



WORCA E-Bike Survey and E-Bike Recommendations

Executive Summary

Introduction: Background and Methodology

As part of a multi-stakeholder approach - including the Resort Municipality of Whistler, WORCA, Whistler-Blackcomb, and the Province of BC - to review policy regarding the use of e-bikes, WORCA conducted a survey to measure member and public awareness, attitudes, and behaviours on the topic.

WORCA considers e-bikes to be a Class 1 electric bicycle, or “low-speed pedal-assisted electric bicycle,” and is defined as a bicycle equipped with a motor that provides assistance only when the rider is pedaling, and that ceases to provide assistance when the bicycle reaches the speed of 32 kilometers per hour. At this time there is much discussion on whether a Class 1 electric bicycle should be considered “motorized”, given that there is no throttle and is only engaged when assisting active pedalling. WORCA has been waiting for pending Provincial policy on this definition, given that the majority of WORCA managed and maintained trails are on Provincial Crown land. A policy has been drafted, but at this time, has not been passed through government and enacted. As such, organizations like WORCA operate in a policy-void on these lands.

A single 25-question 7-minute online survey was opened to the public. The survey launched on 21st November 2018 and remained open for 2 weeks. Members were invited to complete the survey via email invitation. Social media posts, the WORCA website, and traditional media were used to invite the Public, as well as members.

In advance of this survey, WORCA has taken a conservative approach to e-bikes, but does not have a formal resolution on e-bike use. This survey will help us better rationalise our position on e-bikes on WORCA maintained and managed trails. Further to this, WORCA has undertaken targeted outreach to community leaders, stakeholders, and other user-groups, such as the RMOW, former WORCA executive, the Whistler Trails Subcommittee, and the ACC, among others. Currently, the WORCA website states:

WORCA advocates for non-motorised mountain biking. WORCA considers e-bikes motorized vehicles. E-bikes are not included at WORCA events as our insurance will not cover their use. E-bikes are still in the evolutionary stage and management plans are not yet established. Some clear issues stand out which have not fully been evaluated. The facts are that they allow more people to travel farther and quicker into places they could not so easily access before. This potentially opens up a number of concerns around user conflict, trail safety, and damage to trails that WORCA is keen to monitor and re-evaluate if necessary based on authentic studies or assessment of on-trail conditions. E-bike riders are directed to be extra considerate on public trails and be aware that faster speeds in all directions is a concern for collisions on multi-use trails.

It is important to note that many of the trails that WORCA manages and maintains have policies in place that do not allow e-bikes, and WORCA respects and abides by those policies. The Whistler Interpretive Forest (WIF) within the Cheakamus Community Forest (CCF), particularly those trails found generally around the Cheakamus Crossing community, along with the newly constructed Sproatt trails above 1000m have clauses within their development plans stating that all users must be solely human powered. It has been



confirmed with the management entities for these areas, that human powered does not include pedal assist (Class 1) e-bikes.

Key Findings

Importance and Interest

The relative importance of the e-bikes topic was highlighted by the increased survey response by WORCA members. Typically, annual WORCA member surveys attract around 200 responses, a 130% increase with minimal change in membership numbers and invitation methods:

- 852 total responses
- 55% of responses were WORCA members, 45% were public

The breadth of respondents primary riding location highlighted interest somewhat transcends geographical location:

- 40% ride primarily outside of Whistler (20% Squamish, 10% Pemberton, 10% Nth Vancouver)

Awareness

The topic of Trails and e-bikes is generally poorly understood:

- 30%, the largest response category, indicated they don't know if the 'WORCA trail network' can handle more traffic (Lower among WORCA members). 25%, the 2nd largest response category, indicated a ¼ increase in traffic can be handled
- Despite 70% acknowledging they would ride longer and further on an e-bikes (10% didn't know), 35% believe e-bikes have no additional impact on trails; 2.5% believe e-bikes have less impact (Slightly higher impact believed among WORCA members).
- 50% indicated they do not know the Cheakamus Community Forest and Sproatt Alpine Zone are for non-motorised use only (Slightly higher among WORCA members)

Attitudes

E-Bikes are generally supported but there are usage concerns:

