

Re: Chestonia Township Public Hearing on August 22, 2024 on the proposed ORV ordinance

To the Chestonia Township Board,

### *Introduction*

My name is Anna McGlashen, and I am the local policy manager for the Tip of the Mitt Watershed Council, a local nonprofit dedicated to protecting the water resources of Northern Michigan. I was contacted by the Friends of the Jordan River Watershed to weigh in on this issue because there was concern that the proposed ordinance would cause unwanted harm to the environment. In consultation with other staff at the watershed council and a brief review of online resources, I am writing to recommend that the Township Board vote down the proposed ordinance.

### *Disclosure*

The information presented is our best understanding at this time, but if there are conflicts we would defer to others with more expertise. Further, I will raise environmental issues (such as the spread of non-aquatic invasive species) that are not directly related to our mission of water quality protection. These issues are raised for completeness.

### *Argument*

The operation of ORVs in Chestonia Township will likely negatively impact the environment through 1) spreading invasive species and 2) increasing siltation/erosion into waters which also 3) disturbs water quality and aquatic habitat to the detriment of fish and other aquatic species.

### **Invasive Species**

Invasive species are a serious economic and environmental concern for the Great Lakes region. More than 5.7 billion dollars of economic impact is estimated from aquatic invasive species in the Great Lakes Region, and more than 42% of threatened or endangered species are considered at risk due to non-native species. Michigan's Department of Natural Resources (DNR) and Department of Environment, Great Lakes, and Energy (EGLE) are taking financial and regulatory steps to stop the spread of these invasive species to support and save our native flora and fauna for the betterment of our communities and our economies. From our staff, "[m]any invasive species can be severely damaging to our ecosystems and any attempt to limit the spread should be taken. The tires on an ORV can hold seeds or root systems of a number of invasive species and easily spread them to any roadside or trail. There is a concern that people visiting from other areas where certain invasive species are present that are not yet in Northern Michigan, may introduce these species. An emphasis should be placed on the proper cleaning of an ORV (specifically the tires) to limit the spread of invasive species". ORV use often takes place on along the sides of regularly trafficked roads where invasive species like purple loosestrife flourish. Invasive species often colonize disturbed habitats like those maintained by the road commissions to ensure sight lines in the right of way. Unfortunately, ORVs can easily transport these invasive species not just down the road, but into the forests and along the trails and seasonal roads that are vulnerable to invasion. For more detailed and authoritative information on invasive species, please reach out to the CAKE CISMA (Charlevoix, Antrim, Kalkaska, Emmet Cooperative Invasive Species Management Area) staff, who can be contacted at <https://www.cakecisma.org/>.

## **Erosion & Aquatic Habitat**

It can be difficult to quantify the impact from increased ORV usage, but our staff and other environmental organizations have definitively connected ORV usage to environmental harms. Our staff say “[w]hen an ORV trail is on or near a streambank or lakeshore, it can destabilize and erode the bank, especially with continued use and rutting. This destabilization causes more sediment to enter the stream. Increased sedimentation in the streambank can directly cause loss of fish and wildlife habitat as the sediment fills in areas between cobbles and branches that many species use as habitat. When an ORV trail goes through a wetland ecosystem, the ruts that the tires create can disrupt the flow of water as well as trample the existing plant community. This disruption can then affect wildlife habitat in the wetland and negatively affect native plant communities.” This relationship is described in more detail on the Cumberland River Compact’s website: “Siltation negatively impacts ecosystems in many ways. Excessive silt clogs gills, and smothers eggs and nests. It can bury habitat aquatic insects need for survival, which impacts organisms up the food chain that eat these insects for survival. Siltation can also interfere with photosynthesis in aquatic plants resulting in a decrease in needed dissolved oxygen. Important components of aquatic habitat, which native aquatic species rely on for survival, are altered by siltation. These include the amount of light, the temperature, depth, and flow of water. In addition, pollutants like fertilizers, pathogens, pesticides, and heavy metals can be attached to soil particles that find their way to our water. Siltation also increases levels of treatment needed for drinking water, fills up reservoirs and navigation channels, and increases a waterbody’s likelihood of flooding.” Due to the negative environmental impacts associated with erosion and siltation, taking actions to minimize or mitigate erosion are in the best interests of the township. This is particularly a concern in this instance because the erosion threatens a high quality and more strictly regulated natural river (the Jordan) and threatens the topsoil preservation needed for agricultural production.

