TOS Trial Ebike Rule Change Backgrounder **Draft:**
GPC Trails and Open Space Subcommittee 8/1/19

Note: At its November 2018 meeting, the General Plan Committee's Trails and Open Space Subcommittee (TOS) voted to recommend a trial rule change to permit Class 1 ebikes on all trails during the 2019 mountain biking season. As a first step to bringing its rule change recommendation to the Board of Directors, the TOS presented its proposal to the Covenants Committee in March 2019. The Covenants Committee voted to reaffirm the existing rule that bans ebikes from Tahoe Donner's trails, effectively tabling the TOS's recommendation. Consequently, at this time ebikes remain officially banned from Tahoe Donner's trails. Absent a push by the Board of Directors or by Tahoe Donner members, at this time the TOS plans no further action on ebikes in Tahoe Donner.

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1a. Are ebikes mopeds?

In a decades old rule, Tahoe Donner prohibits the use of "motor-powered bikes ... in Common Areas, and other Association-owned properties." The phrase "motor-powered bikes" is an uncommon one and does not appear in the California Vehicle Code. The Vehicle Code does, however, identify a class of vehicles known as "motorized bicycles," which are otherwise known as "mopeds." Although the argument would be stronger if the Tahoe Donner rules used the phrase "motorized bicycle" or "moped" instead of "motor-powered bike," the original intent of the rule appears to have been to prohibit mopeds from Tahoe Donner's trails.

Are ebikes mopeds? Until AB1096 was signed into law in 2015, it appears that ebikes were classified as mopeds. However, once AB1096 became law, an entirely new class of vehicles was added to the California Vehicle Code: electric bicycles or ebikes. Regardless of any apparent similarities with mopeds, the law distinguishes between the two vehicle classes. Notably, according to the Vehicle Code, unlike for mopeds, "A person operating an electric bicycle is not subject to the provisions of this code relating to financial responsibility, driver's licenses, registration, and license plate requirements, and an electric bicycle is not a motor vehicle."

If the intent of Tahoe Donner's rule was to ban mopeds, and if ebikes are not today legally classified as mopeds, then are ebikes not already permitted on Tahoe Donner's trails by virtue of this legal reclassification? This argument has been suggested, but the argument is neither satisfactory nor wise.

First, rather than resolve the question about ebikes, this argument actually begs it. Second, it is not clearly in the association's interest to construe "motor-powered bikes" so narrowly that it is synonymous with mopeds.

Under California law, the Stealth Bikes being sold locally can be classified neither as "mopeds" nor as "electric bicycles," because they are capable of speeds well in excess of those permitted for those vehicle categories. Nor is it apparent that they can be legally classified as motorcycles,

electric or otherwise. It is not even clear that the vehicle code defines a class of vehicles that would be fitting for them. However, they are some sort of "motor-powered bike" and the TOS believes that they should be banned from Tahoe Donner's trails.

Whatever the original intent of the rule might have been, if we were to construe "motor-powered bikes" narrowly as mopeds, and suggest that motor propelled bikes unclassified as mopeds are permitted, then both legally classified ebikes and electrically powered Stealth Bikes would be permitted on our trails. The TOS cannot recommend this outcome.

In sum, if you oppose ebikes on the trails, it is no longer sustainable to claim they should be banned as mopeds. They are no longer mopeds. If you favor permitting ebikes on the trails, it is insufficient to claim they are permitted because they are no longer legally classified as mopeds. And regardless of your view for or against ebikes, and regardless of our rule's original intent, it is unwise to say the existing rule applies only to mopeds.

1b. The Ambiguity of "Motor-Powered Bike"

The "motor-powered bike" language in our existing rule may be poorly formed given other technological developments. For instance, many otherwise conventional mountain bikes have electronic gear shifters controlled by small motors. The existing rule could be construed to suggest that mountain bikes equipped with electronic gear shifters are also banned from Tahoe Donner's trails. This in itself may be reason to recommend a rule update regardless of any decision pertaining to ebikes.

2a. Is it justifiable to change the rules because more and more people are breaking the rules?

The mere fact that ebikes are more and more prevalent on our trails is not a sufficient basis for recommending a rule change to permit them. Nor would increased use of ATVs, snowmobiles, or dirt bikes on our trails be a legitimate reason to recommend permitting those vehicles. Increased use of new or prohibited vehicle classes on our trails may, however, be grounds for revisiting a rule to verify that it is sufficiently up-to-date and that it still serves association interests. That is what happened regarding ebikes.

