



February 24, 2021

Administrative Law Judge Eric Lipman
Office of Administrative Hearings
Submitted online only, OAH Granicus Ideas Website

Re: Comments 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.

Honorable Judge Lipman:

The 11 undersigned Minnesota tribes and tribal entities jointly submit these comments opposing the Minnesota Pollution Control Agency (“MPCA’s”) planned amendments to Class 3 & 4 water quality standards at Minnesota Rules chapter 7050s and 7053.¹ Also attached are a summary of the comments that Grand Portage Secretary-Treasurer April McCormick delivered orally at the hearing on February 4 on behalf of Minnesota tribes. These proposed changes would remove longstanding and enforceable numeric limits for pollutants and convert them into harder-to-enforce narrative standards. They ignore the interconnected habitats and needs of aquatic life, terrestrial wildlife, plant life, and humans—all of which depend upon clean water and each other for survival. These changes only look out for the interests of large-scale industrial dischargers who want to limit their regulatory costs, and ignore the best interests of Minnesotans and our waterways.

If passed, these standards have the potential to significantly impair the health of Minnesota waters. That damage will be all the more severe for the state’s tribal citizens, who rely on wild rice, fish, and other treaty-protected resources for subsistence at rates higher than the rest of the population, and who are already subject to disparate impacts because of widespread water pollution. Put another way, these proposed rule changes are a direct violation of the state’s environmental justice commitments. In fact, aspects of the rule change appear to be an indirect attempt to remove protection measures for the state’s wild rice waters—undercutting OAH’s rejection of MPCA’s attempted rollback of wild rice protections in 2018. Unsurprisingly, these proposed changes are also the result of inadequate state consultation with the tribes—a process that the agency has persistently misrepresented.

¹ The rules to be changed are specifically located at Minn. R. 7050.0140, 7050.0223, and 7050.0224.

Additionally, the agency’s proffered justifications for the rule changes are substantively defective because they lack sufficient scientific or legal basis under the federal Clean Water Act (the “Act”), as well as corresponding state law. The OAH should reject the proposed changes now and save the state further, improper expenditure of resources on defending fundamentally flawed rules—just as the OAH rejected MPCA’s last, industry-supported attempt to limit protections for wild rice waters.² If the OAH instead approves these rules as written, we will urge the EPA to disapprove them and we will consider all our other options to uphold the Clean Water Act and keep scientifically-defensible rules in place.

I. Tribal coalition.

It is believed to be unprecedented for this many tribes to submit joint comments on any MPCA rulemaking (in addition to some tribes and tribal agencies submitting separate comments), a fact that should speak for itself as to the importance of this issue to Minnesota’s tribal governments. The four Dakota tribal governments in Minnesota are the Lower Sioux Indian Community, Prairie Island Indian Community, Shakopee Mdewakanton Sioux Community, and Upper Sioux Community (which submits separate comments). The six tribal governments of the Minnesota Chippewa Tribe are the Bois Forte Band of Chippewa, Fond du Lac Band of Lake Superior Chippewa, Grand Portage Band of Lake Superior Chippewa, Leech Lake Band of Ojibwe, Mille Lacs Band of Ojibwe, and White Earth Band of Ojibwe. The Red Lake Nation is also Ojibwe and has separate federal recognition.³

In northeastern Minnesota, throughout the entire Arrowhead Region, the Bois Forte, Fond du Lac, and Grand Portage Bands retain usufructuary rights in the lands and waters that were ceded to the United States under the 1854 Treaty of LaPointe (the “1854 Ceded Territory”).⁴ These rights were retained to ensure hunting, fishing, and gathering for subsistence, economic, cultural, medicinal, and spiritual needs could continue into perpetuity. Likewise, the Mille Lacs and Fond du Lac Bands retain usufructuary rights under the 1837 Treaty with the Chippewa, and the 1837 Ceded Territory stretches across east central Minnesota into Wisconsin.⁵

² In the Matter of the Proposed Rules of the Pollution Control Agency Amending the Sulfate Water Quality Standard Applicable to Wild Rice and Identification of Wild Rice Rivers... (“Wild Rice Rulemaking”), Rep. of ALJ (Jan. 9, 2018) (“ALJ Report”), available at <https://www.pca.state.mn.us/sites/default/files/wq-rule4-15mm.pdf>; Chief ALJ Order on Rev. (Apr. 12, 2018) (upholding disapproval after MPCA resubmission of rule without required revisions), available at https://mn.gov/oah/assets/9003-34519-pca-sulfate-water-quality-wild-rice-rules-chief-judge-reconsideration-order_tcm19-335811.pdf; MPCA Notice of Rule Withdrawal (Apr. 26, 2018), available at <https://www.pca.state.mn.us/sites/default/files/wq-rule4-15oo.pdf>. See also GP Cmts. on WR Rule (Oct. 24, 2017), at Ex. H.

³ Information about all 11 Minnesota tribes can be found at the Minnesota Indian Affairs Council webpage at <https://mn.gov/indianaffairs/index.html> and at each tribe’s website.

⁴ 10 Stat. 1109 (Sept. 30, 1854); see also Minnesota Department of Natural Resources (“MN DNR”), Laws and Treaties, at https://www.dnr.state.mn.us/aboutdnr/laws_treaties/index.html.

⁵ See *Minnesota, et al. v. Mille Lacs Band of Chippewa Indians, et al.*, 526 U.S. 172 (1999) (confirming off-reservation usufructuary rights under the 1837 Treaty); see also Great Lakes Fish and Wildlife Commission (“GLIFWC”), A Guide to Understanding Ojibwe Treaty Rights (2018), available at <http://www.glifwc.org/publications/pdf/2018TreatyRights.pdf>; MN DNR, Main Treaties Page, available at https://www.dnr.state.mn.us/aboutdnr/laws_treaties/index.html.

In order to fully exercise these rights, abundant and unpolluted natural resources must be available, including water that meets tribal and state water quality standards. The state has a government-to-government relationship with all Minnesota tribes,⁶ and state agencies in Minnesota co-manage 1837 and 1854 Treaty resources with signatory tribes.⁷ This includes adequate state consultation with the tribal nations, and taking into account tribal comments as a vital part of rulemaking changes. Tribal government requests should be accommodated whenever possible to uphold this government-to-government relationship.

II. The Clean Water Act and its enacting regulations provide no legal authority for a state to convert enforceable numeric standards into subjective narrative standards.

These proposed changes have the potential to result in little to no regulation of discharge into Class 3 & 4 waters that are currently protected under existing standards. The changes would roll back specific numeric protections by using narrative standards. This directly contradicts Clean Water Act regulations that require states and authorized tribes to either establish numerical values based upon EPA guidance or “other scientifically defensible methods,” or “establish narrative criteria or criteria based upon biomonitoring methods *where numerical criteria cannot be established or to supplement numerical criteria.*”⁸ There is no legal basis for MPCA’s attempt to remove essentially all Class 3 & 4 numeric standards.

The purpose of the Clean Water Act is “to restore and maintain the chemical, physical, and biological integrity of the Nation’s waters.”⁹ The Act requires states to establish water quality standards that are “sufficient to provide for the protection and propagation of fish, shellfish, and wildlife, as well as recreation in and on the water.”¹⁰ These standards must include designated uses of a waterbody in addition to “water quality criteria necessary to protect those uses.”¹¹ A state’s water quality criteria correspondingly must be based on “sound scientific rationale.”¹² Moreover, for waters with “multiple use designations,” the criteria “must support the most sensitive use.”¹³ Only where a state’s water quality criteria has met the Act’s requirements can EPA approve the criteria.¹⁴

⁶ See, e.g., Gov. Walz Exec. Order 19-24, “Affirming the Government to Government Relationship between the State of Minnesota and Minnesota Tribal Nations: Providing for Consultation, Coordination, and Cooperation” (Apr. 4, 2019).

⁷ Federal agencies also have a legal responsibility to maintain all tribal, treaty-reserved natural resources. See, e.g., Memo. on Tribal Consultation and Strengthening Nation-to-Nation Relationships (Jan. 26, 2021), affirming Exec. Order 13175—Consultation and Coordination With Indian Tribal Governments (Nov. 6, 2000) (stating “the United States has recognized Indian tribes as domestic dependent nations under its protection,” there is a “trust relationship with Indian tribes,” and “[a]gencies shall respect Indian tribal self-government and sovereignty, honor tribal treaty and other rights, and strive to meet the responsibilities that arise from the unique legal relationship between the Federal Government and Indian tribal governments.”), available at <https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/26/memorandum-on-tribal-consultation-and-strengthening-nation-to-nation-relationships/>.

⁸ 40 C.F.R. § 131.11(b) (emphasis added).

⁹ 33 U.S.C. § 1251(a).

¹⁰ 33 U.S.C. § 1313(c)(2)(A).

¹¹ *Id.*

¹² 40 C.F.R. §§ 131.5(a)(2); 131.11(a).

¹³ 40 C.F.R. § 131.11(a).

¹⁴ 40 C.F.R. § 131.5(a).

Courts recognize that this rule means exactly what it says: “states should develop either numerical criteria based upon CWA guidance (or other scientific methods), or narrative criteria, *if numerical criteria cannot be established*. Narrative criteria might also be developed to supplement numerical criteria.”¹⁵ As with all other types of rulemaking, where a state sets aside a prior finding (in this case that numeric criteria are necessary for Class 3 & 4 uses), it can only do so for non-arbitrary reasons, and within the parameters of controlling law.¹⁶ There is no such justification here.

