Commenter name (& affiliation if known)	Rule part	Topic	Comment (summarized if marked with *)	MPCA response	Discussed on SONAR page or supporting doc	Comment type	Exhibit #
Ryann Geldner	Minn. R. 7050.0222; Minn. R. 7050.0150	General support	* Support for the proposed amendments because they will refine and strengthen protections for lakes	Attachment 2, Section A	Hearing Exhibit D, SONAR [pp. 13-16, 32-40]	pre-hearing eComment	I-1.1
Ryann Geldner	Minn. R. 7050.0227	Class 7 use designation	…request that MPCA remove Class 7 entirely and classify all waters under protective Classes 1–6.	Attachment 2, Section B	Hearing Exhibit D, SONAR [pp. 40-43]	pre-hearing eComment	I-1.1
Ryann Geldner	Minn. R. 7050.0222	Implementation of additional protections for lakes	**Incorporate macroinvertebrate monitoring into lake assessments.** Macroinvertebrates are foundational to lake food webs and are sensitive indicators of eutrophication, sediment oxygen depletion, and chemical disturbance. Including benthic macroinvertebrate metrics would greatly improve biological condition assessments under TALU.	Attachment 2, Section C.1	Hearing Exhibit D, SONAR [pp. 40-43]	pre-hearing eComment	I-1.1
Ryann Geldner	NA	Implementation of additional protections for lakes	**Add protections or scoring incentives for lakes with intact native plant shorelines.** Native littoral vegetation supports fish spawning, amphibians, macroinvertebrates, and water quality. TALU tiers should recognize and reward lakes with high quality shoreline habitat.	Attachment 2, Section C.2	Hearing Exhibit D, SONAR [pp. 40-43]; Perleberg et al. 2025 [pp. 18-32]; SONAR Exhibit S-5 [Appendix A]	pre-hearing eComment	I-1.1
Ryann Geldner	NA	Implementation of additional protections for lakes	**Require ecological monitoring after aquatic herbicide treatments.** Chemical treatments can affect dissolved oxygen, sediment chemistry, macroinvertebrates, and amphibians. Minnesota does not currently require post treatment biological monitoring. Adding this requirement would align lake management with the rule's aquatic life protection goals.	Attachment 2, Section C.3	Hearing Exhibit D, SONAR [pp. 40-43]	pre-hearing eComment	I-1.1
Ryann Geldner	NA	Implementation of additional protections for lakes	**Improve oversight of cumulative chemical applications.** A single lake can receive multiple herbicide permits from individuals, associations, and contractors. MPCA should track cumulative chemical load to ensure aquatic life standards are not unintentionally compromised.	Attachment 2, Section C.3	Hearing Exhibit D, SONAR [pp. 40-43]	pre-hearing eComment	I-1.1
Ryann Geldner	NA	Implementation of additional protections for lakes	**Create a public, searchable database of all aquatic herbicide permits and quantities.** Transparency is essential for public trust and scientific evaluation. A centralized database would allow citizens, researchers, and local governments to understand how much chemical treatment is occurring and where.	Attachment 2, Section C.3	Hearing Exhibit D, SONAR [pp. 40-43]	pre-hearing eComment	I-1.1
Ryann Geldner	Minn. R. 7050.0222	Implementation of additional protections for lakes	**Ensure TALU does not unintentionally reduce protection for modified or degraded lakes.** TALU should continue to encourage restoration and improvement. Lakes with intact native plant shorelines should receive higher protection, and lakes with degraded littoral zones should not be permanently assigned lower expectations.	Attachment 2, Section C.4	Hearing Exhibit D, SONAR [pp. 40-43]	pre-hearing eComment	I-1.1
Kathy DonCarlos, Northwern Waters Land Trust—Land Conservation Program	Minn. R. 7050.0222; Minn. R. 7050.0150	General support	* Support for the proposed amendments because they will refine and strengthen protections for lakes	Attachment 2, Section A	Hearing Exhibit D, SONAR [pp. 13-16, 32-40]	pre-hearing mail/fax	I-1.2
Robert Sip & John Finney, Red River Watershed Management Board	Minn. R. 7050.0222	Natural variability	…the Red River Basin (RRB) is hydrologically, geographically, and biologically different from many other regions of Minnesota. These differences must be fully reflected in both the final rules and their subsequent implementation. It also amplifies the need for engaging local experts in processes and procedures associated with the Clean Water Act implementation. The RRWMB is particularly concerned that standards, biological criteria, lake classifications, reference conditions, and impairment methodologies developed on a statewide basis could produce unintended consequences when applied to the naturally shallow, highly variable, wetland influenced, low gradient waters of Northwest Minnesota. Although it is unlikely these rule changes will add restrictions relative to construction of WD projects, the RRWMB is opposed to any additional restrictive rules with no basis for the classification changes. Accordingly, the RRWMB requests that MPCA incorporate the following considerations into the final rule and its implementation.	Attachment 2, Section D.1 and D.2	Hearing Exhibit D, SONAR [pp. 14, 23-24, 25-27]; SONAR Exhibit S-4 [p. 1]; EPA 2021	pre-hearing eComment	I-1.3