2b. On what bases are rule changes justifiable?

Association rules should exist only if they serve a definite association interest. It is unjustifiable to subject members to rules that serve no clear association interest. Therefore, rules that serve no definite association interest should not be perpetuated. If the association has a definite interest in banning ebikes, then we should maintain (and perhaps even strengthen) the existing rule. If the association has no definite interest in banning ebikes, then the existing rule should be modified to permit them as an exception.

3a. Liability

We would have a definite interest in preserving the ebike ban if permitting ebikes would increase

our liability exposure. However, staff has reported that permitting ebikes would have no effect on our liability exposure provided that:

1. The trails we are building are designed to match the usage we are intending.
2. We have noticed controls (signage, map notes, etc.) to regulate appropriate usage.

As there are no trails in Tahoe Donner known to be unsuitable for ebikes from a design perspective, the association's exposure for liability would be unaffected by adding ebike riders to the existing multi-use trail user groups.

3b. Safety

Urban European Studies

Studies of urban European ebike usage do associate ebikes with greater injury risk, particularly among older riders. However, because many of the accidents studied were particular to urban environments (accidents involving automobiles, tram lines, intersections and so forth), there is reason to doubt whether studies of commuter ebikes in an urban environment have any relevance for mountain ebikes on dirt trails.

Speed

The TOS's recommendation is that we conduct a trial rule change to permit Class 1 ebikes on Tahoe Donner's trails. Class 1 ebike cease providing assistance once the bike reaches 20 MPH. We already have many conventional mountain bikers on our trails capable of going much faster than 20 MPH.

Research compiled by People For Bikes suggests that ebikes tend to have somewhat higher average and top speeds. However, the cited studies tended to focus on urban ebike use, and the one study that did include data from undeveloped urban greenways found that in those areas ebikes actually travelled at lower average and top speeds than conventional bikes. It is also intuitively obvious that ebikes will be able to maintain higher and more consistent speeds on climbs. On descents, however, ebikes would be expected to be slower because they tend to be both heavier and less maneuverable than conventional mountain bikes.

By law, Class 1 ebike motors cannot exceed 750 watts. (This is approximately 1/2 the wattage of a typical hair dryer.) One horsepower is equivalent to 745 watts. Over the course of an hour, a world class cyclist can sustain power outputs between 300 and 400 watts, with a healthy adult capable of sustaining power outputs only half that level. If the Class 1 ebike motor did not cease assistance at 20 MPH (as designed and mandated by law), and if the bike's power output was set at its highest assistance setting, a world class cyclist (among the least likely cyclists to be using ebikes) might theoretically be able to extract the full power potential of an ebike's 750 watt motor with sustained consistency. This would not be remotely possible for a typical healthy adult, who would be able to access the motor's full assistance potential only in bursts.

Additionally, ebike riders must balance assistance (and thus speed) with the need to conserve

battery power for the duration of their ride. (Also see *Rider Behavior* below.)

Speed Versus Distance

The primary benefit of electric assistance on a mountain bike is not speed but efficiency. Ebikes permit riders to cover longer distances at ordinary speeds with a lower rate of exertion. Hence, the primary attraction of ebikes is not speed, but distance. Except on climbs, ebikes do not significantly increase bike speed, but because they provide motorized assistance, ebikes do permit riders to travel much farther.

Rider Behavior

Studies cited by People For Bikes suggest that, even when they are sharing trails with ebikes, conventional bike riders do not detect the presence of ebikes on the trails with them. Our experience so far in Tahoe Donner appears to support these findings. Though ebikes have been a regular and growing presence on our trails in recent years, our Trails Manager has not received a single complaint about them. That would suggest either that ebikes are not being noticed on Tahoe Donner's trails, or that ebike rider behavior on Tahoe Donner's trails is not readily distinguishable from rider behavior on conventional mountain bikes. In either case, it would seem that ebikes are blending into Tahoe Donner's trails without arousing negative reaction.

Ride Characteristics

Ebikes do exhibit certain ride characteristics that may be hazardous to novice riders. For instance, novice users may have difficulty coping with the lag between when a rider stops pedaling and when the power shuts off. It was also noted that, though the weight of ebikes makes them slower downhill, the weight also poses a hazard because it makes the bikes more cumbersome and therefore more difficult to maneuver on tight trails. Other TOS members countered that novice conventional mountain bike riders frequently use lower-end, heavier mountain bikes that are more similar to ebikes in terms of weight and maneuverability. Finally, in Tahoe Donner we routinely deal with similar novice safety issues for skiing, snowboarding, or even for conventional mountain biking. Because such novice hazards are hardly unique to ebikes, it would be difficult to justify singling them out for special restrictions on this basis.