The Jordan River is the largest tributary for Lake Charlevoix and is a local and tourist destination for Northern Michigan fly fishing. The Jordan River is also a designated “natural river” slated for more rigorous environmental protections for the benefit of all Michigan residents. In the River Plan the existing uses for Scenic/Aesthetics, Fishing, Wildlife Observation and Hunting, Canoeing/Boating, and Ecological Systems are highlighted as benefits. Additionally, Antrim County’s Master Plan has identified a strong orientation towards the protection and preservation of farmland. The soil erosion and vegetation impacts associated with ORV use are both a major environmental threat to agricultural sustainability and productivity and also a threat to the scenic/aesthetic, fishing, and ecological systems uses identified in the River Plan. Both the River Plan and the County Master Plan provide guidance that highlight the importance of environmental protections.

The river is currently surrounded by high value mature forests, scenic trails, and other highly valued recreational opportunities. Because Chestonia Township is transected by a network of tributaries for the Jordan, the types of land use permitted by the township (such as ORV use) can have a direct impact on water quality downstream, including on Lake Charlevoix.

## **Economics**

Permitting ORV use in Chestonia township may provide some additional economic benefit, either through increased ORV tourism leading to increased purchases at restaurants and shops, or from new businesses that might be created to cater to these recreational users. However, it is also possible that the visible and invisible environmental degradation resulting from increased ORV traffic will decrease

environmental tourism and cause a negative economic impact. Quantifying the relative impacts would require much more time, so I will not attempt it. I will instead suggest that it is difficult and extremely expensive to recover and restore a scenic and resilient environmental ecosystem which is currently providing economic value to your community. It is not a foregone conclusion that increased ORV traffic will cause widespread and substantial environmental degradation across the Jordan River Valley, but from the reviewed literature and the best understanding of Watershed Council staff it is extremely likely that there will be significant undesirable environmental impacts if this ordinance passes. It is our understanding that a purely economic argument for or against passage of the ORV ordinance would require additional research to substantiate any position.

### **Alternatives & Mitigation**

One method to prevent the spread of invasive species is to thoroughly wash and dry the ORVs between use, which can be easily accomplished with a hose at a private residence. However, this is unlikely to happen regularly and even if it does, this washing would not prevent the spread of invasive species during one interval of use (an ORV that picks up the seeds of an invasive species at the beginning of the day may shed or spread those seeds throughout the day even if the vehicle is washed at the end of the day). The township could provide educational materials requesting ORVs to be cleaned regularly, post educational signage, or install cleaning stations to increase the frequency of washing. Individuals can be encouraged to wash their ORVs if they are moving between sites. For the control of aquatic invasive species we typically suggest visually inspecting boats for obvious vegetation or species clinging to boat sides and wells and cleaning the boats with heated and/or pressurized water before changing watersheds/bodies of water. There is likely a version of this protocol that can be applied to ORVs.

One method to prevent siltation of water resources is to create a water resources setback for ORVs. I'm not sure exactly how this would work logistically, but requiring a densely vegetated buffer between roads and trails that allow ORV traffic and the Jordan River/its tributaries would be a good start.

Another option would be to open up a dedicated area for ORV use, such as a set of parks. These areas should have limited water resources and should be regularly monitored and maintained to prevent or remove invasive species. This option allows recreational use of ORVs in Chestonia but provides more oversight and control over the environmental damage these vehicles tend to cause.

Another potential intervention is to create a map of allowable access areas, limiting ORV use to roads that are relatively isolated from sensitive environmental resources.

### *Conclusion*

Thank you for taking the time to read this summary. It is the opinion of the Watershed Council that opening Chestonia Township to increased ORV use will negatively impact water quality. Due to this negative impact, we recommend that Chestonia Township does not pass the proposed ORV ordinance. If the Township decides to move forward with the ordinance, we suggest exploring options to minimize and mitigate the environmental impacts. Please feel free to reach out with any questions.

Best,

Anna McGlashen

Local Policy Manager