Even if there was a legal basis under the Act for MPCA’s proposal, there is nothing in the record that would justify the extremity of MPCA’s proposal. It is not supported by “current science,” as the agency claims. MPCA’s alleged reason for the changes is that “the diversity of water quality needs for industrial and irrigation use means that identifying protective numeric values for each potential pollutant necessary to protect various wide-ranging industrial and irrigation uses is unreasonable to complete on a statewide basis.”¹⁷ The agency goes on to claim that the changes “move away from the existing one-size-fits-all numeric standard to a narrative standard coupled with a robust implementation approach that takes advantage of available information and tools to implement the WQS as location-specific protective values.” If this is true, then why is the agency not proposing to dispense with *all* numeric criteria for *all* uses, and undertake *solely* site-specific analyses? The reason is that this approach be entirely contrary to the express language of the Act, and it would be unreasonable due to extensive time and effort such an approach would require—something that is well beyond MPCA’s admitted capacity.

MPCA also has not performed the legally-mandated, structured scientific assessment, or a Use Attainability Analysis (“UAA”), to determine if the current, more stringent Class 3 & 4 criteria can be achieved.¹⁸ Under 40 C.F.R. 131.10 (g), a UAA is required to either “designate a use, or remove a use that is *not* an existing use”—which is what MPCA is doing with the proposed rule changes. EPA guidance confirms expressly that a “UAA must be conducted for any water body when a state or authorized tribe designates uses that do not include the uses specified in section 101(a)(2) of the Act or when designating sub-categories of these uses that require less stringent criteria than previously applicable.”¹⁹ The uses at section 101(a)(2) are commonly summarized as “fishable/swimmable” uses.

¹⁵ See, e.g., *Nat. Res. Def. Council, Inc. v. US EPA*, 16 F.3d 1395, 1403-1404 (4th Cir. 1993) (emphasis added); see also *Nw. Envtl. Advocates v. US EPA*, 855 F. Supp. 2d 1199, 1217-18 (D. Ore. 2012) (EPA violated the Act by approving new, less protective numeric criteria).

¹⁶ *F.C.C. v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) (agency must justify departure where “its new policy rests upon factual findings that contradict those which underlay its prior policy; or when its prior policy has engendered serious reliance interests that must be taken into account...”) (internal citations omitted).

¹⁷ 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 1, available at <https://www.pca.state.mn.us/sites/default/files/wq-rule4-17k.pdf>.

¹⁸ See 40 C.F.R. 131.10 (g) (listing requirement of a use attainability analysis to either “designate a use, or remove a use that is *not* an existing use”); see also US EPA, Use Attainability Analysis (UAA), at <https://www.epa.gov/wqs-tech/use-attainability-analysis-uaa> (“A UAA must be conducted for any water body when a state or authorized tribe designates uses that do not include the uses specified in section 101(a)(2) of the Act or when designating sub-categories of these uses that require less stringent criteria than previously applicable.”)

¹⁹ See EPA, UAA, at <https://www.epa.gov/wqs-tech/use-attainability-analysis-uaa>.

Amazingly, MPCA admits it is not following this mandate: “*To date, the MPCA has not assessed any of the narrative or numeric water quality standards that exist for the Class 3 and 4 beneficial uses.*”²⁰ The agency justifies this by alleging limited resources—and because the “prime goal” of the Act is to protect fishable/swimmable uses, the agency “believes that resources should be focused on assessing water quality standards for those beneficial uses and those that protect human health (drinking water and aquatic consumption).”²¹ But the agency has no discretion to disregard the federal mandate of a UAA for Class 3 & 4 rule changes—again, EPA guidance makes clear that this requirement also applies to *non-101(a)(2)* uses. This defect alone is fatal to the entire rulemaking. Nor has MPCA taken any steps to ensure that the most sensitive use in each Class is protected by the proposed amendments, as discussed further in Sections III and IV.²²

Moreover, even the claim of limited resources is eyebrow-raising. The agency acknowledges that it has a substantial database of surface water quality data to assess whether a water is suitable for irrigation: “MPCA has collected over 250,000 surface water quality samples for specific conductance statewide,...over 1,700 locations that have been sampled for the cations (Na, Ca, Mg).”²³ Yet MPCA has not even done a tabletop exercise to evaluate this extensive information. MPCA is making a conscious choice to pick and choose between its nonwaivable obligations under the Clean Water Act.

MPCA also argues that “[c]ontested case hearings and litigation are very consuming of staff resources.”²⁴ But the fact of excessive staff workload (and fear of litigation by permittees) does not provide a legal or scientific justification for a rule change. While tribes empathize with lack of sufficient resources to support important water quality programs, this is not a basis to roll back Class 3 & 4 numeric criteria.

Additionally, MPCA claims that changes are justified due to a claimed “lack of available documentation of the scientific basis used to derive the standards in 1967” and that “[i]t is important that MPCA is able to demonstrate that standards are based on sound science.”²⁵ Contradictorily, later in the SONAR MPCA acknowledges that there *is* such documentation.²⁶ Tribes agree that updates to water quality standards are appropriate from time to time—but however outdated the science to support the current standards (which MPCA has not actually established in this record), this does not justify a departure from *any and all* protective, numeric standards.

As discussed throughout these comments, MPCA has also ignored federal anti-backsliding regulations. These proscribe states, in reissuing NPDES permits, from imposing less stringent provisions than appeared in the original permit except in limited circumstances:

²⁰ *Id.* at 15-16 (emphasis added).

²¹ *Id.*

²² 40 C.F.R. § 131.11(a).

²³ SONAR at 86.

²⁴ *Id.* at 101.

²⁵ *Id.* at 2.

²⁶ *Id.* at 11.

...interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under § 122.62.²⁷

Ultimately, MPCA's claim that this rollback is based upon the "best current scientific understanding about industrial, irrigation, and livestock and wildlife designated uses"²⁸ is undermined by the agency's own admissions about the failure of its own review process. MPCA has simply offered no legal basis upon which the OAH can approve these changes.

III. MPCA has failed to review the impact of these proposed changes on the Class 4A wild rice use—much less to offer a legal basis for the exclusion.

Through many conversations and comments in advance of the public process, tribes have voiced concerns about this rulemaking, including that the proposed changes to Class 4A beneficial uses will adversely impact wild rice waters. MPCA response is to say that its "intention" in this rulemaking is not to change the 10 mg/L wild rice sulfate standard—which the agency then characterizes as "contentious" and requiring a "separate rulemaking process"²⁹—even though MPCA has expressly confirmed the validity of the standard and there is no ongoing rulemaking.³⁰ These are mixed messages, to say the least.

Indeed, the rule changes here do not *directly* attack the existing 10 mg/L sulfate limit for wild rice waters. The attack is instead in the refusal even to acknowledge or conduct review of any potential impacts on wild rice waters via this deregulation, which is a contravention of the Act, as further explained in Section II.³¹ MPCA treats the Class 4A 10 mg/L wild rice sulfate standard as entirely unconnected to the rest of Class 4A, saying that "the language related to the wild rice subclass is so entwined with the overall Class 4A language that amendments are necessary to differentiate the two."³² This is despite tribes having pointed out repeatedly that removing most of the numeric

²⁷ 40 CFR § 122.44(1)(1).

²⁸ *Id.* at 3.

²⁹ SONAR at 62.

³⁰ *See, e.g., In the Matter of the reissuance of an NPDES/SDS Permit to United States Steel Corporation (U.S. Steel) for its Minntac facility...*, 937 N.W.2d 770, 789 (Minn. Ct. App. 2019), *partially rev'd on other grounds*, Case No. A18-2094, ___ N.W.2d ___ (Minn. Feb. 10, 2021) (noting that in briefing MPCA stated that it "would enforce the [10 mg/L] wild rice sulfate water quality standard by imposing a QBEL on U.S. Steel's surface seepage discharges, if applicable. Based on this representation, if the MPCA determines that QBELs are required on remand, it would seem to follow that the MPCA would apply the wild rice rule in determining conditions for the NPDES portion of the permit.")

³¹ SONAR at 62. The science confirms the need for the 10 mg/L sulfate limit for waters used for the production of wild rice. *See* Minnesota Chippewa Tribe Tribal Wild Rice Task Force Rep. (Dec. 15, 2018) at 23-27 (discussing science), available at <http://mnchippewatribe.org/pdf/TWRTF.Report.2018.pdf>, attached at Ex. A; MN Governor's Task Force on Wild Rice (Jan. 3, 2019) at 32-34 (same), available at <https://www.eqb.state.mn.us/sites/default/files/documents/FINAL%20Governor%27s%20Task%20Force%20on%20Wild%20Rice%20Report%20January%203%202019%20v2.pdf>.

³² SONAR at 62.

criteria that protect Class 4A beneficial uses in general, and replacing them with weaker narrative criteria that use a “translator” to develop numeric permit limits, allows backsliding and ignores that this will adversely impact wild rice waters.³³ It is also despite uncontested science confirming sulfate is not the only parameter that can negatively affect wild rice waters, as discussed further in Section IV.³⁴

Tribes have long requested MPCA protect and restore wild rice using existing Clean Water Act tools including water quality assessments, identification of impaired waters based on assessments (and listing of impaired wild rice waters), setting appropriate effluent limits in NPDES permits, and developing Water Quality Based Effluent Limits (“WQBELs”) for Total Maximum Daily Loads (“TMDLs”) that bring impaired wild rice waters into compliance with water quality standards. In the SONAR, MPCA recognizes these very tools as core to protection of beneficial uses.³⁵ Yet the agency has applied none of them to wild rice waters.

A key example of this regulatory refusal is that, over the last year, the Minnesota Indian Affairs Council (“MIAC”), the Minnesota Chippewa Tribe, and individual Minnesota tribes have joined together to request that known, impaired wild rice waters finally be added to Minnesota’s 2020 303(d) list, building on ongoing tribal work since at least 2011—and based upon MPCA’s own field data and conventional-pollutant methodology.³⁶ MPCA’s list was due to US EPA in the spring of 2020, but MPCA sought and received authorization for a delay from EPA due to tribal calls for the listing. But then, in recent weeks, tribal leaders each received a call from Governor Walz stating there would be no listing of any impaired wild rice waters afterall—even though agency staff have admitted impairment. MPCA has confirmed that it has now submitted the list to US EPA for approval—without including any impaired wild rice waters, and without ever having actually provided a written response to the tribes’ detailed submissions on the required technical and legal analysis.

