

E-Bikes on the Trail



Electric bicycles—or e-bikes—are becoming increasingly popular nationwide. These bikes look like traditional bicycles but are equipped with an electric motor that can be used to assist the rider. While there are a variety of e-bike types—ranging from pedal-assist, which simply give riders a boost, to bikes with throttles that allow users to choose to pedal or use the motor to get around—all are electric, which means that they do not use gasoline or emit exhaust fumes, and are quiet when the motor is used.

As these bikes gain popularity, questions arise about their use. At Rails-to-Trails Conservancy (RTC), we often get questions about whether or not e-bikes should be or are allowed on trails, and what concerns trail users might have about interacting with e-bikes. Here are RTC’s perspectives on e-bikes and trail use.

How E-Bikes Are Regulated

The U.S. Consumer Product Safety Commission regulates e-bikes federally from a product safety standpoint. Federal law specifies a maximum speed of 20 mph under motor power alone (bikes with a throttle) but no maximum speed when operating a pedal-assist e-bike. The commission regulates an e-bike at the first point of sale but not from a usage standpoint.

At the state level, e-bike statutes vary. Among the states that have adopted specific legislation, e-bikes are typically classified as bicycles with language that clarifies their distinction from “motorized vehicles” like motorcycles or mopeds. This specification means that e-bikes in these states avoid certain registration and licensing requirements pertaining to motorized vehicles. States with e-bike laws typically allow e-bikes on protected bicycle lanes and trails.

Among states that have not adopted e-bike statutes, e-bikes may be regulated as motorcycles or have confusing licensing and registration requirements. These states may also prohibit e-bike access to bicycle lanes and trails.

How and Why E-Bikes Are Classified

The bicycle industry has developed a classification system to define types of e-bikes based on their function and speed. In RTC’s view, this is critical as it draws a clear distinction between bicycles and motorized vehicles. This classification provides the legal distinction between: a) e-bikes as bicycles with motors, and b) motorized vehicles that are prohibited from trails in certain situations. What’s more, the classification system provides clear definitions of types of e-bikes, allowing local jurisdictions to better determine which types they will permit on their trails.

E-bike classifications include the following:

- **Class I:** Pedal-assist only, where the pedal-assist cuts off at 20 mph, and the user must pedal manually to go faster
- **Class II:** Throttle on demand—which operate by a throttle, by pedal-assist or by both—where the throttle cuts off at 20 mph, and the user must pedal to go faster
- **Class III:** Pedal-assist only, where the pedal-assist cuts off at 28 mph, and the user must pedal to go faster



Monterey Bay Coastal Recreation Trail, California | Barry Bergman

RTC's Policy Position on E-Bikes

RTC supports the passage of model e-bike legislation developed by the bicycle industry. Our support is predicated on the need to more clearly define in law the distinctions between bicycles with motors and motorized vehicles. Motorized vehicles—with the exception of motorized wheelchairs and snowmobiles—have long been prohibited on certain federally funded trails. We continue to support this prohibition but do not believe the definition of “motorized vehicles” should be so broadly construed as to automatically prohibit the use of bicycles with electric motors.

As to which classes of e-bikes should be permitted on trails, we believe that such decisions are best made by state and local decision-makers because conditions and uses of trails and other facilities vary. A central consideration is the compatibility of trail uses—including riding e-bikes—so users can have the experience that they expect. Applying e-bike classifications can be an effective way for determining which e-bikes are best suited for local trails and bicycle facilities.

Observing proper trail behavior—especially safe speeds—is not just the right thing to do, it is absolutely critical to maintaining a high standard of safety for all trail users. The top electric motor speed of Class I and Class II e-bikes is 20 mph, and the top speed of a Class III e-bike is 28 mph. By comparison, Google Maps uses an average speed of 10 mph for their bicycle directions, and a person of average health typically cycles at about 13 mph. The average speed of a Tour de France bicycle racer is 25 mph. At RTC, we feel that user conflicts caused by speed are more about behavior than technology. Both traditional cyclists—especially fit cyclists or racers—and e-bike users have the potential to cause speed-related user conflicts.

While e-bikes could exacerbate trail conflicts, it is most important to educate all cyclists and trail users about **trail etiquette**. In order to maintain a safe experience for everyone, cyclists—whether using an e-bike or a regular bike—must respect the experiences of pedestrians, other cyclists and other trail users by **using safe speeds and signaling when passing**. In short, it is user behavior, not the technology of an e-bike, that determines the trail experience.