Robert Sip & John Finney, Red River Watershed Management Board	Minn. R. 7050.0222	Natural variability	The Minnesota portion of the RRB encompasses a remarkably diverse landscape extending from the Lake Agassiz Plain eastward into lake, forest, and wetland dominated portions of Northwest Minnesota. Local WD staff have decades of experience working in these unique conditions. As such, we strongly encourage the State of Minnesota to increase its level of engagement with local stakeholders when making policies, rules, or implementing Clean Water Act activities in the RRB. The proposed rule specifically recognizes 17 HUC-8 watersheds within the Red River of the North Basin. However, these watersheds do not represent a uniform aquatic environment. The RRB is the bed of former Glacial Lake Agassiz and is characterized by extremely low gradients, extensive agricultural drainage, naturally fine soils, high sediment mobility, wetland complexes, shallow water bodies, and highly variable hydrology. Farther east, the basin transitions into landscapes containing numerous natural lakes, forests, wetlands, coldwater resources, and substantially different soils and watershed characteristics. The final rule should expressly recognize that the attainable biological and chemical condition of a water body must be evaluated in the context of its natural watershed, geomorphic, hydrologic, and ecological setting. Again, local practitioners like staff at WD's and Soil and Water Conservation Districts (SWCD) have decades of firsthand boots-on-the-ground experience in addressing this natural variation.	Attachment 2, Section D.1	Hearing Exhibit D, SONAR [pp. 14, 23-24, 25-27]; SONAR Exhibit S-4 [p. 1]; EPA 2021	pre-hearing eComment	I-1.3

Robert Sip & John Finney, Red River Watershed Management Board	NA	Natural variability	During the 1st cycle of the watershed approach in Minnesota, local expertise had more direct engagement with the MPCA before, during, and after processes like the proposed rules. We strongly encourage the MPCA to reinstitute stronger stakeholder engagement with local stakeholders before, during, and after the implementation of processes like the proposed rule changes. The RRWMB is available to discuss effective strategies for engaging stakeholders within the RRB. For example, it is not uncommon for an intense rainfall event to impact a localized area within a watershed. Typically, local WD and SWCD staff will be aware of these events and familiar with the specific impacts. Without local coordination, it would be difficult for regionally based state agency staff to recognize this type of impact if monitoring towards the proposed rule was scheduled to occur a few days after the event. Local stakeholder coordination could help to resolve this issue. As such, the RRWMB strongly recommends development of a clear and accessible process through which WD's and other affected parties can be collaboratively engaged before, during and after the application of Clean Water Act procedures to waters in the RRB.	Attachment 2, Section D.1 and D.2	Hearing Exhibit D, SONAR [pp. 14, 23-24, 25-27]; SONAR Exhibit S-4 [p. 1]; EPA 2021	See Attachment 2, Item D.1, D.2	I-1.3
Robert Sip & John Finney, Red River Watershed Management Board	Minn. R. 7050.0222	Natural variability	**2. Natural Background Conditions Must Be Distinguished from Human Caused Pollution:** Perhaps the most important issue for the RRWMB is the treatment of natural background conditions. Natural watershed characteristics can contribute significant amounts of phosphorus to lakes. The MPCA's analysis acknowledges that natural watershed sources of nutrients can be substantial in RRB. Elevated phosphorus concentration does not necessarily demonstrate anthropogenic pollution, and reduced water transparency does not necessarily demonstrate human caused degradation. Naturally productive shallow lakes, wetland dominated watersheds, peatlands, organic soils, internal nutrient cycling, wind driven sediment resuspension, fish communities, drought, flooding, and natural hydrologic variability can substantially affect observed water quality. Alternatively, the elevated phosphorus concentrations maybe be significantly impacted by human activities such as stormwater, historical direct