In this rulemaking, again, the agency has singled out wild rice waters for exclusion even from analysis, despite lacking any legal authority to do so. The agency has ignored extensive data in the record confirming that the same salty pollutants, for which Class 4A standards are being rolled back in this proposed rulemaking, have negative impacts on wild rice.

³³ See, e.g., Grand Portage Cmts. on Planned Class 3 & 4 Rule Changes at 2-3 (Sept. 4, 2020) (“There is nothing in this draft proposal, or MPCA’s previous proposals, that demonstrate wild rice will be protected by allowing higher concentrations of salty parameters for Class 4 beneficial uses.”), Ex. B; GP Cmts. (Apr. 22, 2019) at 3-4 (“Wild rice existing uses will be adversely impacted by the waters the planned amendments to Class 3 and 4 Uses.”), Ex. C (also attaching Ltrs. of D.Keehner (USEPA Dir. of Standards and Health Protection) to D.Smithee (Okla. Water Resources Board) (Sept. 2008)).

³⁴ Myrbo et.al., Sulfide Generated by Sulfate Reduction is a Primary Controller of the Occurrence of Wild Rice (*Zizania palustris*) in Shallow Aquatic Ecosystems (2017), Ex. E; Myrbo et.al., Increase in Nutrients, Mercury, and Methylmercury as a Consequence of Elevated Sulfate Reduction to Sulfide in Experimental Wetland Mesocosms (2017), Ex. F.

³⁵ SONAR at 10, 15, 117.

³⁶ See MCT Cmt. Ltr. on 2020 303(d) List (Jan. 8, 2020); GP Cmt. Ltr. (Jan. 8, 2020); MPCA Ltr. to MIAC (Apr. 15, 2020); Jt. Tribal Ltr. to MPCA (Apr. 27, 2020); GP Ltr. to MPCA (May 8, 2020) and attach.; MPCA Comm’r L.Bishop Email to Tribes (May 15, 2020); Jt. Tribal Ltr. to Gov. Walz (Oct. 2, 2020) and Exs. A-B; Jt. Tribal Ltr. to EPA (Oct. 2, 2020) and Exs. A-B (same); SMSC Ltr. to EPA (Oct. 2, 2020); MPCA Ltr. to MIAC (Nov. 11, 2020), combined at Ex. D; see also GP Cmt. Ltr. on 2018 303(d) List (Jan. 26, 2018), at Ex. I.

Oddly, the SONAR also retreads old territory, defending the agency’s work in support of an equation-based sulfate standard—an approach this entity rightly rejected in the 2018 wild rice sulfate rulemaking.³⁸ In its detailed 2018 order, the OAH “determined that the proposed rule was insufficiently specific to be approved”³⁹ and that it was not “rationally related to the Agency’s objective” of “protect[ing] wild rice from the impact of sulfate, so that wild rice can continue to be used as a food source by humans and wildlife.”⁴⁰ It is alarming to see the agency wedge this discussion into a SONAR it claims has “nothing to do” with attempts to undermine the 10 mg/L wild rice sulfate standard.

In fact, many of the reasons for disapproving the proposed equation-based wild rice sulfate rules apply with equal force here. There, the OAH listed the defects as follows:

- MPCA failed to demonstrate that repealing and replacing the current 10 mg/L sulfate standard would be “at least as protective” of wild rice, which is both a Clean Water Act and a state antidegradation requirement.⁴¹
- MPCA “failed to recognize the proposed rule’s burden on the Native American community” and “[l]oosening the sulfate standard for the state’s designated waters could degrade the quality of the Bands’ wild rice waters.”⁴²
- The OAH disapproved the MPCA’s proposed list of wild rice waters, “concluding that the MPCA’s approach excluded hundreds of water bodies previously on lists from the DNR and other sources, including the 1854 Treaty Authority’s 2016 and 2017 lists of wild rice waters,” which the OAH determined violated the federal prohibition against removing a designated use if such a use is an existing use.⁴³

Likewise, neither of the proposed narrative agricultural and industrial use criteria are “at least as protective” as existing rules. The disproportionate burden on Native people is the same as in 2018. As noted, the revisions seek to change designated use classifications without a UAA. Rule implementation will require years, if not decades, and will be a burden on MPCA’s capacity in permitting. Application of the rules will be limited to a small portion of agricultural and industrial use waters, but will profoundly degrade wild rice waters.

³⁸ SONAR at 190.

³⁹ ALJ Rep. at 58, Finding 247. *See also Minnesota Chamber of Commerce v. Minnesota Pollution Control Agency*, 469 N.W.2d 100, 107 (Minn. Ct. App. 1991) (“A rule, like a statute, is void for vagueness if it fails to give a person of ordinary intelligence a reasonable opportunity to know what is prohibited or fails to provide sufficient standards for enforcement”) (citing *Grayned v. City of Rockford*, 408 U.S. 104, 108-09 (1972)).

⁴⁰ ALJ Rep. at 58, Finding 246.

⁴¹ *Id.* at 52-53, Findings 223-225.

⁴² *Id.*

⁴³ *Id.*

IV. Despite MPCA’s failure to conduct the review, the science already confirms that the proposed Class 4A rules will not protect wild rice or other known, culturally important resources.

Again, MPCA has stated that this rule making “will not change the wild rice sulfate standard,” which is currently at Class 4A, and is an agricultural use. But all other Class 4A criteria apply to wild rice, too—not just the sulfate limit. Wild rice waters are also protected by a narrative standard stating that “[t]he quality of these waters and the aquatic habitat necessary to support the propagation and maintenance of wild rice plant species must not be materially impaired or degraded.” Tribes have expressed concern that the proposal to eliminate numeric criteria for bicarbonates, pH, specific conductance, total dissolved salts, and sodium, and to then replace them with a general narrative standard, will negatively affect wild rice, which may be the most sensitive beneficial and existing use in Class 4A waters. MPCA tries to sidestep this entire argument, claiming that they evaluated the possibility of using “a single conservative numeric water quality standard that protects irrigation under the most sensitive irrigation conditions that could occur” in the state, but “found it to be unreasonable.”⁴⁴ As with its UAA argument, MPCA also incorrectly characterized the comments as “relying on the requirement under the CWA that water quality standards developed to protect aquatic life or human health” but that “the CWA does not require presumptive protection of the most sensitive species for developing non-101(a)(2) use water quality standards,” like the agricultural and industrial uses at issue here.⁴⁵

This intentionally-simplistic approach ignores both the science and the law, as well as the actual content of comments about wild rice waters. Section 3.14 of the US EPA Water Quality Standards Handbook under the heading “Criteria for Agricultural and Industrial Designated Uses” provides that states and authorized tribes may also establish criteria specifically designed to protect designated uses and should ensure that they apply the criteria that are protective of the most sensitive use of the water body, as required by 40 CFR 131.11(a).⁴⁶ Furthermore, the CWA requires, at a minimum, that existing uses be protected.⁴⁷ Wild rice is *both* an existing and designated use in Minnesota water quality standards.

MPCA also contradicts itself. MPCA first states that “[i]t does not appear that the numeric values established in the general Class 4A water quality standards are critical to the protection of wild rice.”⁴⁸ But then the agency reveals that its own scientists have investigated “Minnesota wetland plant response to salinity stressors: conductivity, chloride, and sulfate,” including wild rice.⁴⁹ The agency concluded that a preliminary concentration of conductivity expected to kill 95% of

⁴⁴ SONAR at 40.

⁴⁵ *Id.*

⁴⁶ US EPA Water Quality Standards Handbook (“EPA WQS Handbook”) at 3.14, available at <https://www.epa.gov/sites/production/files/2014-10/documents/handbook-chapter3.pdf>.

⁴⁷ 40 CFR § 131.3(e).

⁴⁸ SONAR at 190-191.

⁴⁹ *Id.* at 191. Specific conductivity (or conductance) means the volume of ions in water as measured by passing electrical current through a water sample, a simple and reliable testing method. It detects inorganic dissolved solids like chloride, nitrate, sulfate, phosphate, sodium, magnesium, calcium, iron, and aluminum. The higher the level of ions, the higher the toxicity of the water. See EPA, National Aquatic Resource Surveys, Indicators, Conductivity, at <https://www.epa.gov/national-aquatic-resource-surveys/indicators-used-national-aquatic-resource-surveys>.

wild rice is 407 $\mu\text{S}/\text{cm}$ statewide.⁵⁰ But then the agency endorses a translator approach to rationalize allowing conductance concentrations up to 3,000 $\mu\text{S}/\text{cm}$ —*almost an order of magnitude higher than what the agency itself estimates would kill 95% of wild rice in a given water body*. Nevertheless, the agency goes on to conclude that its “interim approach to protecting aquatic life should be sufficient for both macroinvertebrates and wetland plants,” including wild rice.⁵¹ Put another way, the agency is refusing to acknowledge the science regarding conductance confirms that these rule changes will have profound, direct, and negative impacts on wild rice. The Class 4A rules are and must remain protective of the wild rice use *now*—not under an interim or future Class 2 aquatic life beneficial use protections—which, as proposed, would themselves be profoundly insufficient to protect the wild rice use.

Water quality standards criteria are intended to address unacceptable adverse effects from both short-term (acute) and long-term (chronic) exposure, with the objective of protecting aquatic life from lethal as well as sub-lethal effects (e.g., immobility, slower growth, reduced reproduction). Criteria are designed to be protective of the vast majority of aquatic species in an aquatic community (i.e., 5th percentile of tested aquatic animals representing the aquatic community). As a result, the designated uses and their associated criteria may be considered as assessment endpoints.”⁵² Simply stated, allowing concentrations of conductivity to exceed by one-order of magnitude the concentration that would kill 95% of wild rice in a given waterbody is neither legally nor scientifically defensible.

