

SF 1324: Rationale for Protecting Exceptional Use MPCA Ranked Waters And Buffer Zone Requirements for Waters on Designated Unpaved OHV Routes

According to the biennial MPCA Impaired Waters report, over half the waters in the state are impaired. (1)

MPCA ranked Exceptional Use waters are among the most pristine waters remaining in the state. There are only 49 Exceptional Use listed streams in the state in 2023 and they are almost all in the north. These pristine, cold-water streams serve as critical thermal refuge in the climate crisis for sensitive species like our state walleye and brook trout.

SF #1324 requires that designated Off Highway Vehicle (OHV) routes on unpaved roads avoid these pristine waters to prevent water degradation that would put these sensitive aquatic species at risk.

The aggressive tire treads of off-road vehicles on unpaved roads increases soil erosion, which in turn increases sedimentation and run off to waters. Copious amounts of dust pollution are also created, which studies have shown can travel as far as 300 feet from the vehicle source to deposit in waters.(2) Sedimentation and dust pollution in waters absorbs solar heat and increases water temperatures, stressing and imperiling sensitive cold-water species. Elevated levels of sediment and turbidity also impact the aquatic life food chain and reproduction and cumulative effects can be lethal, reducing oxygen and clogging or harming delicate gills. (3, 4 & 5)

Given the ongoing multi-million-dollar funding, averaging \$20 million in the past two years, (6) and the three DNR statewide master plan systems for ATVS, Off Road Vehicles and Off Highway Motorcycles, protecting the relatively few remaining pristine streams in the state is a common sense measure to protect the sensitive species that need these cold, clear waters to survive. This need is all the more urgent in our climate crisis and warming waters.

Buffer zones for all water bodies on OHV designated routes on unpaved roads

SF #1324 puts in place buffer zone requirements for designated OHV routes on unpaved roads, that are science based Best Management Practices (BMPs) used by National Forests and included in their official Forest Service Document widely used to manage off-road vehicle use on national forest lands. (4)

Best Management Practices provide science-based criteria and standards that land managers follow in making and implementing decisions about human uses and projects that affect natural resources. BMPs are used for implementation and monitoring to mitigate impact. (4)

Currently there are no buffer zone requirements for OHV designated trails.

This can result in trails on unpaved roads being too close to waters when crossing waters or traveling alongside them, creating ineffective buffer zones and increased sedimentation and dust pollution to waters. Examples of this are evidenced in the Border-to-Border Touring Route for Highway Licensed OHVs on unpaved roads. It has also been determined, as noted, that dust pollution can travel 300 ft from a vehicle sources to land in waters. (2)

Research has found that the risk of stream sedimentation and negative impacts on aquatic habitat are highest at stream crossings. (7)

Best Management Practices for soils, used by National Forests, are: (7)

- Locate routes a minimum distance (as listed below) from waterbodies and wetlands:
 - Fish-bearing streams and lakes – 91 m (300 ft)
 - Permanently flowing non-fish-bearing streams – 46 m (150 ft)

(1) <https://fmr.org/updates/water-legislative/minnesota-updates-list-impaired-waters-2022>

(2) Monitoring fugitive dust emissions from off-highway vehicles traveling on unpaved roads and trails using passive samplers, Pamela E. Padgett & Dexter Meadows & Ellen Eubanks & William E. Ryan, Received: 4 April 2007 / Accepted: 28 August 2007 / Published online: 28 September 2007 # Springer Science + Business Media B.V. 2007

(3) The impacts of fine sediment on riverine fish [Paul Kemp](#), [David Sear](#), [Adrian Collins](#), [Pamela Naden](#), [Iwan Jones](#) First published: 24 January 2011

(4) <https://www.wsdot.wa.gov/research/reports/fullreports/526.1.pdf>

(5) Effects of Suspended Sediments on Aquatic Ecosystems [C. P. Newcombe](#), [D. D. Macdonald](#) First published: February 1991 [https://doi.org/10.1577/1548-8675\(1991\)011<0072:EOSSOA>2.3.CO;2](https://doi.org/10.1577/1548-8675(1991)011<0072:EOSSOA>2.3.CO;2)

(6) <https://www.atvrider.com/story/news/minnesota-budgets-13-million-for-atv-trail-upgrades-and-expansion/> (plus additional 5 million noted in article) ATV Rider, 8/26/21 by Ross Ballot

(7) http://www.willallen.com/JCP/JCP_2012_V08_2_Switalski.pdf
Off-road vehicle best management practices for forestlands