- 75% believe e-bikes are positive for tourism (slightly lower among WORCA members)
- 50% believe e-bikes present new hazards or risks (slightly higher among WORCA members)
- 50% believe e-bikes should require specific regulation (Lower among WORCA members), 5% don't know
- 85% support some degree of e-bikes use on trails (40% support e-bikes use on multi-use trails, 25% suggest e-bikes only trails or areas, 25% suggest a combination of e-bikes only trails and multi-use trails – effectively all trails, 15% don't support e-bikes on any WORCA maintained trails)
- Provided WORCA receives more funding, 50% of respondents believe WORCA should maintain trails for e-bikes use; 33% believe WORCA should do so without extra funding (Among WORCA members, there is a higher demand for funding if WORCA is to maintain trails for e-bikes use)



- 60% believe WORCA should take a multi-stakeholder approach to building an e-bikes specific zone of trails (slightly higher among WORCA members)

Behaviours

Current e-bikes ownership is relatively low, however future adoption is indicated:

- 15% currently own a class-1 e-bikes
- 25% will buy and e-bikes within the next 5yrs
- A following 30% will buy an e-bikes within 5 to 10yrs+
- 30% would never by an e-bikes
(No difference in proportions between WORCA members and public)

Biking remains primarily non-motorised post e-bikes adoption:

- A large majority (75%) of e-bikes owners still primarily use a non-motorised bike
(Slightly higher among WORCA members)

The response to e-bikes policy involving permits or restrictions is likely to be mixed:

- 20% would still ride trails on e-bikes regardless of required permits or restrictions
- A further 10% are unsure how they would respond
- 45% would ride e-bikes only on permitted trails
- 25% would not ride e-bikes on any WORCA maintained trails, as they believe the trails are not appropriate for E-Biking
(No difference in proportions between WORCA members and public)

E-Bike usage means people would make more use of trails:

- 70% acknowledged they would ride longer and further on an e-bikes (Slightly lower among WORCA members); 10% didn't know

Discussion and Recommendations

Increasing Awareness

Through the survey, it has become clear that there is a general acceptance by the majority of users that e-bikes are a growing user group on the WORCA maintained and managed multi-use trail network. Within this general consensus, there is acknowledgement of increased use/distance, increased risks (real or perceived), and increased potential for conflict. From these indicators, WORCA recommends that signage and communications strategies need to be undertaken for all trail users utilizing the WORCA maintained and managed trail network. WORCA recommends that there should be two forms of signage program implemented:

1. Trail usage signs – these are signs related to use of the trail itself, exemplified, but not limited, by the following:
 - a. Downhill primary
 - b. No uphill riding
 - c. General directional signage at trail heads (better marking)
 - d. Usage restrictions (e.g. – “no e-bikes” signage in WIF or alpine network)



2. Trail etiquette and gateway signs – these are signs that would appear at unique or important trailheads or trail nodes that have the following information:
 - a. Maps with trail designations (priority direction, use restrictions) and difficulty
 - b. General use etiquette
 - c. Information on trail support or “trail karma”

When identifying the impacts of e-bikes – in particular, riding longer and further means extra ‘wear and tear’ – in doing so, it is important to delineate ‘e-bikes’ and ‘e-bike usage’, the former is where it might be argued that e-bikes do more or less damage due to the physical bike e.g. weight, the latter is where it is argued that changes in biking behaviour due to the introduction of e-bikes result in increased impact on trail networks e.g. more laps. The survey clearly identifies that there is an acknowledgement of increased e-bike usage expected, but that e-bikes don’t specifically cause any additional damage to trails by virtue of their design, weight, or characteristics. There is a lack of substantive research in this area at this time.

E-Bike Use and Ridership

The survey indicates, to a large extent, that there is a broad range of support for e-bike use on WORCA maintained/managed multi-use trails, regardless of membership in WORCA. Only 25% of respondents noted that e-bikes should be on e-bike only trails, and overall, 85% support some degree of e-bike use on trails. Of all respondents, most indicated that they did not know if e-bike use would have any significant or larger impact on the trails, but we also know that the majority of respondents indicated they would ride more trails/longer with e-bikes, which has a de-facto maintenance increment.

