain bikes and their conventional counterparts ([East Zone Connectivity and Restoration Project Decision Notice & FONSI 2021](#)).
- C. Based on a review of their findings, "Tahoe National Forest has determined that inclusion of Class 1 E-bikes as a designated, legitimate use on these trails does not constitute an increased adverse impact to their sustainability," ([East Zone Connectivity and Restoration Project Decision Notice & FONSI 2021](#)).

Electric bicycles travel at bike-like speeds.

- A. Class 1 electric bicycles have a motor that cuts off after the rider reaches 20mph. This is not the average speed. On flat and uphill surfaces, electric bicycles travel on average 2-3 mph faster than conventional bicycles (i.e. around 13-14 mph). Studies show that electric bicycles do not travel significantly faster than regular bicycles, and in some instances, are slower, depending on the location and the rider.
 - Langford, B. et al, Risky riding: Naturalistic methods comparing safety behavior from conventional bicycle riders and electric bike riders, Accident Analysis & Prevention (Sept. 2015) ("We find that average on-road speeds of e-bike riders (13.3 kph) were higher than regular bicyclists (10.4 kph) but shared use path (greenway) speeds of e-bike riders (11.0 kph) were lower than regular bicyclists (12.6 kph)").

- Cherry, C. & MacArthur, J., E-bike safety, A review of Empirical European and North American Studies (Oct. 15, 2019) “[Electric bicycle] riders tend to ride at higher speeds on uphill segments, but not flat or downhill segments.”).

Electric bicycle riders comply with laws in the same way as riders of conventional bikes.

- A. Electric bicycle users are like most people and choose to respect the law of the road and be kind to others with whom they share public resources. They would respond more favorably to restrictions on use rather than an outright ban. Most critically, existing studies show that electric bicycles riders comply with laws to the same extent as bicycle riders.
- Cherry, C. & MacArthur, J., E-bike safety, A review of Empirical European and North American Studies (Oct. 15, 2019) (“For other safety surrogates (wrong way riding, stop sign and signal compliance) e-bike riders behaved in the same way as cyclists, with similar violation rates.”);
 - Langford, B. et al, Risky riding: Naturalistic methods comparing safety behavior from conventional bicycle riders and electric bike riders, Accident Analysis & Prevention (Sept. 2015) (“E-bike riders exhibit nearly identical safety behavior as regular bike riders and should be regulated in similar ways.”).

The safety outcomes relating to electric bicycle use and conventional bicycle use are similar.

- A. Banning electric bicycles from areas where conventional bicycles are used is not justified based on safety issues or the risk of collisions.
- Cherry, C. & Fishman, E., E-bikes in the Mainstream: Reviewing a Decade of Research, Transport Review (July 2015) (“Overall differences in safety outcomes were not dramatic between e-bike and bicycle riders.”).
 - Cherry, C. & MacArthur, J., E-bike safety, A review of Empirical European and North American Studies (Oct. 15, 2019) (summarizing European studies finding that over the same distances traveled, “e-bikes and conventional bicycles have the same crash risk.”).

An electric bicycle ban will not decrease ridership, only complicate enforcement. There is strong demand in the public for electric bicycles.

- A. Ridership is increasing, and people are using electric bicycles to recreate, replace vehicle trips and augment existing bicycle trips. In 2020, electric bicycle sales grew by 132% (Source: the NPD Group). This is the fast-growing sector of sales in the bicycle industry by a significant margin.

Studies by Local Governments

There are two in-depth studies that local governments have taken to understand electric bicycle rider behavior and craft local ordinances to regulate their use.

[Fairfax County Research \(2019\)](#)

- A. Overview: Fairfax County, VA worked closely with NOVA (Northern Virginia) Parks to fund a white paper to gain a better understanding of electric bicycles. This research reviewed federal and state electric bicycle laws and model legislation, the difference

in safety and behavior between regular bikes vs electric bicycles, other local trail systems policies, current park regulations, and potential alternatives.

- B. Rationale: The increased use of electric bicycles within Fairfax County sparked the need to address current regulations regarding their use. The county chose to research the use of electric bicycles to inform a data-driven policy for their community.
- C. Results: This research found that electric bicycle users exhibit nearly identical behavior as regular bike users, electric bicycle speeds were observed to be lower than standard bike speeds on shared trails, electric bicycles tend to be similar to regular bikes and most trail users are unaware of the presence of electric bicycles when asked.

[Jefferson County Study \(2017\)](#)

- A. Overview: Jefferson County, CO conducted two studies at multiple parks to gain a better understanding of visitors' knowledge, perceptions, and concerns related to the use of electric bicycles on urban pathways and natural surface trails. Through 'Test Ride Surveys,' visitors are asked four questions before and after riding an electric bicycle to determine familiarity with electric bicycles and any changes in perception and/or acceptance after riding one. Through 'Visitor Intercept Surveys,' random park visitors are asked about their perceptions, acceptance, and concerns related to electric bicycles on trails, as well as their ability to detect an electric bicycle sharing the pathway with them.
- B. Rationale: Jefferson County realized that electric bicycles are already in use on its pathways and trails, and that usage will not significantly decrease with a wholesale ban. It has opted to study the issue and engage park visitors to determine whether to allow or prohibit this technology on the transportation and recreation corridors under its jurisdiction.