Fire Risk

Because they are powered by lithium-ion batteries, ebikes do pose some fire risk. However, that fire risk does not appear to be closely associated with the use of commercially available Class 1 ebikes, but rather with faulty charging facilities at bike shops, aftermarket ebike conversion kits, and homemade ebikes. It was further noted that Tahoe Donner permits thousands upon thousands of lithium-ion batteries on the trails in cell phones. Additionally, because pedal strikes can create sparks, conventional mountain bikes are not immune from fire risk either.

4. Environmental & Physical Considerations

The available data we have suggests that the environmental impact of electric mountain bikes

(eMTBs) is similar to ordinary mountain bikes. However, that data is limited to a single study on trail erosion conducted outside this region. While that single study is suggestive, it is too limited to be dispositive in itself.

Acknowledging that there is little evidence or documentation regarding the ecological impact of eMTBs, Sasha Gennet, a Tahoe Donner member and ecologist at the Nature Conservancy, hypothesized that eMTBs may be more ecologically impactful than conventional mountain bikes due to their added power and weight. The possible impacts, most likely vegetation trampling and soil erosion, would depend on the type of soil, soil moisture levels, time of year, speed, and the actual combined weight of the bike and rider. While she agreed that the soils in this region are not as fragile as the cryptobiotic soils found around Moab and Sedona, she thought the greatest concerns in this area would likely be associated with trails that traverse wet meadows and with ebike riding on saturated trails during shoulder seasons. (These concerns are also associated in varying degrees with conventional mountain bikers, equestrians, and even hikers. It may also be possible to mitigate these effects through improved trail design and trail rerouting.) Because so little is known or documented, she suggested that Tahoe Donner could monitor the environmental impact of eMTBs during a limited trial and use that information to inform a long term decision.

Lisa Wallace, Executive Director of the Truckee River Watershed Council and a Tahoe Donner member, affirmed Sasha Gennet's general assessment. She also added that steep slopes, road and trail crossings, and stream crossings are additional areas of environmental concern that could be monitored during an ebike trial.

5a. Technology: Slippery Slopes - Fact versus Fallacy

The slippery slope argument takes three forms. **First**, by permitting Class 1 ebikes, we open the door to other more powerful ebikes. **Second**, by permitting one battery powered vehicle, we open the door to other battery powered vehicles. **Third**, by permitting any battery powered vehicles, we open the door to combustion engine vehicles.

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Class 2 and 3 Ebikes

Some have raised concern about how narrowly a rule change could be drafted. Under California law, ebikes must be "equipped with fully operable pedals and an electric motor of less than 750 watts," and Class 1 ebikes are those "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 20 miles per hour." California law defines two further classes of ebikes, but the TOS is not prepared to recommend any rule changes to allow ebike classes other than Class 1, the slowest pedal-assisted ebike class. To carve only a narrow exception to the prevailing rule prohibiting motorized vehicles on the trails, the TOS would expect either to cite or quote California law. As an example, with changes in italics:

> *Unless specifically exempted in this rule, s*nowmobiles, motor-powered bikes, all-terrain

vehicles (ATV's), off-road motorcycles and off-road use of any motorized vehicle is prohibited on Common Areas, and other association-owned properties, except that the association may use such vehicles in the furtherance of its operations. *Class 1 electric bicycles as defined by California Vehicle Code, Section 312.5 (those "equipped with fully operable pedals and an electric motor of less than 750 watts," and "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 20 miles per hour") are exempted from this rule through December 31, 2019.*

Hacked Ebikes

Under California law, Class 1 ebikes cannot exceed certain legally specified performance characteristics, and must have a manufacturer label designating the ebike class and motor wattage. Though the manufacturers may be claiming that they are putting safeguards in place to prevent hacking ebikes to achieve faster speeds, these claims are not remotely credible. Given enough time and enough ingenuity, everything can be hacked. And as soon as one person figures out how to do it, the instructions will be on the internet. Although the law states that "A person shall not tamper with or modify an electric bicycle ... so as to change the speed capability of the bicycle, unless he or she appropriately replaces the label indicating the classification," it is safe to assume that the labels on many (if not most) hacked ebikes will not be updated. Hence, hacked ebikes would have higher performance characteristics than their labelled class and wattage advertise. Accepting ebikes on our trails can be expected to mean accepting that some unknown number of hacked ebikes will also be on the trails. However, given the increasing prevalence of ebikes on our trails, and the dim prospects for enforcing any ban against them, some TOS members doubted that changing our ebike policy one way or another willl have any appreciable effect on the probability of hacked bikes using our trails.