disposal of sewage, historical creamery waste disposal, historical mortuary waste disposal, historical sawmill waste disposal, or unmanaged water from rural settings. It is just as important as the natural causes to understand the human causes. Before determining that a water body is impaired or requiring additional nutrient reductions, MPCA should demonstrate that the observed condition represents a departure from the reasonably attainable natural condition of that water body. Local knowledge and insights should help inform these decisions. WD's and landowners should not be required to implement costly restoration measures intended to achieve conditions that are naturally unattainable. The RRWMB recommends that the final rule or associated implementation guidance explicitly establish a process for separating: • Natural background loading. • Internal loading and natural nutrient cycling. • Wetland derived nutrients and organic matter. • Naturally occurring turbidity and sediment conditions. • Climate and hydrologic variability. • Anthropogenic pollutant loading.	Attachment 2, Section D.1	Hearing Exhibit D, SONAR [pp. 14, 23-24, 25-27]; SONAR Exhibit S-4 [p. 1]; EPA 2021	pre-hearing eComment	I-1.3
Robert Sip & John Finney, Red River Watershed Management Board	Minn. R. 7050.0222	Natural variability	**3. Lake Classification Decisions Must Be Transparent and Reviewable:** The proposed framework places increased importance on determining the appropriate lake category, especially in the Lake Agassiz Plain ecoregion that does not have a unique set of Lake Eutrophication Standards (LES) and relies on professional judgment to assign a set of standards based on how the lake compares to lakes in ecoregions with LES. Lake classification can involve depth, littoral area, thermal stratification, fish communities, and other characteristics that some lakes do not fit neatly within established categories. In such cases, professional judgment may be necessary. Professional judgment is necessary in the RRB, and the classification decisions can have significant regulatory consequences. A lake classification determines the appropriate water quality standards, which can in turn determine whether a lake is considered impaired. The Lake Agassiz Plain contains water bodies that may naturally exhibit high nutrient concentrations, turbidity, limited transparency, shallow depths, wetland influence, and other characteristics that could be unusual in recreational lakes elsewhere in Minnesota. The RRWMB therefore recommends that MPCA establish, or continue using, a transparent classification process that: • Identifies the data supporting the classification. • Identifies the criteria used. • Documents the scientific rationale. • Allows consideration of locally collected data. • Provides notice to affected watershed districts and local governments. • Establishes a meaningful process for reviewing or challenging an incorrect classification. Classification should not become an administrative determination that is effectively unreviewable once incorporated into an impairment assessment. But rather, it should include local feedback and insights to help determine the correct classification and application of water quality standards. For mixing type classification, it is important to incorporate temperature and dissolved oxygen profile data, when available. Discissions on mixing classification should go beyond the use of the geometric ratio alone, to ensure the most appropriate standards are applied to the lake. Local flexibility when classifying a lake and applying a standard is important. The Lake Agassiz Plain ecoregion spans 500 miles end-to-end. Applying a single numeric standard to accommodate a wide range of conditions within the same ecoregion can lead to unattainable targets without site-specific considerations. The RRWMB therefore requests that MPCA retains a scientifically defensible mechanism for establishing site-specific expectations for Lake Agassiz Plain waters rather than applying standards developed from substantially different lake populations. MPCA should also clearly explain the methodology that will be used to establish those site-specific standards. Local WD's and other affected local governments should have a meaningful opportunity to review the data, reference conditions, lake classification, and proposed standard before a site-specific determination becomes the basis for an impairment listing or regulatory requirement.	Attachment 2, Section D.2 and D.3	Schupp (1992); SONAR Exhibits S-5 [p. 3, 12-13, 27-50] and S-8 [p. 5]	pre-hearing eComment	I-1.3