Put yet another way, the proposed changes to Class 3 & 4 criteria will unquestionably increase the allowable concentrations of salts that can be discharged into surface water (like chloride, sodium, carbonate and sulfate, magnesium and calcium). The proposed rule lacks any meaningful analysis of the potential for these increased salty discharges to hurt other, more sensitive, beneficial uses including not just Class 4 wild rice waters but also waters with the Class 2 aquatic life use, discussed further in Section V and elsewhere in these comments. MPCA has only looked at it from perspective of industrial and agricultural dischargers while ignoring other uses or existing impairments—over years of tribal and other comments to the contrary.

Tribes have also raised questions about the wholesale changes to, and in some cases, eliminations of, use subclassifications. According to EPA guidance, states “are required to designate uses considering, at a minimum, those uses listed in section 303(c) of the Clean Water Act (i.e., public water supplies, propagation of fish and wildlife, recreation, agriculture and industrial purposes, and navigation).”⁵³ The EPA goes on to state that:

However, flexibility inherent in the State process for designating uses allows the development of subcategories of uses within the Act’s general categories to refine and clarify specific use classes... (i) if States adopt subcategories that do not require

⁵⁰ *Id.* at 191. “ $\mu\text{S}/\text{cm}$ ” means micromhos per centimeter, a unit of ionic measure.

⁵¹ *Id.*

⁵² US EPA Water Quality Standards Key Concepts, Supplemental Module, Aquatic Life Criteria, available at <https://www.epa.gov/wqs-tech/supplemental-module-aquatic-life-criteria#:~:text=Summary-,Aquatic%20life%20criteria%20are%20estimates%20of%20concentrations%20of%20pollutants%20in,%2C%20mortality%2C%20reduced%20reproduction.>

⁵³ US EPA Water Quality Standards Handbook at 2.3.

criteria sufficient to fully protect the goal uses in section 101(a)(2) of the Act (see section 2.1, above), a use attainability analysis pursuant to 40 CFR 131.10(j) must be conducted for waters to which these subcategories are assigned.⁵⁴

This again underscores that MPCA is attempting, in this rulemaking, to avoid doing the necessary work of a UAA, sidestepping the requirement under the CWA to fully protect the goal uses in section 101(a)(2) of the Clean Water Act, as discussed in Section II above.

The science confirms repeatedly that MPCA's changes to Class 4A rules *will* affect wild rice waters. But the agency has done no research on what increased salty discharges will do to downstream wild rice waters. The danger to wild rice and other sensitive uses under this proposal is both profound and unjustifiable.

V. The proposed rules fail to study the potential impacts on aquatic insects under Class 2B.

MPCA also failed to study the potential impacts on benthic invertebrates (aquatic insects), which are very sensitive to salts. Allowing increases in chloride and other salts in upstream Class 3 & 4 waters could kill the aquatic insects there—which also kills the fish that eat those insects in downstream Class 2B waters. Indeed, the impacts of this rulemaking would only compound Minnesota's issues with salty parameter discharges due to the continued reliance on salts for de-icing and dust suppression. In addition, rising water temperatures resulting from climate change can increase the toxicity of certain salts for aquatic life. But despite tribal requests, there is no analysis of those impacts. This approach is even more detrimental because it is proposed at the same time MPCA is continuing to refuse to implement aquatic life conductivity criteria, despite the science being clear. MPCA's own 10-year assessments of watersheds monitoring and assessment database shows just how specific conductance impairs aquatic life, and illustrate that these existing impairments have gone unaddressed without numeric protections.⁵⁵ MPCA has more than enough information to set numeric specific conductance values to protect aquatic life—it just refuses to do so because that would be unpopular with industry.

The SONAR itself attaches a 2015 Johnson and Johnson report (supported by EPA's independent analysis) that determined that a protective specific conductance concentration for aquatic insects in northeastern Minnesota—meaning the maximum safe limit—would be approximately 300 $\mu\text{S}/\text{cm}$.⁵⁶ Additionally, MPCA's stressor identification study of the St Louis River documented concentrations of specific conductance exceeding 2,000 $\mu\text{S}/\text{cm}$, and validated the substantial reductions in macroinvertebrate populations statewide at specific conductance concentrations at or above 500 $\mu\text{S}/\text{cm}$.⁵⁷ It was this research that guided the Fond du Lac Band in establishing a US

⁵⁴ *Id.*

⁵⁵ 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>.

⁵⁶ SONAR at Ex. S-10 at 272.

⁵⁷ 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>.

EPA-approved water quality standard for specific conductance of 300 $\mu\text{S}/\text{cm}$ to protect reservation waters, including a portion of the St. Louis River.⁵⁸

Instead of setting conductivity criteria that would be protective of aquatic insects, MPCA proposes to relax these criteria. Specific conductance would be allowed to increase from an instantaneous maximum of 1,000 $\mu\text{S}/\text{cm}$ up to 3,000 $\mu\text{S}/\text{cm}$ averaged over a 122-day period.⁵⁹ This means the instantaneous maximum concentration could far exceed 3,000 $\mu\text{S}/\text{cm}$ —which essentially guarantees destruction of aquatic insects that need maximum levels of 300 $\mu\text{S}/\text{cm}$ or less.

Additionally, MPCA’s St. Louis River Watershed Stressor Report documents elevated sulfate concentrations as high as 751 mg/L.⁶⁰ The report briefly discusses studies that have established direct sulfate toxicity to aquatic insects at concentrations as low as 124 mg/L in (soft) waters, such as those found in northeastern Minnesota.⁶¹ The report further opines that “[t]he lack of a water quality standard in Minnesota presents challenges in building a defensible case for or against sulfate as a stressor to fish and macroinvertebrate communities.”⁶²

Here, instead of developing a protective sulfate standard for aquatic life, MPCA has instead proposed a 600 mg/L sulfate standard in Class 4A that it claims would serve to protect cows from the adverse impacts of high concentrations of sulfate—but is a level that kills aquatic insects. MPCA’s refusal to acknowledge the known impacts of such a profoundly high sulfate limit on aquatic insects is inexcusable and must be rejected.

VI. MPCA has likewise ignored potential impacts on forest resources.

Tree farms are an existing use of importance to tribes that is supposed to be protected under the agricultural use umbrella under Class 4A. But MPCA has not even evaluated these impacts. Many tribes rely upon nurseries for seedlings to meet forest management plans. Salt damage has been documented for several trees that are culturally important to the Minnesota tribes such as white cedar, sugar maple, and paper birch. White cedar is damaged by salts sprayed onto foliage and added to the soil.⁶³ In particular, a greenhouse study found significant foliage discoloration and

⁵⁸ SONAR at Ex. S-10 at 272; Fond du Lac Band of Lake Superior Chippewa Water Quality Standards of the Fond du Lac Reservation, Ord. #12/98 (as amended July 8, 2020), at Sec. 301(k) (“Existing mineral quality shall not be altered by municipal, industrial and in-stream activities or other waste discharges so as to interfere with the designated uses for a water body. Since aquatic biota in this ecoregion are known to be sensitive to the effects of elevated ionized substances (cations and anions) in the water, the specific conductance in all waters of the Reservation shall not exceed an annual average continuous exposure of 300 $\mu\text{S}/\text{cm}$. Exceedances of this numeric criterion are indicative of polluted conditions.”), at <http://www.fdlrez.com/government/ords/12-98WaterQualityStandard2020.07.pdf>.

⁵⁹ SONAR at 67.

⁶⁰ St. Louis River Watershed Stressor Identification Rep. at 305, Sec. 5.15.3

⁶¹ St. Louis River Watershed Stressor Identification Rep. at 41 at Table 9.

⁶² *Id.* at 435

⁶³ Foster, A.C., Maun, M.A., Effects of highway deicing agents on *Thuja occidentalis* in a greenhouse, *Can. J. Bot.* 56, 2760-2766 (1978), at <https://doi.org/10.1139/b78-329>; Foster, A.C., Maun, M.A., Effect of Two Relative Humidities on Foliar Absorption of NaCl, *Can. J. Plant Sci.* 60, 763-766 (1980), at <https://doi.org/10.4141/cjps80-111>; Hofstra, G., Hall, R., Injury on roadside trees: leaf injury on pine and white cedar in relation to foliar levels of sodium and chloride, *Can. J. Bot.* 49, 613-622 (1971), at <https://doi.org/10.1139/b71-097>; Kutscha, N.P., Hyland, F., Langille, A.R., Salt Damage to Northern White-Cedar and White Spruce, *Wood Fiber Sci.* 9, 191-201 (1977), at

root tip burn at sodium chloride soil concentrations above 0.93 mg/g (930 ppm, ~1453 $\mu\text{S}/\text{cm}$ of specific conductance).⁶⁴ A nursery study found that 15 weeks of spraying cedar foliage with 5ml of 100ppm NaCl (~156 $\mu\text{S}/\text{cm}$ of specific conductance) during the dormant season damaged 90% of foliage.⁶⁵

The sensitivity of sugar maples to salt damage has been noted since at least the 1950s when road salt was tied to regional maple declines in New England.⁶⁶ Although sugar maple may mitigate low salt concentrations by shedding their deciduous leaves, high salt concentrations lead to death more quickly than other tree species.⁶⁷ Indeed, several authors list sugar maple as moderately to very sensitive to salt damage.⁶⁸ Consequences of salt exposure include stunted shoot growth and root decline.⁶⁹

Although salt damage to paper birch is less well documented, recent research has demonstrated long-term reduction in paper birch survival and recruitment attributable in part to road salt application over a 20 year period.⁷⁰ This reduction occurred under a relatively low soil sodium concentration of 103 ppm (estimated NaCl equivalent of specific conductance: ~408 $\mu\text{S}/\text{cm}$).