"Ebikes" Lacking Legal Classification

As evidenced by the previously mentioned Stealth Bikes, it seems a safe assumption that motorized bicycles will continue to become faster and lighter. It is important to note, however, that Stealth Bikes are not legally classified as "ebikes" under California law, let alone Class 1 ebikes, which is the only class we are considering for Tahoe Donner's trails.

Enforcement and The Honor System

Rules, like laws, often define the transgressive, but they rarely prevent transgression. And that is certainly the case here. Even with a narrowly drawn rule change, we know that not everyone will abide by the rule. We also lack any genuine ability to enforce rules on the trails. Our existing rules prohibit motorcycles, ATVs, and snowmobiles, but all of those things appear regularly on our trails and in our open spaces. Regardless of what policy we choose regarding ebikes, ebikes of various classes, ebikes that have been hacked, and electric powered bikes like the ones made by Stealth will inevitably appear on our trails. When it comes to trail use, we are operating by necessity on the honor system, and that system is rarely perfect.

For our purposes, however, the real question is whether the vast majority of ebike users can be

trusted to be responsible trail users. The same question was asked (and is still being asked) of conventional mountain bikers. The mountain biking community has done considerable work to self-police and to prove themselves worthy "trails citizens." That is one of the reasons why that community puts so much weight on showing up to do trail work. Trail work is a clear demonstration that conventional mountain bikers are making a sincere effort to be good stewards of the trails. Through these and other efforts, and in the face of real opposition, the mountain biking community "earned the right" to be on the trails. Will ebike riders prove themselves worthy trail users if given the chance? Perhaps. A trial rule change should be seen as an opportunity for the nascent ebike community to prove themselves to the wider trails community.

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Other Battery Powered Vehicles

The TOS believes the idea that permitting Class 1 ebikes will put us on a slippery slope to permit a variety of other battery powered vehicles is a fallacy.

The "logic" underlying this fallacy appears to be the idea that we are recommending a trial rule change to permit Class 1 ebikes because they have quiet battery powered motors. Hence, if other vehicles can be outfitted with quiet battery powered motors, then would we not "naturally" permit those as well? Battery powered electric snowmobiles and dirt bikes exist. If we permit Class 1 ebikes, aren't they what's next?

It is quite easy to make a distinction between motorized devices that assist human locomotion, and motorized devices that replace human locomotion. Class 1 ebikes assist human locomotion. Class 2 ebikes replace human locomotion. In forming its recommendation, this distinction played a decisive role in the TOS's thinking. The TOS was favorable to a trial rule change to permit Class 1 ebikes, but was absolutely opposed to permitting Class 2 ebikes. These two classes of ebikes have identical performance characteristics in terms of power and speed. The only difference is that Class 2 ebikes have throttles, and can therefore replace human locomotion rather than merely assist it.

If we are not willing to recommend a trial rule change for Class 2 ebikes because they would replace human locomotion rather than merely assist it, then on what reasonable basis can it be suggested that permitting Class 1 ebikes will put us on an inevitable path to permitting battery powered electric snowmobiles and dirt bikes?

Several have asked, "If we permit Class 1 ebikes, what's next?" That question is based on a false assumption that something is always invariably next. Sometimes what's next is nothing. If we permit Class 1 ebikes, what's next? Nothing is necessarily next.

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Combustion Engine Vehicles

The argument that permitting Class 1 ebikes on the trails will invariably lead to permitting

combustion engine vehicles, and especially combustion engine motorcycles on the trails is merely a reprisal of the old argument that permitting conventional mountain bikes on the trails will invariably lead to motocross bikes on the trails. Mountain bike advocates fought against that fallacy, and they were right. If we consider slow speed Class 2 ebikes a bridge too far (and we very clearly do), then it would seem an unimaginable leap to suggest that permitting Class 1 ebikes will somehow lead to permitting combustion engine powered vehicles of any type.

5b. Technology: The Exoskeleton Case

The military continues to fund research into battery powered, motorized exoskeletons to assist foot soldiers, in the hope that such assistive technology will help them move farther, faster, and more efficiently on the ground. Numerous companies are developing these exoskeletons, and some have progressed quite far. Already some of these technologies are being developed for the civilian recreational market.

