

27 Stevens Road, PO Box 428 Grand Portage, Minnesota 55605

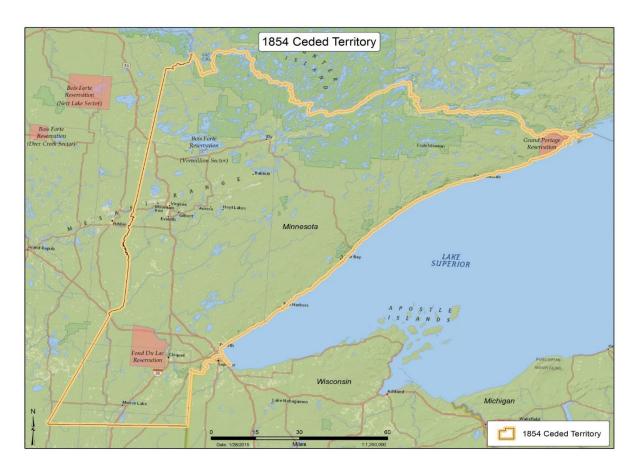
William Cole william.cole@state.mn.us 520 Lafayette Road North St. Paul, MN 55155-4194

Re: MPCA Draft Water Quality Standards Work Plan for 2025 to 2027

January 21, 2025

Dear Mr. Cole:

The Grand Portage Band of Chippewa (the "Band") is a federally recognized Indian tribe that retained hunting, fishing, and other usufructuary rights that extend throughout the entire northeast portion of the state of Minnesota under the 1854 Treaty of LaPointe¹ (the "Ceded Territory"). Grand Portage has and continues to assert these rights throughout the Ceded Territory.



¹ Treaty with the Chippewa, 1854, 10 Stat. 1109, in Charles J. Kappler, ed., *Indian Affairs: Laws and Treaties*, Vol. II (Washington: Government Printing Office, 1904), available on-line at http://digital.library.okstate.edu/kappler/Vol2/treaties/chi0648.htm.





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The Band hereby submits these comments in connection with Minnesota's 2025 – 2027 water quality standards triennial review proposed scope of work. Grand Portage assumed Treatment-in-the-same-manner-As-a-State ("TAS") status under the Clean Water Act for purposes of administering Water Quality Standards in 1996. We have adopted and received federal approval for our water quality standards program and 401 certification process.

Protect Subsistence Fish Consumers in the Ceded Territory

Grand Portage respectfully requests that the MPCA consider developing water quality standards criteria using higher levels of fish consumption to protect the health of Tribal members who consume more fish than the general population and have reserved rights within the Ceded Territory. The current level of fish consumption in the Lake Superior basin is 30 grams per day², or approximately 1 ounce of fish. We recommend using a minimum subsistence fish consumption rate of 142.4 grams per day, or about 5 ounces per day. The 142.4 gram/day rate is located within the "Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health", EPA, October 2000. Additional supporting documentation for the 142.4 grams/day of fish consumption is contained in the "National Recommended Water Quality Criteria Technical Support Document", EPA, November 2002, which lists 148.83 grams of fish consumption per day to protect children or women of childbearing age against developmental effects.

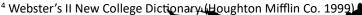
Manoomin /Psin is a Naturally Occurring Aquatic Plant that Supports a Unique and Abundant Ecosystem

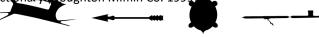
"One of the most important beneficial uses protected by Minnesota rule and the Clean Water Act is aquatic life (Class 2 – Aquatic life and recreation).

- 1. It protects ecosystems, habitats, and aquatic biota including fish, insects, mollusks, crustaceans, plants, microscopic organisms, and all other aquatic-dependent organisms.
- 2. It protects recreational uses such as swimming, fishing, hunting, and boating.
- 3. It is assigned to nearly every waterbody in the state."3

Wild rice is a beneficial use that has been relegated to Class 4, Minnesota's agricultural irrigation use classification. This is despite multiple consultation sessions specifically focusing on wild rice water quality standards during which Minnesota tribes have *consistently and unanimously* recommended to the MPCA that natural wild rice stands (manoomin in Ojibwe, psin in Dakota) should be classified under Minnesota's Class 2 waters (aquatic life uses) in both chapters 7050 and 7052 of the Minnesota Rules. The Bands have noted that it may be appropriate to identify paddy rice in Class 4 because—unlike natural wild rice stands as a whole—paddy rice is a true cultivated agricultural product. Irrigation is defined as "...to supply (dry land) with water by means of ditches, pipes, or streams", 4 so it is simply incorrect to infer that the natural hydrology required to grow manoomin is "irrigation." In fact, many waters containing manoomin/psin have been lost to past irrigation practices, including ditching.

