

Thank you for the opportunity for the public to engage on FSM 7700 and 7710, which would revise Forest Service directives to update and clarify guidance on management of electric bicycle (e-bike) use on National Forest System lands.

The mountain bike community is responsible for a large part of the natural surface trail infrastructure that exists today on our federal, state and local public lands. Hundreds of organized mountain bike clubs around the country manage thousands of volunteers who work closely with land managers on trail development, trail maintenance, and trail education for all users. Much of this work relies on funding sources specific to non-motorized trail projects.

The proposed directives could jeopardize this funding and increase user conflict if non-motorized trails were to become reclassified as motorized to allow for eMTBs. Instead, the final directive must reconsider how to allow class 1 eMTBs on select non-motorized trails while retaining a trail's non-motorized status, similar to the recent Department of Interior final rule. The final directive can be further improved by following the International Mountain Bicycling Association's management recommendations: managing the three classes of e-bikes separately from one another and prohibiting class 2 and class 3 eMTBs on natural surface, non-motorized trails.

Mountain bikers appreciate the leap in technology presented by eMTBs is a unique management challenge. These proposed directives rightfully plan separate management for bicycles and electric bicycles. It is critical that land managers and local mountain bikers work together to determine where eMTBs are and are not appropriate on current and future mountain bike trails.

The public lands should be accessible to as many Americans as possible, including people who use e-bikes. E-bikes help make public lands more accessible to more people. An e-bike is a bicycle with a small electric motor of not more than 750 watts (one horsepower) which assists in the operation of the bicycle and reduces the physical exertion demands on the rider. E-bikes may have two or three wheels and must have fully operable pedals.

BLM-managed public lands offer many opportunities for riding e-bikes, including any area or trail where OHVs are currently allowed. BLM offices also have the authority to identify which non-motorized trails could be used for e-bike use on BLM-managed lands. BLM District and Field Managers are encouraged to consider authorizing e-bike use in accordance with applicable laws and regulations, including the e-bike rule.

- E-bikes make bicycle travel easier and more efficient, because they allow bicyclists to travel farther with less effort.
- E-bikes provide expanded options for visitors who wish to ride a bicycle but may be limited because of physical fitness, age, disability, or convenience.

- When used as an alternative to gasoline- or diesel-powered modes of transportation, e-bikes can reduce greenhouse gas emissions and fossil fuel consumption, improve air quality, and support active modes of transportation for park staff and visitors.

A Comparison of Environmental Impacts from Mountain Bicycles, Class 1 Electric Mountain Bicycles, and Motorcycles: Soil Displacement and Erosion on Bike-Optimized Trails in a Western Oregon Forest

All trail users affect the trail surface and surrounding environment, especially when trails are poorly constructed. Those impacts range from vegetation loss to soil erosion, water-quality degradation, and disruption of wildlife. However, there is no evidence that mountain bicycling causes greater environmental impact than other recreational trail uses. In fact, current research suggests that mountain bicycling impacts are similar to hiking, and less damaging than equestrian and motorized users. An emerging body of research suggests that when it comes to impacts to soils, water quality, and vegetation, the primary issue is not the type of user, but the way the trail is designed and constructed.

IMBA conducted a small trail impact study that measured soil displacement and erosion from traditional mountain bicycles, Class 1 eMTBs, and motorcycles under the same environmental conditions on separated sections of the same trail, within a single test site. Analysis of data from this small-scale field experiment showed support for the hypotheses. Some differences between the impacts of Class 1 eMTBs and mountain bicycles were observed, particularly at turns and grade changes. However, the soil displacement measured in this study was not significantly different (statistically) from that associated with mountain bicycles and was much less than that associated with motorcycle use.

Electric-powered mountain bikes (eMTBs) are a new category of recreational use on public lands, a hybrid of muscle and electric power that falls between traditional motorized and non-motorized uses. Defining eMTBs as new category of recreation access will minimize impacts on access for mountain bikes and protect against an increase of motorized use on non-motorized trails.

This study found that the impacts from Class 1 eMTBs and traditional mountain bicycles were not significantly different, while motorcycles led to much greater soil displacement and erosion. Observations suggest that Class 1 eMTBs may lead to more displacement under certain trail conditions. More research is needed before conclusions can be drawn regarding the environmental impacts of Class 1 eMTBs as compared with traditional mountain bicycles.

Understanding the potential resource impacts of Class 1 eMTBs is a necessary and important first step for formulating management strategies. Additional research is needed to further assess the range of environmental and social impacts for successful Class 1 eMTB use on public lands. IMBA's initial study suggests that, with conscientious management and attention to trail design, Class 1 eMTBs may have the potential to off

Thank you for the willingness to engage with the mountain bike community.

Sincerely,
Victor Palmeri