

MEMO

Date: October 1, 2019

To: Department Advisory Boards and Board of County Commissioners
From: Daylan Figgs, Director, Natural Resources Department

Purpose: To update the board on outreach and evaluation related to electric motorized bikes.

Current Regulation: Larimer County Natural Resources Department allows class I and II electric motorized bikes (e-bikes) on all concrete and asphalt paved surface trails.

Background

In response to increasing popularity and use of electric motorized bicycles (e-bikes), the State of Colorado passed a bill in April of 2017 which defines e-bikes into 3 classes (defined below) and designated e-bikes as non-motorized from the state's perspective. Section 5 of the bill gives local jurisdictions the authority to allow or prohibit the use of e-bikes on pedestrian and bike paths. More recently, legislation has been passed that allows electric motorized scooters (e-scooters) to be regulated to the same extent as Class I e-bikes. In other words, e-scooters cannot be treated or regulated different from Class I e-bikes. LCDNR took the opportunity to consider appropriate regulations associated with e-bikes as part of the updated departmental regulations. The decision was made to allow class I and II e-bikes on paved trails (which includes trails within three of ten of the county's open space properties).

Definitions of E-bikes

Class 1: An electrically assisted bicycle equipped with a motor that provides assistance only when the rider is pedaling and ceases to provide assistance at 20 mph.

Class 2: An electrically assisted bicycle equipped with a motor that provides assistance regardless if the rider is pedaling and ceases to provide assistance at 20 mph.

Class 3: An electrically assisted bicycle equipped with a motor that provides assistance only when the rider is pedaling and ceases to provide assistance at 28 mph.

Summary and Staff Recommendation

Larimer County Department of Natural Resources (LCDNR) collected information on e-bikes over the past year including public outreach (online LCDNR survey, informal stakeholder meetings, and discussions with the department's advisory boards). The majority of stakeholder



groups and public survey respondents (over 60%) were not in favor of allowing e-bikes on either all or some of existing natural surface trails.

LCDNR considers recreational opportunities both regionally and within the LCDNR system with the intent to manage a spectrum of recreation opportunities and a spectrum of wildness and remoteness on parks and open spaces. LCDNR does not currently allow motorized uses on park and open space natural surface trails. Already many of these trails are at or near capacity, and allowing for a new use, and one that at times can exceed the speed of any other use, is concerning for safety, capacity and the quality of existing user experiences. However, paved trails that traverse through 3 of the 10 county open spaces (River Bluffs, Lions and Long View open spaces), were designed to allow a higher level of use, meet alternative transportation and commuting goals, include trails designated for powered mobility devices for mobility impaired individuals, and currently do allow e-bikes/e-scooter motorized access. Additionally, trails located within the Federal lands managed by the County (Horsetooth Reservoir, Carter Lake, Pinewood and Flatiron) are being considered for the allowance of e-bikes, but the final decision has not been made.

Providing consistent cross boundary regulations is a goal we strive to achieve since visitors rarely know when they've left a city vs. a county property, and the lack of consistent regulations can be confusing and have negative consequences for users. LCDNR and Fort Collins have the preponderance of natural surface trails that connect and share identical regulations that allow Class I and II e-bikes on paved regional, commuter type trails and no e-bikes on natural surface trails. Currently, between Larimer County Natural Resources, and the cities of Fort Collins and Loveland, over 25% of the combined regional trail systems managed by these entities allow e-bikes.

Larimer County Department of Natural Resources staff is recommending continuing the recently adopted regulations that allow Class I and II e-bikes on paved, regional trails-only. This recommendation is based on a suite of considerations including: the public response received to date; the allowance for a motorized use into a traditionally non-motorized system; potential changes in regulation on Federal lands; public and staff concerns related to travel speeds and visitor safety; the pace at which electric bike and scooter technology is changing and thus hard to regulate based on a single point in time;; resource impacts to areas intended to be managed for their sense of wildness; and increased trail capacity implications. Staff propose to revisit this regulation during the next regular update of Department regulations, anticipated in late 2021.