Robert Sip & John Finney, Red River Watershed Management Board	Minn. R. 7050.0222	Natural variability	**4. Biological Criteria Must Account for Natural Variability:** The RRWMB recognizes the value of biological monitoring. Fish and other biological communities can provide important information about long-term aquatic ecosystem health that may not be apparent from individual chemical samples. However, biological communities are affected by many factors unrelated to conventional pollution. These include drought, flooding, winterkill, natural lake level fluctuations, fish stocking, invasive species, predation, natural barriers, lake connectivity, habitat changes, temperature, dissolved oxygen, and historical conditions. The proposed rules allow biological quality to be evaluated against biological condition models or reference water bodies intended to represent natural conditions for a particular water body type and geographic region. The choice of appropriate reference conditions is therefore extremely important. MPCA should not conclude that an observed biological difference represents anthropogenic impairment unless there is adequate evidence connecting that condition to a human caused stressor. As part of this, reference water bodies should be carefully selected, within geographically relevant proximity and be subject to public feedback. Consistent with previous comments, this should also include a local stakeholder coordination process that engages local stakeholders prior to, during, and after reference conditions are set.	Attachment 2, Section D.1	Hearing Exhibit D, SONAR [pp. 14, 23-24, 25-27]; SONAR Exhibit S-4 [p. 1]; EPA 2021	pre-hearing eComment	I-1.3

Robert Sip & John Finney, Red River Watershed Management Board	Minn. R. 7050.0222; Minn. R. 7050.0470	Natural variability	**5. Exceptional Use Designations Require Clear Criteria and Local Participation:** The proposed framework establishes exceptional aquatic life classifications, including Class 2Ae, 2Bde, and Class 2Be waters. The RRWMB supports protecting genuinely exceptional aquatic resources. However, an exceptional use designation can have consequences extending beyond the water body itself, particularly if the designation influences antidegradation requirements, watershed planning, land use priorities, permitting, or projects upstream. Accordingly, exceptional use designations should be based on clear and reproducible criteria, adequate monitoring data, consideration of natural variability, and consultation with affected WD's and local governments.	Attachment 2, Section D.2 and D.3	Schupp (1992); SONAR Exhibits S-5 [p. 3, 12-13, 27-50] and S-8 [p. 5]	pre-hearing eComment	I-1.3
Robert Sip & John Finney, Red River Watershed Management Board	Minn. R. 7050.0222	Natural variability	**6. Coldwater and Oxythermal Standards Should Reflect Site-Specific Conditions:** The RRWMB recognizes the ecological importance of protecting coldwater fish communities. The MPCA proposes new oxythermal habitat criteria intended to directly measure the suitability of temperature and dissolved oxygen conditions for sensitive coldwater species. These protections may be particularly important in portions of the eastern RRB. However, MPCA should ensure that naturally occurring temperature or dissolved oxygen conditions are not interpreted as anthropogenic impairment without sufficient evidence. Climate trends, lake morphology, groundwater interaction, water levels, seasonal conditions, and natural oxygen dynamics should be considered before regulatory conclusions are reached. The oxythermal standard needs more definition in the rules. The standard states "an average TDO3 sufficient to support coldwater fish species…" Is this the summer average for the lake, the average over the water column at any given time, or the summer average at a specific depth?	Attachment 2, Section D.1	Hearing Exhibit D, SONAR [pp. 14, 23-24, 25-27]; SONAR Exhibit S-4 [p. 1]; EPA 2021	pre-hearing eComment	I-1.3
Robert Sip & John Finney, Red River Watershed Management Board	NA	Economic review	**7. MPCA Should Evaluate the Potential Effect on TMDLs and WRAPS:** A water quality standard does not operate in isolation. Once adopted, standards become part of the framework used to determine whether waters are meeting designated uses. New or revised standards can therefore lead to additional impairment determinations that then have downstream impacts on planning and implementation efforts. Driven by the importance of the downstream impacts of standards, the RRWMB requests that MPCA provide a RRB specific analysis estimating: • The number of Red River Basin water bodies potentially affected by the revised standards. • The number potentially subject to a different impairment determination. • The number potentially receiving exceptional use classifications. • The likely effects on future WRAPS and TMDLs. • Additional monitoring requirements. • Potential implementation costs. • A use attainability analysis for the standards within the region. • Potential costs to local governments and watershed districts. Without this information, it is difficult for affected local governments to understand the full fiscal and operational consequences of the proposed rules.	Hearing Exhibit I-2; Attachment 2, Section E.1	Hearing Exhibit D, SONAR [pp. 49-61]	pre-hearing eComment	I-1.3
