Data Submitted (UTC 11): 10/23/2020 3:42:11 PM First name: Adrienne Last name: Naumann Organization: Title:

Comments: Dear Sir or Madam:

As a preliminary matter my perspective is also as a participant with two degrees in biology in addition to my law degree. My position for the proposed modifications of your land management regulations is: no e-bikers should access our national forests.

My comment is in outline format as follows:

I. Adverse effects on Wildlife

A. At least one study with elk concludes that reproduction is reduced with the increasing presence of human created disturbances within their habitats.

B. With increased noise and mechanical traffic: Animals will retreat from areas along trails, and thereby decrease opportunities of observing and photographing wildlife from an approved preexisting trail.

C. Some animal species require solitude and will be adversely affected by significant additional traffic and noise.

D.Animals will swallow and be poisoned by discarded expired batteries along the trail

1. There will also be additional trash comprising expired batteries; and

2. Actual physical habitats may be poisoned or otherwise contaminated whenever discarded batteries leak into or onto the ground

II. Effect of e-bikes upon physical trail quality, quantity, numbers and integrity

A. Habitat fragmentation by e-bike trails would contribute to the well documented adverse effect of fragmentation on wildlife.

B. Bikers will also ride outside established approved trails and thereby

1. destroy the wildflowers and other vegetative species growing along the trail; and

2. scar the landscape

3. there will be requests for charging stations along the trails.

C. With increased motorized traffic the trails will require legally compliant scores of traffic signs for right of way, stopping, slowing, etc.

D. My understanding is that there are already 400,000 miles of roads in national forests,

E. A recent comprehensive series of reports documents analogous problems with increasing human use of California parks: Effects of non-consumptive recreation on wildlife in California." Journal for the Conservation and Management of California Species and Ecosystems, Recreation Special Issue 2020.

III. Effect upon hikers and equestrians

A.E-bikes will disturb wildlife, especially larger herbivores and bears

1. E-bikes will significantly decrease visual access to wildlife along a narrow well defined established trail

2. These hikers then become more likely to leave the trail, thereby trampling the areas adjacent thereto, and

a.engaging in behavior that increases the probability of danger from surprised, hungry, or angry wild animals.

B. E-bikes compared to equestrians

1. Unlike e-bikers, equestrians generally ride in groups which are tightly supervised by experienced guides hired by private livery companies.

a. there are also rules imposed by these companies for the group's safety.

2. Horses are generally quiet and I have repeatedly observed during these ride that the horses and large animals (such as elk, sheep, mule deer, white tail deer, and even bears) are accustomed to each other.

a. as a result equestrians have a good chance of observing large wildlife from their horses because the

animals tolerate the horses and come very close to the trail.

3. Horses(and mules) generally stay on a trail, especially with (i)experienced equestrians, and (ii)alongsteep inclines or downward slopes.

4. Horses and mules are always slow and travel at a walking pace

a. because the livery stables' liability insurance carriers do not permit them to do anything else.

b. as a result with horses and mules there is no problem with people 'speeding' along a trail

C. Noise: e-bike noise from the motors, especially if speeding, will disturb animals and other people who are seeking peace and quiet(and the animals)

D.Risky e-bike behavior

1. at last one recent study has examined the prevalent adverse riding habits of e-bikers: C. Ma et al., "Risky Riding Behaviors of Urban E-Bikers: A literature review." International Journal Environment Res. Public Health 16(13) June 2019.

2. These adverse behaviors include using a cell phone while riding the e-bike.

3. Hikers do not visit the national parts to endure a network of noisy trails and roads where they are run down by speeding e-bikers.

IV. Concluding observations and recommendations

A. Over my lifetime I have observed our national parks increasingly accessed by international and domestic visitors.

B. To accommodate them more roads, utilities, campgrounds, shelters, buses and trails have been added to the parks.

C. As a result over the years there has been there has been a general deterioration of the national park and federal lands experience.

D . The presence of e-bikes not only places hikers in danger from risky behaviors, but disturbs their quest for undisturbed nature, quiet and solitude.

1. E-bikes are an asset in urban areas, but they are not appropriate for national forest where people go to escape this same urban environment.

2. Is your agency committed to allocating significant financial resources for the enforcement of safety/trail regulations if crowds of e-bikers are permitted? If there is no enforcement then in addition to the other concerns I raised earlier, there will be a significant risk to hikers from this human activity.

For these reasons I respectfully request that e-bikers be prohibited from operating in all our federal lands, and especially our federally managed forests.

Respectfully submitted, Adrienne B. Naumann, M.S., J.D.