Salt damage has also been documented to trees that are commercially important to tribal forestry operations as well as the broader Minnesota forest industry. Red pine, white pine, and white spruce are valuable sawtimber species in northern Minnesota, and quaking aspen is the most harvested and most valuable pulpwood species in northern Minnesota. Salt damage to all four of these

<https://wfs.swst.org/index.php/wfs/article/view/962>; Lumis, G.P., Hofstra, G., Hall, R., Roadside Woody Plant Susceptibility to Sodium and Chloride Accumulation During Winter and Spring, *Can. J. Plant Sci.* 56, 853-859 (1976), at <https://doi.org/10.4141/cjps76-138>.

⁶⁴ Foster, A.C., Maun, M.A., Effects of highway deicing agents on *Thuja occidentalis* in a greenhouse, *Can. J. Bot.* 56, 2760-2766.

⁶⁵ Kutscha, N.P., Hyland, F., Langille, A.R., Salt Damage to Northern White-Cedar and White Spruce. *Wood Fiber Sci.* 9, 191-201.

⁶⁶ Horsley, S.B., Long, R.P., Bailey, S.W., Hallett, R.A., Wargo, P.M., Health of Eastern North American Sugar Maple Forests and Factors Affecting Decline, *North. J. Appl. For.* 19, 34-44 (2002), at <https://doi.org/10.1093/njaf/19.1.34>; Sucoff, E., Effect of Deicing Salts on Woody Vegetation along Minnesota Roads (Technical Bulletin No. 303, 1975), Minnesota Agricultural Experiment Station, at <https://conservancy.umn.edu/handle/11299/200958>; Westing, A.H., Sugar maple decline: An evaluation, *Econ. Bot.* 20, 196-212 (1966), at <https://doi.org/10.1007/BF02904015>.

⁶⁷ Holmes, F.W., Salt injury to trees, *Phytopathology* 51:712-718 (1961).

⁶⁸ Dirr, M.A., Selection of Trees for Tolerance to Salt Injury. *J. Arboric.* 209-216 (1976), at <http://joa.isa-arbor.com/request.asp?JournalID=1&ArticleID=1415&Type=2>; Shortle, W.C., Rich, A.E., Relative sodium chloride tolerance of common roadside trees in southeastern New Hampshire. *Plant Dis. Report.* 54, 360-2 (1975), at <https://babel.hathitrust.org/cgi/pt?id=mdp.39015001262701&view=1up&seq=384>; Sucoff, E., Feller, R., Kanten, D., Deicing Salt (Sodium Chloride) Damage to *Pinus resinosa*, Ait. *Can. J. For. Res.* 5, 546-556 (1975), at <https://doi.org/10.1139/x75-080>.

⁶⁹ Guttay, A.J.R., Impact of Deicing Salts upon the Endomycorrhizae of Roadside Sugar Maples, *Soil Sci. Soc. Am. J.* 40, 952-954 (1976), at <https://doi.org/10.2136/sssaj1976.03615995004000060038x>; Shortle, W., Kotheimer, J., Rich, A., Effect of salt injury on shoot growth of sugar maple, *Acer saccharum*. *Plant Dis. Report.* 56, 1004-1007 (1972), at <https://babel.hathitrust.org/cgi/pt?id=mdp.39015001262750&view=1up&seq=470>.

⁷⁰ Willmert, H.M., Osso, J.D., Twiss, M.R., Langen, T.A., Winter road management effects on roadside soil and vegetation along a mountain pass in the Adirondack Park, New York, USA. *J. Environ. Manage.* 225, 215-223 (2018), at <https://doi.org/10.1016/j.jenvman.2018.07.085>.

commercially important species is well documented, especially to the spruce and pine.⁷¹ Significant damage to pine and spruce foliage has been observed at soil conductance values of 0.16 dS/m (160 µS/cm).⁷²

All of these culturally or commercially important tree species are widely grown by Minnesota forestry, horticultural, and shade tree nurseries and therefore would be impacted by the new irrigation standards. Moreover, trees of these species in woodlands adjacent to irrigated fields are exposed to irrigation water through overspray. Because none of these species are listed in Table 17 of the SONAR (“Sensitive crops to excess salinity”), they would be subject to the 3,000 µS/cm standard. However, the evidence is clear that damage can occur to these species under field conditions at conductivities as low as ~160 µS/cm, with serious damage occurring for some species between 400-1500 µS/cm. Therefore, the proposed Agricultural Class 4A conductivity standard would fail to protect these culturally and commercially important existing nursery uses.

VII. Class 4B Waters wildlife amendments contravene federal water quality standards guidance.

Under Minnesota Rule 7050.0224 at subpart 3, the beneficial use is described as simply “use by livestock and wildlife,” and includes a narrative standard that the water quality is such that livestock and wildlife can use the water “without inhibition or injurious effects.” In EPA’s Water Quality Standards Handbook, the guidance around use classification stipulates that in addition to the Section 101(a)(2) “fishable/swimmable” aquatic life uses, water quality standards should “consider the use and value of State waters for public water supplies, *propagation of fish and wildlife*, recreation, agriculture and industrial purposes, and navigation.”⁷³ This clearly conveys that the CWA principle behind establishing a wildlife use is to *broadly* protect wildlife health and sustainable populations. However, MPCA has stated in this rulemaking that the Class 4B wildlife use is *narrowly* intended to apply only to water that is “consumed” by livestock and wildlife.⁷⁴ MPCA’s redrafting of federal law is improper.

⁷¹ Bryson, G.M., Barker, A.V., Sodium accumulation in soils and plants along Massachusetts roadsides, *Commun. Soil Sci. Plant Anal.* 33, 67-78 (2018), at <https://doi.org/10.1081/CSS-120002378>; Goodrich, B.A., Koski, R.D., Jacobi, W.R., Condition of Soils and Vegetation Along Roads Treated with Magnesium Chloride for Dust Suppression, *Water, Air, Soil Pollut.* 198, 165-188 (2009), at <https://doi.org/10.1007/s11270-008-9835-4>; Goodrich, B.A., Koski, R.D., Jacobi, W.R., Roadside Vegetation Health Condition and Magnesium Chloride (MgCl₂) Dust Suppressant Use in Two Colorado, U.S. Counties, *Arboric. Urban For.* 34, 252-259 (2008), at <http://joa.isa-arbor.com/request.asp?JournalID=1&ArticleID=3054&Type=2>; Hall, R., Hofstra, G., Lumis, G.P., Effects of Deicing Salt on Eastern White Pine: Foliar Injury, Growth Suppression and Seasonal Changes in Foliar Concentrations of Sodium and Chloride, *Can. J. For. Res.* 2, 244-249 (1972), at <https://doi.org/10.1139/x72-040>; Lumis, G.P., Hofstra, G., Hall, R., Roadside Woody Plant Susceptibility to Sodium and Chloride Accumulation During Winter and Spring, *Can. J. Plant Sci.* 56, 853-859 (1976), at <https://doi.org/10.4141/cjps76-138>; Sucoff, E., Effect of Deicing Salts on Woody Vegetation along Minnesota Roads (Technical Bulletin No. 303); Sucoff, E., Feller, R., Kanten, D., Deicing Salt (Sodium Chloride) Damage to *Pinus resinosa*, *Ait. Can. J. For. Res.* 5, 546-556.

⁷² Bryson, G.M., Barker, A.V., Sodium accumulation in soils and plants along Massachusetts roadsides, *Commun. Soil Sci. Plant Anal.* 33, 67-78 (2002). <https://doi.org/10.1081/CSS-120002378>.

⁷³ US EPA Water Quality Standards Handbook at 2.1 (emphasis added), at <https://www.epa.gov/wqs-tech/water-quality-standards-handbook>

⁷⁴ SONAR at 47-48.

MPCA recognizes that wildlife has the potential to use any water in the state. The agency asserts that “the livestock and wildlife designated use protects waters for current and future use by terrestrial animals.”⁷⁵ MPCA subsequently states “[g]iven that the data available for wildlife species is limited, it is reasonable to use these livestock data as surrogates for wildlife data. The MPCA is reasonably choosing a value that protects the most sensitive livestock species.”⁷⁶

This is an unjustifiable leap. The almost total lack of wildlife-specific data in MPCA’s record precludes any confidence in the agency’s assumption. Furthermore, if the standards associated with the uses are only applied when and where there is a water appropriations permit, they by nature do not serve to protect wildlife across the state. By only applying standards to water at the point of intake, these revised standards by nature cannot be said to apply statewide. There is no scientifically defensible basis for the claim that these revised standards are protective of wildlife.

VIII. The proposed rule changes fail to take into account wildlife impacts from mercury methylation.

MPCA maintains that Class 2 mercury limits are protective of wildlife in their “consumption of aquatic organisms,” seemingly suggesting there is no need to include mercury criteria in Class 4. This narrow rationale directly contradicts EPA guidance, which mandates:

Development of water quality criteria to protect wildlife may be important because terrestrial and avian wildlife species that are dependent on the aquatic food web may be exposed to aquatic contaminants via dietary exposure. This exposure pathway can be particularly important for bioaccumulative pollutants, which accumulate in tissues of aquatic organisms at levels greater than water column concentrations. Bioaccumulation is defined as the accumulation of chemicals in the tissue of organisms through any route including ingestion or direct contact with contaminated water.⁷⁷

In other words, the potential for exposure is *not* to be measured solely through “consumption” of aquatic organisms.

An additional problem is that sulfate and chloride are heavier than water and can therefore create what is called a chemocline. A chemocline is a distinct boundary in a body of water, marked by a steep concentration gradient, separating layers of water with different chemical compositions or concentrations. Chemoclines can partially or completely eliminate the ability of lakes to turn over. Typically, lakes turn over in the spring and fall, mixing water from the bottom to the surface. By vertically mixing water, oxygen and nutrients are moved to areas for uptake by aquatic organisms. When a waterbody is healthy, sediments bind excess nutrients and metals making them inaccessible for uptake by aquatic organisms. However, sediments that contain elevated chloride and sulfate can become oxygen depleted and release toxic metals and nutrients into the water column making them bioavailable for aquatic organisms. Further, when sulfate releases mercury

⁷⁵ *Id.* at 47.