It is not a question of if we will start seeing hikers, skiers and snowshoers wearing battery powered, assistive exoskeletons on our trails. It is only a question of when. What ebikes are for conventional bikes, these exoskeletons will be for hikers, skiers, and snowshoers. And under our rules, these exoskeletons will be 100% permitted. Are we going to permit assistive technology to these trail user groups, but forbid analogous assistive technology to another?

Compounding the issue, under our existing rules, it would be fully permitted to wear a battery powered, motorized exoskeleton while riding a conventional mountain bike. We can imagine an exoskeleton that equipped a conventional mountain bike rider with the identical level of assistance that he would possess riding a Class 1 ebike. Under our current rule, which bans Class 1 ebikes, use of such an exoskeleton by a conventional mountain bike rider would be permitted.

Is the distinction between assistive technology worn on the body and assistive technology attached instead to a bicycle frame truly meaningful? Or is this a distinction without a difference? It would seem to be the latter. And, yet, Tahoe Donner's current rule distinguishes between these cases, banning one and permitting the other.

6. Trails Character

Disturbance and Trails Conflict

The association has the right (and even the duty) to prohibit activities that would unreasonably disturb a member's use and enjoyment of the commonly owned areas and facilities. Would permitting ebikes on the trails create an unreasonable disturbance? Because ebikes are a relatively new phenomenon, we remain uncertain. But the limited evidence and experience we do have suggests they would not. They are effectively silent. They are increasingly indistinguishable from ordinary mountain bikes. They do not appear to change rider behavior for the worse. The disturbances and conflicts associated with eMTBs appear to be the same as those associated with conventional mountain bikes. As such, we have no reasonable basis to assume permitting ebikes would create disturbances or conflicts beyond those already associated with all mountain bikes. In Tahoe Donner, we permit mountain bikes on our trails. If the worst one can

say about eMTBs is that they are mountain bikes, then as long as conventional mountain bikes are permitted, there is no truly reasonable basis for demanding eMTBs be banned.

Remote Areas and Trail Congestion

By lowering the barriers of entry, will permitting ebikes change the character of more remote areas that are less well traveled today? Just as the mechanical advantages of conventional mountain bikes lower the barriers of entry for some to travel to more remote areas, so the battery powered motors on eMTBs will do the same for an even larger population. To that extent, yes, eMTBs can be expected to make it easier for more people to access more remote areas.

Those that value the solitude of the more far flung trails may consider this a negative, but others will consider this a positive. Several Tahoe Donner members have directly told the TOS that the association should do more to make the more remote association properties accessible to a wider range of physical abilities. Permitting ebikes on our trails may be one way to facilitate that access. A number of TOS members also suggested that we should want members to be using and enjoying the full range of our trails, and if ebikes help more members use and enjoy that full range, then that would seem to be a good thing, not a bad thing.

Further, though permitting eMTBs may increase use of the more remote areas, in doing so it may help spread usage more widely across the trails system, decreasing user density in currently more popular areas. If, however, permitting ebikes increases overall trail usage, then we might encounter additional congestion at or near popular trailheads, unless the added efficiency of ebikes also encourages more trail users (and especially Tahoe Donner members) to ride rather than drive to a trailhead.

7. The Public

Tahoe Donner's trails are open to the public for various practical and policy reasons. The trails system has porous borders, there are effectively infinite points of entry, it is connected to other trail systems, we lack the ability to monitor trail usage effectively, we lack the ability to remove people from the trails, and in some areas access easements legally oblige Tahoe Donner to permit public access. Additionally, we are a tax-exempt 501c4 organization, and an HOA that is so classified "must primarily serve the community rather than the private interests of its members."[1] One way we serve the community is by permitting public access on our trails.

The issue of public access arose in the context of ebikes because some were specifically concerned that, particularly if Tahoe Donner is the only regional land manager to permit ebikes, then Tahoe Donner might become an ebike "mecca," increasing public use without additional benefit to members. However, in June 2019 the USFS announced that the Tahoe National Forest "will be extending opportunities for Class 1 E-MTB riders to use recommended non-motorized trails across the forest." These recommended trails include five non-motorized trails within the Truckee and Sierraville Ranger Districts: Hole In The Ground, Sawtooth, Mount Lola Trail, Cottonwood Overlook, and the Commemorative Overland Emigrant Trail. The last trail listed intersects Tahoe Donner's trail system. Currently, the Truckee Donner Land Trust has no ebike

1 See this link.

policy on its trails and open spaces.