³ MPCA. Class 2: Aquatic life and recreation beneficial uses. <u>Class 2: Aquatic life and recreation beneficial uses |</u> <u>Minnesota Pollution Control Agency</u>





² MPCA Statement of Need and Reasonableness, Human Health Methods Sonar. April 22,2014, available on-line at https://www.pca.state.mn.us/sites/default/files/wq-rule4-08c.pdf



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We urge MPCA to take this up during the upcoming triennial review to better protect natural stands of wild rice that do not have the same habitat and growing requirements that paddy wild rice has. Minnesota tribes have steadfastly advised the MPCA that water quality protections for manoomin/psin should focus on preserving and enhancing the sustainability, rather than "production." This focus is fundamentally consistent with Section 101(a) of the Clean Water Act, GP MPCA Triennial Rev. Cmts. April 8, 2021 the "protection and propagation of fish, shellfish and wildlife" use, which can include the protection of aquatic flora. Therefore, we believe the appropriate classification for manoomin/psin is in Minnesota's Class 2 waters, which apply broadly to the physical, chemical and biological attributes necessary to preserve, enhance, and *sustain* aquatic life."

Develop Specific Conductance Criteria to Protect Aquatic Life From the Harmful Effects of Salts

We would like the MPCA to add regional numeric specific conductance criteria for the protection of aquatic life uses in both Minnesota Rules chapters 7050 and 7052. Specific conductance is a far better measure of the negative impacts of salty discharges than developing criteria for single pollutants like chloride and sulfate that may only constitute a portion of a salty discharge. Because specific conductance is a measure of a suite of salty parameters, it protects aquatic life from the synergistic effects of several salty parameters. Impacts to aquatic insects, which are very sensitive to salts, can have cascading effects including potentially killing fish that rely on those insects in downstream waters. MPCA's 10-year assessments of watersheds monitoring and assessment database shows just how specific conductance impairs aquatic life and illustrates that these existing impairments have gone unaddressed without numeric protections for far too long.⁵

MPCA has enough information to set numeric specific conductance values to protect aquatic life. Research done by Bruce and Maureen Johnson determined that a protective specific conductance concentration for aquatic insects in northeastern Minnesota—meaning the maximum safe limit—would be approximately $300~\mu\text{S/cm}$. Additionally, MPCA's stressor identification study of the St Louis River documented concentrations of specific conductance exceeding 2,000 $\mu\text{S/cm}$, and validated the substantial reductions in macroinvertebrate populations statewide at specific conductance concentrations at or above $500~\mu\text{S/cm}$. It was this research that guided the Fond du Lac Band in establishing a US EPA-approved water quality standard for specific conductance of $300~\mu\text{S/cm}$ to protect reservation waters, including a portion of the St. Louis River, based on the 2015 Johnson and Johnson report and EPA's independent analysis. Since then, Grand Portage has adopted Specific Conductance

⁵ The great majority of Minnesota tribes jointly commented on specific conductance issues in connection with the Class 3 & 4 rulemaking, and those comments (including both initial and rebuttal) are incorporated in their entirety by reference here. *See* Jt. Tribal Cmts. on Proposed Amendments to Rules Governing Water Quality Standards, Minnesota Rules chapters 7050 and 7053; Revisor ID No. 4335; OAH Dkt. No. 65-9003-37102 (Feb. 24, 2021), at 13-16; *see also* Jt. Tribal Rebuttal Cmts. (Mar. 3, 2021).

⁶ See State. of Need and Reasonableness, In the Matter of Proposed Revisions of Minnesota Rule Chapters 7050 and 7053, Relating to Water Quality Standards – Use Classifications 3 and 4; Revisor ID No. 04335 (Dec. 12, 2020) ("SONAR") at Ex. S-10 at 272, available at https://www.pca.state.mn.us/sites/default/files/wq-rule4-17k.pdf.