⁷⁶ *Id.* at 48.

⁷⁷ US EPA Water Quality Standards Handbook at 3.11.

from sediments the rate of conversion to methylmercury increases. But MPCA does not consider this issue.

MPCA's failure to regulate mercury contamination and bioaccumulation within the Class 4 Wildlife standards is inconsistent for Minnesota waters within the Lake Superior Basin, to say the least. EPA's Water Quality Guidance for the Great Lakes System describes a methodology applicable to the Great Lakes System for developing criteria for the protection of avian and mammalian wildlife from "adverse effects resulting from the ingestion of water and aquatic prey."⁷⁸ The Great Lakes Initiative, or GLI, methodology is similar to the methodology used to derive non-cancer human health criteria, in that "separate wildlife values are derived for birds and mammals using taxonomic class-specific toxicity data and exposure data for five representative Great Lakes wildlife species"—bald eagle, herring gull, belted kingfisher, mink, and river otter—which are likely to experience the highest exposures to bioaccumulative contaminants through the aquatic food web in the Great Lakes.⁷⁹ In addition, the EPA published the Great Lakes Water Quality Initiative Technical Support Document for Wildlife Criteria (1995), which includes the methodology for deriving wildlife values for pollutants with limited toxicological data to derive a value for only one of the two taxonomic classes specified (birds and mammals).⁸⁰ Yet MPCA has followed none of the mandatory GLI methodology for the Great Lakes System.

The agency rightly asserts that it is "reasonable for Minnesota to include standards that are more similar to states that also intend the standards to protect for livestock and wildlife drinking the water"⁸¹—MPCA just doesn't follow its own suggestion. In Table 37 of the SONAR, the agency compares wildlife standards among states and tribes in Region 5 or bordering Minnesota. Grand Portage and Fond du Lac, who have federal Treatment-in-the-Same-Manner-as-a-State and promulgate their own water quality standards, include the GLI wildlife criterion for mercury in their water quality standards. MPCA offers no basis for failing to do so, too.

Despite MPCA's characterization of their new Class 3 & 4 standards as being reasonable and necessary for protecting wildlife, because the proposed rules do not incorporate the derived protective mercury wildlife criterion in Class 4, they are not supported by significant body of peer-reviewed science or longstanding EPA guidance.

IX. The proposed changes to Class 3 are impermissible due to their failure to consider scaling and corrosion impacts.

The proposed changes to Class 3 waters will also allow backsliding and degradation of water quality. Amendments to Class 3 standards include: removing all numeric standards for chloride, hardness, calcium carbonate, and pH; replacing numeric standards with a single narrative standard; consolidating the beneficial use protection to a single Class 3 designation; and

⁷⁸ 40 CFR 132 at App'x D, Sec. I(A), Great Lakes Water Quality Initiative Methodology for the Development of Wildlife Criteria.

⁷⁹ *Id.*

⁸⁰ Great Lakes Water Quality Initiative Technical Support Document for Wildlife Criteria (1995) at Sec. 1, at <https://www.epa.gov/gliclearinghouse/great-lakes-initiative-technical-support-documents>.

⁸¹ SONAR at 165.

incorporating by reference the translator methodology for implementing the narrative standard.⁸² The Class 3 translator is only intended to avert “*water quality conditions that prevent attainment of the industrial consumption (Class 3) designated use with respect to scaling.*”⁸³ Although the stated goal of the changes to Class 3 rules is to protect the industrial consumption designated use by ensuring the downstream potential for calcium scaling will not negatively affect existing industrial appropriators, the agency claims it “currently has no indications that any industrial appropriators are experiencing calcium scaling at levels of concern.”⁸⁴

But in fact, MPCA is well aware of industrial concerns regarding scaling, as well as corrosion. U.S. Steel, for its Minntac taconite operation published an Environmental Impact Statement in 2004 to support a water management plan aimed at reducing the concentrations of sulfate, chloride, total dissolved solids, fluoride, and hardness.⁸⁵ The reason was that corrosion that was negatively impacting operations through increasing maintenance and capital costs.

Another aspect of this that has not been assessed is the potential impacts to downstream community drinking water sources. Corrosion can increase toxic metals in drinking water that then require community drinking water plants to institute corrosion control methods to prevent a situation similar to Flint, Michigan, where residents were subjected to high concentrations of lead due to their corrosive source water.⁸⁷

Current Class 3C Industrial Standards provide that waters “shall be such as to permit their use for industrial cooling and materials transport without a high degree of treatment being necessary to avoid severe fouling, corrosion, scaling, or other unsatisfactory conditions.”⁸⁸ Scaling is only one aspect of current protections. By removing protection for severe fouling, corrosion, and other unsatisfactory conditions, the MPCA would allow backsliding in NPDES permits and violate state antidegradation rules.

Loading limits for Class 3C waters in the current rule allow a range of numeric criteria for chloride from 50 mg/L for subclass 3A, to 250 mg/L for subclass 3C.⁸⁹ The current chloride threshold of 250 mg/L in subclass 3C to prevent scaling, severe fouling, corrosion, and other unsatisfactory conditions is five times higher than 3A criteria intended to protect the use of industrial water that “shall be such as to permit their use without chemical treatment, except softening for groundwater, for most industrial purposes, except food processing and related uses, for which a high quality of water is required.”⁹⁰ Current numeric criteria ranges for hardness are 50 mg/L for subclass 3A, up

⁸² *Id.* at 13.

⁸³ MPCA, Draft Industrial Consumption Narrative Translator at 1 (emphasis added), available at <https://www.pca.state.mn.us/sites/default/files/wq-rule4-17g.pdf>. Scaling means calcium carbonate precipitation due to high water hardness.

⁸⁴ SONAR at 74-75.

⁸⁵ US Steel Minntac Water Inventory Reduction Environmental Impact Statement (Sept. 2004) at 2, available at <https://www.pca.state.mn.us/sites/default/files/minntac-deis.pdf>.

⁸⁷ New York Times, *Flint’s Water Crisis Started Five Years Ago. It’s Not Over Yet.* (Apr. 25, 2019)

<https://www.nytimes.com/2019/04/25/us/flint-water-crisis.html#:~:text=Flint%20officials%20had%20failed%20to,the%20blood%20of%20many%20residents>, Ex. G.

⁸⁸ SONAR at 13.

⁸⁹ *Id.*

⁹⁰ *Id.*

to 500 mg/L for subclass 3C.⁹¹ The concentration at which hardness is currently limited to prevent scaling, severe fouling, corrosion, and other unsatisfactory conditions is 500 mg/L, one order of magnitude more concentrated than Class 3A.

The new narrative translator proposes to define hardness limits in NPDES permits using existing discharge levels only to prevent an *increase* in loading. This would allow those entities that are already far exceeding current hardness standards to continue unabated—with new wiggle-room to increase calcium loading, and without having to control chloride.⁹² This is the definition of impermissible backsliding. Moreover, as explained in Section II, combining the four existing industrial categories would only be permissible under the Clean Water Act and state rules if MPCA extended the *most protective* criteria from the current Class 3A and 3D beneficial use categories. MPCA has gone the opposite way, impermissibly seeking to allow *higher* concentrations of pollutants than the *least protective* criteria in category 3C.

A further problem is that, although prioritizing large water consumers and dischargers is appropriate, limiting the translator analysis to *only* entities that had or have a water appropriations permit is not compliant with the Clean Water Act. All NPDES permits must go through an analysis to determine their reasonable potential to exceed water quality standards.⁹³ It is a violation of the Act to limit the assessment to determine the reasonable potential to exceed water quality standards to a downstream industrial intake. NPDES permit limits are set based on the concentration of water pollutants *in a discharge*, not *at an intake* of another industry that may be many miles downstream of a discharge that has the reasonable potential to violate water quality standards. Additionally, suggesting that the translator be incorporated by reference into the rule because it “allows MPCA to more conveniently make changes if they are needed”⁹⁴ without going through rulemaking and additional public scrutiny, is without any legal or scientific basis. Again, this aspect of the proposed rules fails under the most basic requirements of the Act. EPA guidance states that “[m]ost water quality criteria are expressed as numeric, or quantitative, parameters... expressed in this way specify the precise, measurable levels of particular chemicals or conditions allowable in a water body. *When pollutants cannot be precisely measured, narrative criteria are used to express a parameter in a qualitative form.*”⁹⁵ These changes must be rejected.

X. This rule change is not legally necessary to accommodate the needs of industrial and Publicly-Owned Treatment Works (“POTWs”).

According to MPCA’s preliminary cost analysis, compliance with current Class 3 & 4 water quality standards has the potential to cause substantial economic hardship to NPDES permittees,

⁹¹ *Id.*

⁹² MPCA, Draft Industrial Consumption Narrative Translator at 3.

⁹³ 40 CFR 122.4(d)(1)(i): Limitations must control all pollutants or pollutant parameters (either conventional, nonconventional or toxic pollutants) which are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality.

⁹⁴ SONAR at 37.

⁹⁵ US EPA Water Quality Standards Key Concepts, Module 3: Numeric and Narrative Criteria, available at <https://www.epa.gov/wqs-tech/key-concepts-module-3-criteria#tab-5>.

particularly municipal dischargers.⁹⁶ However, MPCA has already resolved this issue by developing an electronic variance application for excess salts specifically made for municipalities.⁹⁷ This streamlined, automated calculator aggregates economic data and pollution control technology cost estimates to evaluate variance eligibility. Based on results from the automated calculator, MPCA stated in the SONAR that *every municipality* (98 cities) that has a reasonable potential to exceed water quality standards for salty discharges would be eligible for a variance from water quality standards, and therefore “it is reasonable to assume that every facility with a Class 3 and 4 limit would also be eligible.”⁹⁸ So even if they were legal or scientifically supported, which they are not, the changes are not necessary to provide POTWs recourse.