Despite some curious rumors to the contrary, Tahoe Donner's Marketing Department never promotes our trail system to the public. Indeed, our Marketing Department has even intervened to stop outside publications seeking to promote our trails. So, although they do from time to time promote public events on our trails system (like races, for instance), the notion that they are actively promoting public usage of our trail system appears to be false. Historically in Tahoe Donner, *permitting* public use of our trails has not and does not entail *promoting* public use of our trails.

If the Board ultimately agrees to implement the TOS's recommendation for a trial rule change, the TOS would recommend that the rule change be implemented with a similarly quiet approach that reaches out only to the one group that truly needs to be informed about this matter: the members. There would be no reason to publicize this type of trial rule change beyond the members, and no reason to cooperate with any outside bodies that might wish to promote this trial rule change beyond the members.

Finally, if permitting ebikes makes our trails more attractive to members, we should expect that it will also make our trails more attractive to non-members. The TOS states this as a maxim: *What attracts members to our trails will also attract the public to our trails.* If our goal is to deter the public, then we will be forced to accept the inverse of that same maxim: *What deters the public from our trails will also deter members from our trails.*

8. Commercial Considerations

Inside Tahoe Donner

Though it is true that the review of Tahoe Donner's ebike ban originated with management's proposal for Bikeworks to rent ebikes, Bikeworks is outside the portfolio of this subcommittee and its commercial operation need not be a factor in our discussions or recommendations, which pertain only to the existing rule and its possible modification.

However, if a trial rule change is implemented, the association might reasonably ask if Bikeworks should play a role in introducing members to ebikes, and in providing some education and training to novice riders. For instance, it may be worthwhile to host member-only ebike demo days during a trial. Whether the association should purchase ebikes for that purpose, or partner with outside groups who may be willing to donate demo bikes for such events, is not something the TOS is prepared to make a recommendation upon at this time. However, and especially if a trial rule change is approved, we could schedule further discussions to provide the Board and staff with rollout advice and recommendations.

Outside Tahoe Donner

At least two members of the TOS have noted that some ebike advocacy groups, and notably People For Bikes, have an economic interest in promoting ebike usage. People For Bikes is an industry advocate group funded largely by the Bicycle Product Suppliers Association. To their

credit, People For Bikes does not hide this fact. However, the information derived from advocacy groups, even ones with economic interests tied to their advocacy efforts, is not necessarily unreliable. We should also bear in mind that independent land managers in this region and beyond consider People For Bikes a credible and authoritative source for reliable information about eMTBs.

Further, though some fears have been raised, there is no actual evidence to suggest this is a zero-sum game in which ebike manufacturers stand to profit at Tahoe Donner's expense if ebikes are permitted on our trails. At a minimum, Tahoe Donner would gain by better serving those members who do wish to make use of ebikes on Tahoe Donner's trails. At a maximum, Tahoe Donner would have the option of monetizing ebikes themselves through rentals and other association commercial ventures. And, critically, any monetary gain that ebike manufacturers stand to gain by virtue of Tahoe Donner permitting ebikes on its trails is incidental, and indistinguishable from the incidental monetary gain that conventional mountain bike manufacturers enjoy because Tahoe Donner's trails have long permitted conventional mountain bikes.

Finally, with regard to the TOS's recommendation for a trial rule change to permit Class 1 ebikes, neither these incidental outside commercial considerations nor the credibility of information from People For Bikes and other similar organizations are especially relevant. The TOS is not recommending a trial rule change because it believes a convincing *positive* case to permit ebikes has been made by anyone. Rather, the TOS is recommending a trial rule change because it concluded that nobody has made a convincing *negative* case against permitting them.

9. Urgency and Regional Rule Consistency

Absent clear and compelling reason to the contrary, in order to prevent confusion and conflict, Tahoe Donner's trails policies and practices should harmonize with the policies and practices of adjacent and proximate trails and trail systems. Because our trail systems are connected with Land Trust and US Forest Service trail systems, and because they can be expected to become even more connected in the future, if other regional land managers are moving to permit ebikes, then that is reason in itself to consider adopting similar rules here in Tahoe Donner, and to do so with some urgency. That said, the reverse is also true: if it turns out that adjacent and proximate land managers are ultimately hesitant to permit ebikes, we may want to be similarly hesitant in order to avoid creating a regional patchwork of contradictory rules. (It should be noted that, if neighboring land managers do permit ebikes, public access easements will oblige Tahoe Donner to permit ebikes on at least certain connecting trails.)