Summarized Survey and Literature Review Information

Larimer County Department of Natural Resources E-Bike Informal Survey Results

E-Bikes on Larimer County Natural Surface Trails

	Class 1 E-Bikes on All Natural Trails	%	Class 1 E-Bikes on Certain Natural Trails	%
1 (against)	430	56	379	49
2	57	7	58	8
3	18	2	40	5
4	14	2	55	7
5	29	4	32	4
6	28	4	45	6
7 (in favor)	195	25	162	21
Total Survey Responses	771	100	771	100

Resident vs. Non-Resident

	#	%
Non-Resident	112	15
Resident	659	85
	771	100

Average Number of Years Lived in Larimer County: 16

Number of Times Visited LCDNR Property in the Past 12 Months (Highest to lowest)

Horsetooth Mountain OS	16.2	Hermit Park OS	1.4
Horsetooth Reservoir	13.7	Red Mountain OS	1.2
Devil's Backbone OS	7.6	Eagles Nest OS	0.9
Carter Lake Reservoir	2.5	River Bluffs OS	0.7
Pinewood Reservoir	2.2	Flatiron Reservoir	0.6
Lions Park OS	2.0	Ramsay-Shockey OS	0.5

Review of Survey Comments

The comments provided by survey respondents varied widely from those strongly in favor of e-bikes to those adamantly opposed. Included below are general summaries about the comments provided by the survey respondents to questions about e-bikes on the survey.

Survey Question #1: A Class 1 e-bike has an electric motor that only turns on when the rider is pedaling. The motor ceases to operate once the bike reaches 20 mph. Are you in favor of allowing Class 1 e-bikes on *all*-natural surface (dirt) trails managed by Larimer County that are already open to bicycles? (Select one.)

Respondents opposed commented on safety concerns due to speed potential and inexperience of e-bikes riders, resource damage, noise concerns, increased use on already congested and crowded trails, enforcement challenges, and generally not in favor of allowing any motorized uses on natural surface trails. Those in favor of e-bikes cited the benefits related to exercise, assistance for those with limited mobility or health issues, and that Class 1 e-bikes are quiet, efficient, and reliable.

Survey Question #2: Larimer County Natural Resources could designate certain trails in its system for e-bike use. Are you in favor of the department designating *certain* natural surface (dirt) trails for e-bikes?

Respondents opposed believe that certain trail designations would be too confusing for all users, be unsafe, create issues at junctions, lead to resource damage and that there are plenty of other options for e-bike users such as roads, commuter trails, USFS trails, and more. Those in favor believe there needs to be more options available to e-bike users on natural surface trails. Some respondents stated that by allowing select natural surface trails for e-bikes would provide an opportunity to pilot the use.

Boulder County E-Bike Literature Review

Boulder County completed an e-bike literature review in September 2019 to gather any published studies on e-bike trends, benefits and disadvantages, trip purpose, impacts to trails and recreational visitor conflicts.

Key trends and results of this literature review are as follows:

- Crowding is a concern on public lands across the nation. Spatial and temporal management strategies may be effective to alter visitor recreation patterns and thereby disperse use, minimize recreation conflict, and environmental impacts.
- Pilot studies have and are being conducted by land management agencies to analyze the potential effects of e-bikes within their jurisdiction.
- Recommendations for e-bike management on trails range from descending direction trails to speed limits to restrictions on trail width for e-bike use.

- Educational strategies may be useful when implementing e- bike regulations and for improving on-trail etiquette for all trail users.
- Given the recent introduction of e-bikes into the outdoor recreation space, there is a paucity of research on e-bike management prescriptions.

E-bike allowance by trail type in several jurisdictions within Colorado

Jurisdiction	Type of Trail/Area Where E-bikes are Allowed			
	Natural Surface ¹	Improved Surface ²	Paved	Motorized Use
U.S Forest Service				I, II, III
U.S Forest Service Special Use Permit	I, II			
Bureau of Land Management	I, II, III			I, II, III
National Park Service	I, II, III		I, II	I, II, III
Colorado Department of Transportation			I, II, III	
Colorado Parks and Wildlife	I, II		I, II	I, II
Boulder County Parks and Open Space		I, II,		
City of Boulder Open Space & Mountain Parks				I, II
City of Boulder Multi-use Paths			I, II	
Larimer County Natural Resources			I, II	
Fort Collins Natural Areas			I, II	
Fort Collins Moves			I, II	
Roaring Fork Transportation Authority			I	
Summit County Open Space & Trails			I	
Jefferson County Open Space	I		I, II	
Eagle County Trails			I, II	
City of Durango Parks & Recreation			I, II	
Village of Snowmass Transportation			I	
Town of Aspen Transportation			I, II, III	
City of Grand Junction			I, II	