The agency also assessed taconite operations for variance eligibility, and they are in a significantly different situation than POTWs. ArcelorMittal, USA (“AM”); Cleveland-Cliffs, Inc. (“CC”); and U.S Steel Corporation (“USS”) are the parent companies of all of the taconite mines in Minnesota. MPCA correctly concluded that “[a]ctive treatment would be required to treat taconite related discharges to below the Class 3 and 4 WQS.”⁹⁹ MPCA correctly concluded that there was no demonstration of substantial economic impacts under the variance analysis because “finances can be leveraged for complying with existing water quality standards” from these parent companies “for their subsidiary taconite mines in Minnesota.”¹⁰⁰ Because taconite producers cannot demonstrate substantial financial impacts, they are not entitled to variances.¹⁰¹

Furthermore, the existing Class 3 & 4 criteria for industrial and agriculture uses are considered attainable because they can be achieved if technology based standards are imposed on point source dischargers (as provided in sections 301(b)(1)(A) and (B)) and 306 of the CWA), along with cost-effective and reasonable best management practices imposed on nonpoint source dischargers. Relaxing criteria, while the concentrations of salts build in surface and groundwater, only increases the financial burden for industry and municipalities when and if the agency requires compliance with water quality standards.

Another distinction is that large industrial dischargers have direct and negative impacts *on* POTWs. Taconite is the most significant source of mercury in the Lake Superior basin and yet operators are not required to have a mercury reduction strategy. Nearby community residents that are not connected to community water supplies either must suffer from polluted groundwater or install home drinking water treatment systems that can cost thousands of dollars.

Every day that large industrial sources are allowed to operate without wastewater treatment costs Minnesota residents near these operations hundreds of thousands of dollars for additional, future pollution treatment for both wastewater and community drinking water. An example of the result of uncontrolled discharges from taconite pollution is the experience of Chisholm, Buhl, Kinney

⁹⁶ MPCA Class 3 and 4 Water Quality Standards Revision Technical Support Document (Jan. 2019) at 8, available at <https://www.pca.state.mn.us/sites/default/files/wq-rule4-17d.pdf>.

⁹⁷ SONAR at 130.

⁹⁸ *Id.*

⁹⁹ *Id.* at 143.

¹⁰⁰ *Id.* at 162.

¹⁰¹ *Id.* at 149.

and Great Scott Townships, which have seen taconite mining operations pass down expenses to taxpayers for a new wastewater treatment system of approximately \$21 million to treat mercury. The district leveraged funding from several public sources, including:

- 2005 Minnesota Bonding Bill: \$1.7 million design grant;
- Minnesota Public Facilities Authority: \$12 million construction grant, an \$8.1 million low-interest loan plus about \$4.8 million for inflow & infiltration (“I & I”) removal projects; and
- Iron Range Resources and Rehabilitation Board Funds: \$5.5 million construction grants.¹⁰²

In any case, MPCA’s analysis demonstrates that community wastewater discharges would *not* be adversely impacted by compliance with existing rules—the overall regulatory scheme provides various forms of support. The analysis also demonstrates that the taconite industry *can* afford to implement wastewater treatment for their discharges, and must do so to comply with existing water quality standards.

Finally, entirely missing from the analysis are the costs associated with loss of natural capital. Yet natural capital provides for indispensable economic development and quality of life benefits. Flood protection is one straightforward example of ecosystem services. When wetlands functions are lost, the economic damages of flooding can include job losses, infrastructure repairs, reconstruction costs, restoration costs, property damage, and death.¹⁰³ Subsistence foods such as fish and wild rice require clean water. Clean water also provides economic benefits to users because of reduced treatment costs. The proposed changes are not legally necessary to meet permittees’ needs.

XI. Meaningful consultation between MPCA and tribal leaders “with the goal of achieving mutually beneficial solutions” has not occurred.

Due to the government-to-government relationship between tribes and the state, MPCA provides advance notice to tribes of permit and rulemaking, with opportunities for consultation, as well as offering staff-level engagement. Tribes provided comments to MPCA regarding the proposed changes to Class 3 & 4 water quality standards in March 2019 and September 2020.¹⁰⁴ While there have been multiple contacts and conversations, the consultation process has fallen severely

¹⁰² MPCA, On Point Newsletter (Dec. 2015), “Strategic planning helps sewer district go above and beyond in northern Minnesota,” available at https://content.govdelivery.com/accounts/MNPCA/bulletins/12c728c?mnpeca_150. The Minnesota Public Facilities Authority manages three large revolving loan funds that have received federal capitalization grants and state match appropriations; Minnesota Public Facilities Authority 2015 Annual Report, at <https://www.leg.state.mn.us/lrl/agencies/detail?AgencyID=1326>; The Iron Range Resources and Rehabilitation Board receives most of its funding from taxes on taconite mining in its service area; Office of the Minn. Legislative Auditor, Iron Range Resources and Rehabilitation Board (IRRRB) Evaluation Report (Mar. 2016), at <https://www.auditor.leg.state.mn.us/ped/pedrep/irrrb2016.pdf>.

¹⁰³ Great Lakes Indian Fish and Wildlife Commission, Earth Economics, The Value of Nature’s Benefits in the St. Louis River Watershed (June 2015), available at <https://www.glifwc.org/Events/Earth%20Economics%20St%20Louis%20River%20Project%20Report.pdf>.

¹⁰⁴ See, e.g., Exs. B-C (GP comment ltrs.).

short. The deficit is not in the fact that the state and the tribes do not agree—that is, indeed, sometimes inevitable even after a robust consultation process—but here there has been a failure of agency process. MPCA appears to have confused quantity of contacts with quality. This is not meaningful consultation.

The SONAR provides a brief discussion about consultation and coordination with tribes, specifically citing Governor Walz’s Executive Order 19-24, which requires state agencies to “consider the input gathered from tribal consultation into their decision-making processes, with the goal of achieving mutually beneficial solutions.”¹⁰⁵ Here, however, the agency has simply informed tribes of their plans after making them, despite the profound and negative impacts of those plans on tribal communities.

As the SONAR confirms, and as discussed above, in the course of this consultation, tribes have suggested that MPCA use existing Clean Water Act tools to protect wild rice by: (1) listing impaired wild rice water on the 2020 303(d) list;¹⁰⁶ (2) ensuring wild rice is protected by adequate limits in NPDES permits; (3) enforcing NPDES permit limits; and (4) moving natural wild rice waters out of agricultural beneficial uses and into aquatic life beneficial uses.¹⁰⁷ These efforts would go a significant distance to mitigate the impacts of the proposed Class 3 & 4 rule changes (while not addressing the standalone legal and scientific issues with the current proposal). But none of these things are being done. It is deeply frustrating that the MPCA has pursued none of the measures requested by tribal nations—all of which are rooted in the law and science. This undercuts all other relationship building this administration and agency have sought to do with tribes.

The SONAR also mischaracterizes the consultation process, stating that only Grand Portage requested consultation—ignoring Fond du Lac’s consultation request—and then seriously understating Grand Portage’s position.¹⁰⁸ The MPCA also notes that this same section of the SONAR was shared with tribes in advance of the formal rule proposal—but that round seems to have been nearly meaningless because, despite receiving correction on a number of statements from the tribal nations, the SONAR was still published with misstatements.¹⁰⁹

Despite all of this, in the SONAR, as it does elsewhere, the agency has continually made claims to the effect that it seeks to “work together” and “collaborate” with tribes on “the protection and restoration of wild rice in Minnesota, including the wild rice sulfate standard.”¹¹⁰ In fact, tribes have been working with MPCA since the mid-1990’s to develop comprehensive wild rice protection and restoration plans. Beginning in 2004, tribes, MPCA and the US EPA met to discuss implementation of the sulfate standard to protect wild rice in industrial NPDES permits where known downstream wild rice waters have elevated concentrations of sulfate. Since then,

¹⁰⁵ SONAR at 82.

¹⁰⁶ See Ex. D (tribal correspondence regarding listing of impaired wild rice waters on the 2020 303(d) List).

¹⁰⁷ *Id.*; see also Exs. B-C (GP Cmts.).

¹⁰⁸ SONAR at 183 (claiming “Grand Portage staff indicated that their key concern was ensuring that their comments had been heard and considered by the MPCA.”); compare GP Cmts. (Sept. 4, 2020), Ex. B (detailed scientific and legal objections to proposed changes); GP Cmts. (Apr. 22, 2019), Ex. C (same).

¹⁰⁹ GP Cmts. (Sept. 4, 2020), Ex. B.

¹¹⁰ SONAR at 5.

tribes participated in MPCA’s advisory panel on wild rice; tribal leaders consulted with the then-MPCA Commissioner regarding the proposed equation-based standard and other proposed changes to the rules that protect wild rice; tribes have provided written comments about proposed rule amendments, NPDES permit reissuance, and various actions associated with environmental review of proposed projects; and tribes have litigated over these issues. Tribes have additionally come together to submit a full report to the state on this topic, the 2018 Tribal Wild Rice Task Force Report.¹¹¹ But very little has changed. Tribal comments have been relegated beneath the comments of other stakeholders who are not governments. The deficits in the tribal consultation process speak for themselves.

XII. The proposed rule changes ignore environmental justice standards and includes no analysis of impacts on treaty resources.

MPCA says it is concerned about environmental justice. Tribes have made clear that protection of wild rice is a top environmental justice issue for Native citizens of this state. Yet MPCA’s Environmental Justice Map does not even show wild rice waters,¹¹² and for all the reasons discussed in Sections III and IV, MPCA here treats those waters as unimportant.