Other than seeking to harmonize our rules with those on adjacent trail systems, does Tahoe Donner have an interest in addressing the ebike issue sooner rather than later? Are there any downsides to keeping the existing policy in place, observing what happens if and when ebikes are permitted on neighboring properties, and deferring any recommendation on this topic until it can be incorporated into the updated Trails Master Plan?

Because we know that Bikeworks is regularly asked if they rent ebikes, and because we also know that shops around town enjoy a brisk ebike rental market, some TOS members have

suggested that the association may be forgoing a source of potential revenue by preserving the ban. If we lifted the ebike ban, Bikeworks could generate revenue by renting them. However, such operational issues are not in our portfolio and need not be factored into the TOS's considerations on this topic.

Because ebikes are already on our trails, others suggested the existing policy will inevitably produce conflict, both because ebike riders will be violating the rule, and because Tahoe Donner will not be able to enforce the rule effectively (or even at all). Hence, for the sake of preventing conflict, these subcommittee members believe there is an urgent need to change the rule.

Finally, wishing the ebike "issue resolved as soon as possible," in late August a member of the Tahoe Donner Board of Directors encouraged the TOS to address the topic sooner than later. In part due to this request, and in part to coincide with an ebike summit at Northstar, the TOS's first ebike discussion was scheduled for the TOS's October meeting. We arrived at a recommendation in November.

Importantly, the TOS's recommendation for a trial rule change will not actually resolve the ebike issue for Tahoe Donner. The recommendation would only put the association on an eventual path toward a resolution, with a final decision about permitting ebikes not expected until at least next winter. In that way, the TOS's recommendation represents something of a compromise between those who believe a resolution is urgently needed, and those who believe patience is in order because we lack the information and experience necessary to make a recommendation for a permanent rule change.

10. Next Steps and Future Considerations

Member Meetings

At the November 2017 Board of Directors meeting, the Board discussed the idea of scheduling "member meetings for a public discussion of the advantages and disadvantages of allowing e-bikes on TD trails." The TOS has concluded that there is little definitely known about those "advantages and disadvantages." Hence the recommendation for a trial to gain experience and information.

Given the paucity of information, a broad based member discussion on the "advantages and disadvantages of allowing e-bikes on TD trails" is more likely to mislead than enlighten. Rather, the TOS should hold member meetings to level with the members about what we know and do not know about ebikes, and to explain why we are recommending a trial rule change to gather more information and experience.

Member meetings to consider the proposed trial rule change should occur during a 45-day member notification period. And member meetings (and other events) to educate members and evaluate the trial should continue throughout the trial period if the recommendation is approved.

Alternatives and The Decision Paper

Board decision papers are not generally structured as a Hobson's choice: the recommended option or nothing. They typically include some non-recommended choices as well.

At a recent TOS meeting, staff noted that ebikes are not mentioned on existing trails signage, but that the signage could be updated once the ebike policy issue is settled. This prompted two TOS members to propose that, instead of recommending that ebikes be permitted on a trial basis, we gauge member interest in permitting ebikes on our trails by more actively publicizing our existing ebike ban. These TOS members recommended a publicity campaign like the one Tahoe Donner mounted in support of the rules against drones. They also recommended trail signage be updated before the summer of 2019 to raise awareness and eliminate any ambiguity.

Though if adopted some TOS members suggested this option is more likely to incite conflict than to lead to a well-considered, calmly delivered resolution, this option could certainly be listed as a non-recommended option for the Board to consider in a decision paper recommending a trial rule change to permit Class 1 ebikes.

11. Trial Rule Change Details

Time Limited Trial versus Geographically Limited Trial

The TOS is recommending a time limited trial that permits ebikes on all Tahoe Donner trails. Why is this preferable to a geographically limited trial that would permit ebikes only on specific trails or on specific types of trails (double-tracks, for instance)?

At Tahoe Donner, we do not currently restrict any multi-use trail user group to particular trails. Though some trails are designated "preferred," hikers, bikers, and horses are permitted on all trails without exception. While some believe it may be justified to restrict specific classes of users for proven cause (for instance, some have suggested that horses cause inordinate damage on specific trails), it is not justifiable to restrict classes of users on the basis of fears or unproven assumptions.

If we are contemplating adding ebike riders as a fourth user group, we must be careful not to single them out for any special restrictions absent definite cause. And today we lack definite cause to restrict ebikes to specific trails during a trial rule change.