In the current regime, there is not a significant body of evidence-based knowledge for or against e-bikes on multi-use trails. As such, on trails that don’t have other jurisdictional controls or restrictions in place, WORCA will focus its near-term efforts on trail signage to mitigate conflict and ensure the safety of our multi-use trail network. WORCA is reticent to enact a specific policy on e-bike use on WORCA managed and maintained trails on Provincial Crown land at this time, knowing there is pending legislation (or at least ‘definition’) on the horizon. The limited resources of a not-for-profit group like WORCA are not best served developing policy and policing trail use when formal policy may be in place that will help us guide our mid- and long-term trail use policies. Regardless, WORCA will review trail use and wear and tear on an annual basis as we monitor usage and understand the e-bike user-group in a more meaningful and substantive way. In the absence of significant empirical data, and the information ascertained in the survey and outreach, it makes sense for WORCA to continue our cautious approach, but to acknowledge the use at this time and monitor in advance of formal trail policy. WORCA would reserve the right, under our existing mandate, to restrict particular trails from user-groups if there are persistent conflicts, dangerous use, or over-use, necessitating trail-specific decision making.

This said, 50% of survey respondents did note that e-bikes should require specific regulation, and coupled with better information and communications, WORCA will undertake controls to manage all use, rather than focusing limited resources solely on e-bikes. These controls, as noted above regarding awareness, will be centered on a communication and signage program that will be multi-platform and for all trail users. Between winter and spring 2019, the WORCA executive will liaise with the trail building and maintenance community to determine if any currently designated multi-use trails should be closed to e-bikes, and the reasons for that



determination. If a trail is exclusively managed and maintained by a trail builder/steward, they may have strong preferences regarding use and that should be considered.

No E-Bike Areas / E-Bike Routes

Most people support e-bikes but highlight that usage needs to be managed. Clearly identified e-bike routes would provide a raft of benefits including: reduced user conflict, reduced e-bike specific hazards and risks, improved trail building and maintenance planning, improved tourism planning, and clear information on where to best ride an e-bike. This is not to isolate e-bikes, but to highlight routes that would work well for e-bikes, particularly from a rental and tourism perspective. These routes would be developed in consultation with rental agencies, tour companies, the RMOW, WORCA, Whistler/Blackcomb, and other stakeholders in order to create diverse opportunities on trails that support this level of activity and are readily accessible for safety reasons. There are reasonable concerns that individuals renting e-bikes may quickly exceed their personal riding limits, masked by the 'assist' provided by the e-bike, and finding themselves on terrain they are unfamiliar or unable to ride. With designated and recommended e-bike routes, tourism operators, rental shops, or new(er) riders can select routes appropriate to their skills. These routes are perhaps more robust for additional usage and identified by length that is appropriate to particular battery output. Local riders or those with more experience may choose to ride other trails, but this will facilitate safer rider-based decision-making.

Non-motorised or "No E-Bike" areas are currently designated by external agencies and WORCA abides by their policies. These trails may be in harder to access and/or more fragile environments or are in areas where the particular land-representative does not have insurance or is unwilling to take on associated risk (real or perceived). Currently the WIF and the alpine trail network (elevations above the Flank Trail) are classified as no e-bike areas. Future provincial policy may identify further use restrictions or will at least better define use on Provincial crown lands. WORCA will monitor trails and speak to users and trail-builders to identify any other multi-use trails in the WORCA maintained/managed network that may need usage limited for justifiable reasons – sensitive lands, safety, ownership, conflicts, etc.

Maintenance and Operations

With 70% of respondents acknowledging that they would ride longer and further on e-bikes and over 50% identifying that WORCA trails should accommodate e-bike use, it is evident that WORCA needs to closely monitor trail maintenance and will likely need additional funding and support from e-bike riders, e-bike tour/rental operators, and others benefitting from riding on WORCA managed and maintained trails. This will likely not be readily apparent in the forthcoming riding season, as there are still not a significant number of e-bikes in the general riding population. But again, the survey notes that this number is likely to grow significantly over the next 5-10 years, presumably as prices go down and quality/durability improves.