⁷ MPCA, St. Louis River Watershed Stressor Identification Rep. (Dec. 2016) at 34 fig. 3, at https://www.pca.state.mn.us/sites/default/files/wq-ws5-04010201a.pdf. *See*, *e.g.*, MPCA, St. Louis River Watershed Stressor Identification Rep. (Dec. 2016), at https://www.pca.state.mn.us/sites/default/files/wq-ws5-04010201a.pdf.; MPCA, Minnesota's Impaired Waters and TMDLs, Approved TMDLs and Wraps, (Jan. 2021) at https://www.pca.state.mn.us/sites/default/files/wq-iw1-13c.pdf



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Criteria for reservation waters that were approved by USEPA in 2023. Grand Portage criteria are more stringent than Fond du Lacs criteria and are intended to protect naturally reproducing Coaster Brook trout and sensitive aquatic insects.⁸

Add New Nitrogen Criteria to Protect Aquatic Life and Human Health

We request that MPCA add total nitrogen criteria for the protection of aquatic life and human health during this triennial review. Total nitrogen is the sum of total Kjeldahl nitrogen (TKN), ammonia and nitrate-nitrite. Nitrogen is part of natural aquatic ecosystems and is the most abundant element in the air we breathe. Excess amounts of nitrogen in water depletes oxygen and can adversely impact sensitive aquatic organisms. Nitrogen supports the growth of algae and aquatic plants, which provide food and habitat for fish, shellfish and smaller organisms that live in water. But when too much nitrogen enters the environment—usually from human activities—the air and water can become polluted resulting in serious environmental and human health issues, and adversely impacting the economy.

Excess nitrogen in the atmosphere can produce pollutants such as ammonia and ozone, impairing our ability to breathe, limiting visibility, and altering plant growth. When excess nitrogen comes back to earth from the atmosphere, it can harm the health of forests, soils, and waterways. Too much nitrogen in the water causes algae to grow faster than ecosystems can handle. Significant increases in algae harm water quality, food resources, and habitats, and decrease the oxygen that fish and other aquatic life need to survive. Some algal blooms are harmful to humans because they produce elevated toxins and bacterial growth that can make people sick if they come into contact with polluted water, consume tainted fish or shellfish, or drink contaminated water. Nitrogen pollution in ground water—which most rural residents of Minnesota use as their drinking water source—can be harmful, even at low levels, with infants being the most vulnerable. At a minimum, we request that MPCA adopt EPA's revised 2013 ammonia criteria during this triennial review period.

Protect All Groundwater in the State as a Source of Drinking Water

MPCA must continue to protect all groundwater in the state as a source of drinking water. This is protective of both municipalities and individual homeowners who may rely on groundwater as their drinking water source. Drinking water sources can vary over time based on both surface and groundwater elevations and water quality, it is imperative that MPCA protect any source of surface water that may in the future be needed for drinking water in addition to protecting all of Minnesota groundwater as a drinking water source. This means any surface waters capable of supporting a community drinking water source should be protected as such whether or not the community is actually currently using it for such purposes.

https://www.health.state.mn.us/communities/environment/water/wells/waterquality/nitrate.html #: ``:text=Natural %20 levels %20 of %20 nitrate %20 in, down %20 and %20 contaminate %20 the %20 ground water.

⁸ Watkins, M. 2023. Technical Support Document for the Numeric Site-Specific Criteria for Nutrients, Aluminum, and Specific Conductance within the Reservation of the Grand Portage Band of Lake Superior Chippewa. https://www.1854treatyauthority.og/images/GP.TSD.pdf

⁹ MN Department of Health, Nitrate in Well Water,

¹⁰ EPA, Aquatic Life Ambient Water Quality Criteria for Ammonia—Freshwater (Apr. 2013), EPA-822-R-13-001, available at https://www.epa.gov/sites/production/files/2015-08/documents/aquatic-life-ambient-water-quality-criteria-for-ammonia-freshwater-2013.pdf



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During this triennial review we request that MPCA develop criteria to protect subsistence fishing, moving manoomin/psiŋ to aquatic life uses, add regional specific conductance criteria to protect aquatic life, add nitrogen criteria to protect aquatic life and human health, and protect all of Minnesota's groundwater as a drinking water source. Thank you for the opportunity to provide suggestions for the upcoming MPCA triennial review of water quality standards.

Sincerely,

Margaret Watkins
Margaret Watkins

Grand Portage Water Quality Specialist