Further, were we to restrict ebikes to particular trails during a trial rule change, that would prejudice the trial because members might infer that ebikes are likely a negative presence on the trails. It would also complicate the trial and become a source of confusion and conflict. For the sake of fairness and simplicity, a time limited trial to gauge acceptance of ebikes across our entire trail system is recommended.

Finally, it should be noted that for all we know today, the trial may in fact reveal that we do have definite cause to exclude ebikes from certain trails. In devising a permanent policy regarding ebikes, that would be critical information to know. But we cannot learn that information unless ebikes are permitted on all association trails during the initial trial.

Duration

The trial period would run from the date of enactment (presumably in the spring of 2019) through perhaps December 31, 2019. However, the end date could be the subject of further consideration and discussion. The Board would obviously have the option to extend the trial if more experience is deemed necessary. However, the longer the trial endures, the more inertia its policies will acquire.

Trail Monitoring: Staff and Volunteer Involvement

This trial should be designed to minimize new demands upon the trails staff. If additional time and labor is required to monitor and evaluate the trial, the TOS may be called upon to provide it, either through itself, or through cooperation with Tahoe Donner clubs and outside agencies like the Truckee River Watershed Council.

Trail Monitoring: An Uncontrolled Experiment

Tahoe Donner routinely collects data on trail erosion for the Lahontan Regional Water Quality Control Board. Could this data be used to evaluate the impact of ebikes on our trails? This is doubtful because there are so many other variables. This trial would not be a well-controlled experiment, and that is one flaw of this recommendation. As much as we are recommending physical monitoring, it may be very difficult (or even impossible) to evaluate the physical effects of ebikes on our trails in any definite or rigourous fashion. However, before passing judgment upon what may or may not be possible, we should consult further with organizations like the Truckee River Watershed Council and the Nature Conservancy who may be able to provide advice and guidance.

Member Outreach and Feedback

As noted at the October and November TOS meetings, some believe Tahoe Donner has been conducting a *de facto* shadow ebike trial without incident, conflict, or even notice for several years. The difference between a shadow trial and an open trial is that members know the latter is happening, and can be enlisted to participate in that trial in a variety of ways. Ultimately, we would want members to weigh in during and after the trial, not merely because members can and should weigh in with their personal opinions regarding rule changes, but also because members are the best eyes we have on our trails, and they can be made part of the "team" that will be monitoring the effects and reception of ebikes on our trails.

If we conduct this trial, we will want to enlist the membership to help monitor and evaluate the results, and that will require a great deal of continuous education and outreach. We may want to conduct periodic forums throughout the trial period. We may want to produce a pamphlet that could be distributed through various channels. It may be worthwhile to hold a series of ebike demo days exclusively for members. And we may also want to survey the members about ebikes, and perhaps even gauge their attitudes before and after the trial period to see if they change. Finally, we may want to establish a specific means for members to comment on their experiences

with ebikes on the trails, either through a dedicated email address or through the trails section on the Likemoji app.

Ultimately, one way or another, if members find reason to complain about ebikes, they will make themselves heard. If we conduct a trial and nobody complains, comments, or even seems to care, that will actually be strong evidence in favor of making the rule change permanent.

Publicity: Members Only

As noted earlier, the only people that truly need to be informed about a trial rule change are association members. To the extent possible, we should minimize notice of this trial beyond that population. Though the TOS doubts we can keep a trial of this sort entirely secret, we should do what we can to limit the distribution of this information via apps like Trailforks and Strava. Additionally, for at least the duration of the trial, we should seek cooperation from People For Bikes not to list our trail system on their ebike permitted maps.

Electric Fatbikes

A TOS member asked if the trial would include Class 1 rated electric fatbikes. In answering this question we should distinguish between the trails at our cross country center, and the trails outside our cross country center. Under the existing rules, conventional fatbikes are allowed on trails both inside and outside the cross country center. The former are freely accessible, and the latter require a fee. The cross country center also rents fatbikes. Under the proposed rule change, it seems obvious that Class 1 electric fatbikes would be permitted on trails outside the cross country center. It is not so obvious that they would be permitted inside the cross country center. That decision would appear to belong to the cross country center's management. However, because it would seem to be unwise to change rules mid-season, the TOS expects that the cross country center's manager may not wish to permit Class 1 rated electric fatbikes on the cross country trails during a trial, unless the trial extended throughout the entire winter season.