The Case for Class 1 E-Bike

Access to Multi-Use Trails

Given the explosive growth of “everything electric”, there is a general lack of understanding of the many devices that are coming to market.

The global **e-bike market was valued at 19.05 Billion US in 2022** and is anticipated to grow at a compound annual growth rate of 14.5% through 2030. The “Trekking” segment of e-bikes is 50% of the market.

Battery technology advances will continue to make e-bikes lighter and more affordable.

The price of lithium-ion batteries is anticipated to decrease by nearly 70% by 2030.

Technology, plus the many persuasive advantages that the e-bike brings to bear, means that the phenomena is not abating.

When it comes to protecting our trails, there has been a knee jerk response to anything with a motor; “ if it has an engine it’s not allowed”; *but not all e-bikes are the same*.

It is important to understand the 3 universally accepted categories of e-bikes and which of them does NOT represent a threat to the integrity and safety of our trails.

EBike Cateogories

E-bikes are categorized based on speed, wattage, and operation:

**Class 1:** *pedal-assist only, with no throttle*, and a maximum assisted speed of 32/kph/20 mph. (conforms to existing Ontario regulations; see below)

* **Class 2:** throttle-assist with a maximum speed of 32 kph/20 mph
* **Class 3:** pedal-assist only, with no throttle, and a maximum assisted speed of 44.80kph/28 mph

Class 2 are generally *not* appropriate for singletrack mountain bike trails since they increase physical damage to trails due to the throttle-action.

Class 3 e-bikes would generally be *restricted* from bike trails and multiuse paths because they are too fast for paths and trails that are shared with other trail users.

**Local Municipal Rule Needed**

The Recommendation

For purposes of this discussion and in terms of access to multi-use trails, the, current and generally accepted practice is to grant **Class 1 e-bikes: (Pedal Assist with No Throttle)** the same access to trails as a traditional bicycle.

Class 1 e-bikes, by definition, comply with Ontario Provincial and MOT criteria for an e-bike.

Land Managers (e.g. TRCA) in other jurisdictions are allowing Class 1 e-bikes on trails that allow bicycles. Uxbridge can adopt this commonsense approach within its own jurisdiction.

*Allowing the Class 1 category of e-bike to operate under the same rules as a traditional bicycle makes for a* very simple criterion; by exception, this *disallows* all other potentially harmful, disruptive, power-assisted bicycles from the trails.

In terms of enforcement, like most rules, compliance would be primarily driven by societal norms. Most users will accept and conform to a published,posted, rational rule. Non-conformists will be few and the need for by-law enforcement would be rare. *Ironically, the greater threat to the integrity of the trails and to the user experience on our trails lies in not having a commonsense rule that all users can point to.*

Everyone would stand to benefit from common-sense rules on how and where one can operate an e-bike. With clear regulations, law enforcement and *all users* will understand what rights e-bike users have.

Bike retailers (especially local ones) can help their customers understand where each type of e-bike can be used locally

*Most Importantly:*

*Trail users, and potential trail users, who may be discouraged from riding a traditional bicycle due to limited physical fitness, age, disability or convenience, gain new transportation alternatives.*

Additional Background

Provincial E-bike definition for Ontario:

* A **pedal-driven** bicycle of conventional exposed fork-and-frame bicycle design and appearance that does not resemble a motor scooter or motorcycle
* Steering handlebars
* *Is capable at all times of being propelled on level ground solely by using muscular power to operate the pedals (effectively making it equal to a Class 1 eBike)*
* continuous rated output power electric motor not exceeding 500 Watts
* A maximum speed of 32 km/h
* a maximum weight of 55 kgs
* a permanent label from the manufacturer in both English and French stating that your e-bike conforms to the federal definition of a power-assisted bicycle (e.g. class of bike)
* Is fitted at all times with pedals that are always operable to propel the bicycle
* Minimum wheel diameter is 350 mm
* Wheels that have a width of not less than 35 mm

It is illegal to modify your e-bike’s motor to make it more powerful or to increase the speed of your e-bike.

You don’t need a driver’s license, vehicle permit or license plate to ride an e-bike, but you doneed to:

* be 16 or older
* wear an approved bicycle or motorcycle helmet
* keep your e-bike in good working order

You also need to follow the same rules of the road as regular cyclists.