The problem is not just the lack of analysis of impacts on existing uses for wild rice and aquatic life. *No change to any water quality standards should happen without analysis of impacts on treaty resources.* That is a core principle of environmental justice when it comes to tribal interests. That analysis goes beyond soliciting tribal comments and consultation—it is an obligation of the agency to do an independent, in-depth analysis. MPCA’s own Environmental Justice Framework requires comprehensive modelling, qualitative and quantitative analysis, and assessment of cumulative impacts.¹¹³ But none of this crucial work has been done here.

XIII. Conclusion

The volume of defects in these proposed rules is staggering. MPCA’s proposed amendments to the Class 3 & 4 Rules contravene federal antidegradation requirements requiring that “[e]xisting instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected.”¹¹⁴ State and federal NPDES authority is limited to discharge permits, not water intake systems. The idea that compliance monitoring would or should occur at an industrial or agricultural intake that may be miles downstream of a discharge that is violating Minnesota water quality standards is not NPDES-compliant. It does not provide protection of the existing uses of the water between one major industrial or agricultural discharge and the next entity large enough to have a MN DNR water appropriations permit. Furthermore, the proposed amendments are not intended to protect the most sensitive uses in each designated use class. Instead of protecting the existing and most sensitive uses, and without doing a UAA, MPCA proposes to change the designated uses in each use class and relax existing criteria to reduce the

¹¹¹ Ex. A.

¹¹² SONAR at 181 and 182.

¹¹³ MPCA Env’t Justice Framework (Dec. 17, 2015), available at <https://www.pca.state.mn.us/sites/default/files/p-gen5-05.pdf>.

¹¹⁴ 40 CFR§131.12(a)(1).

need for NPDES permit limits. At the same time, it would eliminate potential industrial requirements to install adequate wastewater treatment.

These amendments effectively eliminate numeric protections for wild rice waters, without ever even attempting to evaluate the impacts and by pretending protection will be provided by Class 2 criteria, even though wild rice is a Class 4A Beneficial Use. The amendments would allow methylmercury concentrations to increase in fish, wildlife, and, ultimately, people, and they would elevate the risk of high salinity, creating corrosion issues—the same thing that caused high concentrations of lead to be released into Flint, Michigan’s drinking water. This kind of deregulation also risks creating chemoclines in lakes causing habitat destruction from depleted oxygen and the release of nutrients and toxic metals into the water column. The risks are unacceptable.

Additionally, MPCA has misrepresented consultation with Minnesota tribes in the SONAR, and the tribal issues with these proposed rules. Instead of meaningful consultation to develop scientifically-defensible and Clean Water Act-compliant regulations, MPCA simply informed and updated tribes as the agency progressed down a bad path.

This is about deregulation, not protecting water quality. While we agree that MPCA’s water quality standards should be updated periodically to better support aquatic life, the environment, and human health, these revisions will do just the opposite. For all of the reasons cited above, the OAH should reject all the proposed amendments to Class 3 & 4 rules.

Sincerely,

See attached Tribal Leader signature pages

- c: Gov. Walz (by email only c/o Patina Park)
- Lt. Gov. Peggy Flanagan (by email only c/o Patina Park)
- Patina Park, Tribal State Relations Systems Implementation
(by email only: patina.park@state.mn.us)
- Laura Bishop, MPCA Commissioner (by email only: Laura.Bishop@state.mn.us)
- Katrina Kessler, MPCA (by email only: katrina.kessler@state.mn.us)
- Helen Waquiu, MPCA (by email only: helen.waquiu@state.mn.us)
- Catherine Neuschler, MPCA (by email only: catherine.neuschler@state.mn.us)
- Barbara Wester, US EPA Region 5, Office of Regional Counsel
(by email only: wester.barbara@epa.gov)
- Tera Fong, US EPA Region 5, Water Division Director
(by email only: Fong.Tera@epa.gov)
- Alan Walts, US EPA Region 5, Office of International and Tribal Affairs
(by email only: walts.alan@epa.gov)
- Cheryl Newton, Acting EPA Region 5 Regional Administrator
(by email only: newton.cheryl@epa.gov)

Signature Page – February 24, 2021

Office of Administrative Hearings – Administrative Law Judge Lipman

Re: Comments 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.

A handwritten signature in black ink, appearing to read "Travis Morrison", written over a horizontal line.

Travis Morrison

Vice-Chair

Bois Forte Band of Chippewa

Signature Page – February 24, 2020

Office of Administrative Hearings – Administrative Law Judge Lipman
Re: Comments 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.

A handwritten signature in black ink, appearing to read "Kevin Dupuis", written over a horizontal line.

Kevin Dupuis
Chairperson
Fond du Lac Band of Lake Superior Chippewa

Signature Page – February 24, 2021

Office of Administrative Hearings – Administrative Law Judge Lipman

Re: Comments 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.



Robert F. Deschampe

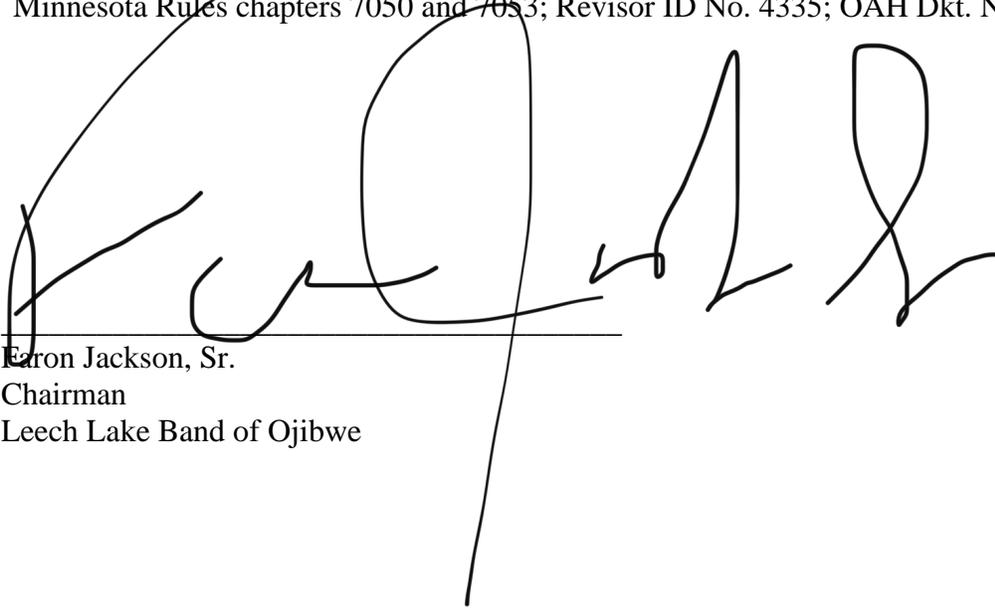
Chairman

Grand Portage Band of Lake Superior Chippewa

Signature Page – February 24, 2021

Office of Administrative Hearings – Administrative Law Judge Lipman

Re: Comments 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.

A large, stylized handwritten signature in black ink, written over a horizontal line. The signature is cursive and appears to read 'Aaron Jackson, Sr.'.

Aaron Jackson, Sr.
Chairman
Leech Lake Band of Ojibwe

A long, thin, slightly curved horizontal line drawn in black ink at the bottom of the page.

Signature Page – February 24, 2021

Office of Administrative Hearings – Administrative Law Judge Lipman

Re: Comments 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.



Robert Larsen
President
Lower Sioux Indian Community

Signature Page – February 24, 2021

Office of Administrative Hearings – Administrative Law Judge Lipman
Re: Comments 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.

A handwritten signature in blue ink that reads "Melanie Benjamin". The signature is written in a cursive style and is contained within a thin blue rectangular border.

Melanie Benjamin
Chief Executive
Mille Lacs Band of Ojibwe

Signature Page – February 24, 2021

Office of Administrative Hearings – Administrative Law Judge Lipman
Re: Comments 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.

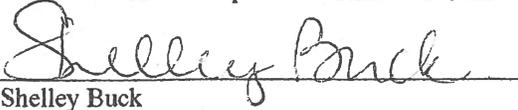
A handwritten signature in cursive script, reading "Gary Frazer", written over a horizontal line.

Gary Frazer
Executive Director
Minnesota Chippewa Tribe

Signature Page – February 24, 2021

Office of Administrative Hearings – Administrative Law Judge Lipman

Re: Comments 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.

A handwritten signature in cursive script that reads "Shelley Buck". The signature is written in black ink and is positioned above a horizontal line.

Shelley Buck

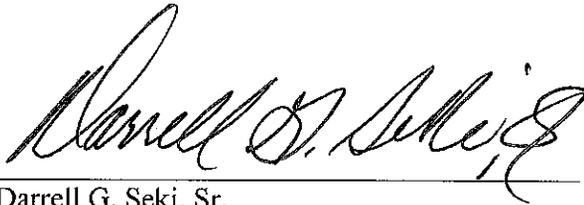
President

Prairie Island Indian Community

Signature Page – February 24, 2021

Office of Administrative Hearings – Administrative Law Judge Lipman

Re: Comments 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.

A handwritten signature in black ink, appearing to read "Darrell G. Seki, Sr.", written over a horizontal line.

Darrell G. Seki, Sr.

Tribal Chairman

Red Lake Band of Chippewa Indians

Signature Page – February 24, 2021

Office of Administrative Hearings – Administrative Law Judge Lipman
Re: Comments 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.

A handwritten signature in black ink that reads "Keith Anderson". The signature is written in a cursive, somewhat stylized font. The first name "Keith" is written in a smaller, more compact script, while "Anderson" is written in a larger, more prominent script. The signature is positioned above a horizontal line.

Keith B. Anderson

Chairman

Shakopee Mdewakanton Sioux Community

Signature Page – February 24, 2021

Office of Administrative Hearings – Administrative Law Judge Lipman

Re: Comments 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.

A handwritten signature in black ink, appearing to read 'M. Fairbanks', written over a horizontal line.

Michael Fairbanks
Chairman
White Earth Nation