WORCA has factored in some additional trail maintenance and armouring of trails to accommodate higher usage generally of all trails and this should accommodate the current rate of e-bike use. This is reflected in the *2019-2021 Fee For Service* application to the RMOW. However, post 2021, it will be necessary to re-evaluate if additional resources will be necessary to accommodate any real and evidenced growth of e-bike use and associated wear



and tear on the WORCA managed and maintained trail system. Concurrently, WORCA will monitor particularly sensitive or high use trails to note if any trails should be removed from the trial period and designated as “no e-bike” trails.

WORCA does note that there is not enough statistical and empirical evidence to make specific recommendations or requests for additional funding beyond that currently contemplated in our budget and *Fee For Service* application.

WORCA may also consider adding a “Trail Pass” or some other form of “Add On” membership specifically related to e-bike management and maintenance to its membership sales platform. This would be entirely voluntary, but those that contribute would acknowledge that they support the work that WORCA does and that they are contributing to potential additional trail miles as a result of their e-bike. There would be some form of identifier (frame sticker) that the individual could use to show their support in this regard. Again, this would be a trial project and entirely optional. This could also be transferred to local bike shops that are renting e-bikes or tour companies specifically promoting e-bike tours on WORCA maintained and managed trails. These shops or companies should have the opportunity to contribute to WORCA at a corporate level and receive recognition for their goodwill.

Multi-Stakeholder Approach

WORCA must work closely with all stakeholders to communicate our approach and messaging well in advance of the commencement of riding season in spring, 2019. As noted above, WORCA is committed to liaising with trail builders and our trail maintenance teams to best identify our trail-specific objectives for monitoring and evaluation. WORCA will also need to identify key stakeholders – RMOW staff, trail users, trail builders, other local trail organizations (ACC), trail running clubs – in regard to the urgent need for a signage and communication plan for trails and for trailheads and key trail nodes. Signage in respect to enhancing safety, reducing conflict, and ensuring a positive trail experience for all user groups on WORCA maintained and managed trails should be WORCA’s priority in the short-term. The use of resources and funding for upgrading signage will provide a strong platform to better understand use habits and the growing numbers of all users on the trail network. WORCA will share the results of our survey with the RMOW as they advance their own research and outreach. Finally, WORCA will share the results of our survey with our membership and with other interested trail organisations.

Key Recommendations

1. **THAT** WORCA immediately undertake a signage and communications program in regard to facilitating etiquette, enhancing safety, managing directional trails on all multi-use trails.
2. **THAT** WORCA clearly communicate to the membership, all bike stakeholders, rental agencies, tour operators, Tourism Whistler, and the RMOW, those zones that are closed to e-bike use due to external policies that WORCA must operate under – WIF and the alpine network.



WHISTLER OFF ROAD CYCLING ASSOCIATION

3. **THAT** WORCA acknowledge that the core concern around e-bike management at this time is 'e-bike use', meaning that additional riding distance and trail use is the greatest concern for WORCA's trail program.
4. **THAT** WORCA work with the membership, RMOW, and the tourism/rental community to identify preferred e-bike routes to offset many of the concerns of recreational e-bike use and enhance safety and quality of experience for these users.
5. **THAT** WORCA monitor all multi-use trails to identify any specific challenges or trail use issues (if any) that may arise through increased use by e-bikes, particularly increased trail maintenance demands as they relate to funding and relationship with e-bike users/user-groups.
6. **THAT** WORCA will liaise with the local trail building/maintenance community to identify any particular trails that may not be appropriate for e-bike use that are not in the identified No-E-Bike zone of the WIF and the alpine network.
7. **THAT** WORCA ensure they are tracking expenses on trail maintenance work and requirements as they may specifically relate to the growth in e-bike use, to justify current and future funding AND work with all levels of government to align tax revenue funding to support new and growing user-types if these uses are to be approved at the Provincial level.
8. **THAT** WORCA consider a "trail pass" or "add-on membership" for members that ride e-bikes, to show their support for additional maintenance as may be required.
9. **THAT** WORCA develop a "corporate sponsorship" for companies and shops invested in bike tourism and rentals, with WORCA providing recommendation to these services.
10. **THAT** WORCA continue to liaise with all stakeholders in regard to the above-mentioned recommendations to ensure an open and transparent process in regard to the acknowledgement of the growing broad-based multi-use activities on WORCA maintained and managed trails, including e-bikes, trail running, hiking, and dog walking.