Robert Sip & John Finney, Red River Watershed Management Board	NA	Maintence of multiple benefits	**8. Flood Damage Reduction and Multipurpose Water Management Projects Must Remain Feasible:** Flood damage reduction is an essential public responsibility within the RRB. The exceptionally flat topography of the RRB, historical wetland alterations, extensive drainage infrastructure, severe spring flooding, intense summer rainfall events, and international and interstate drainage characteristics require active water management. The RRWMB and its member WD's have invested substantial resources in projects that reduce flood damage while increasingly incorporating water quality, habitat, erosion control, wetland restoration, and other environmental benefits. The final rules should not unintentionally create barriers to properly designed multipurpose water management projects. Projects involving flood impoundments, diversions, channel restoration, grade control structures, wetland restoration, floodwater storage, drainage improvements, and other hydrologic modifications should be evaluated according to their overall environmental and public benefits. The MPCA should coordinate with WD's early in project development rather than allowing biological or water quality standards to become an obstacle late in permitting.	Hearing Exhibit I-2; Attachment 2, Section F	Hearing Exhibit D, SONAR [p. 38]	pre-hearing eComment	I-1.3
Robert Sip & John Finney, Red River Watershed Management Board	NA	Natural variability	**9. Climate and Extreme Hydrologic Conditions Must Be Considered:** The RRB experiences extraordinary hydrologic variability. A water body may experience drought, extreme spring runoff, prolonged flooding, intense rainfall, low flow conditions, winterkill, or substantial year-to-year water level fluctuations. These conditions can dramatically alter nutrient concentrations, sediment transport, dissolved oxygen, temperature, biological communities, and water clarity. The proposed standards should therefore be implemented using sufficiently long periods of record and appropriate hydrologic context so that temporary or extreme conditions are not mistaken for permanent anthropogenic degradation. The process by which these decisions are made and incorporated into associated work should be clearly documented and communicated.	Attachment 2, Section D.1	Hearing Exhibit D, SONAR [pp. 14, 23-24, 25-27]; SONAR Exhibit S-4 [p. 1]; EPA 2021	pre-hearing eComment	I-1.3
Robert Sip & John Finney, Red River Watershed Management Board	Minn. R. 7050.0150, subp. 4	Clarifications and corrections to proposed rule language	**10. Are Shallow Lakes now Excluded From LES on Purpose?** Are LES no longer applied to shallow lakes? The proposed changes to the rules are written, under the definitions and water quality standard, in a way to exclude shallow lakes from the LES.	Hearing Exhibit I-2; Attachment 2, Sections G.1 and H.1	Hearing Exhibit D, SONAR [pp. 23 (footnote 13), 41]; SONAR Exhibit S-3 [pp. 12-13]; Hearing Exhibit C	pre-hearing eComment	I-1.3
Robert Sip & John Finney, Red River Watershed Management Board	Minn. R. 7050.0222	Clarifications and corrections to proposed rule language	**11. Are Only Class 2A Lakes Being Assigned Biological Criteria UDraft MN Rules 7050.0222?** Under subpart 3d for Class 2Bd waters (starting on line 43.4) and subpart 4d. for Class 2B waters (starting on line 63.22), there are no biological criteria for Class 2Bd and Class 2B lakes. The biological criteria listed in the tables for Deep, complex lakes; Deep, moderately complex lakes, Moderately deep lakes, and Shallow lakes list either "2Ae" for exceptional or "2Ag" for general under "Class". Why are Class 2Ae and 2Ag lakes listed under Class 2Bd (subp. 3) and Class 2B (subp. 4)? Are all lakes going to be classified as Class 2A for biological criteria? The same biological criterion is used for each class (2A, 2Bd, and 2B), is this correct? We suspect this is a drafting error that should be corrected before the proposed changes are accepted. If it is not a drafting error, can you provide clarity to why Class 2A lakes WQS are listed under Class 2Bd and 2B?	Hearing Exhibit I-2; Attachment 2, Section H.2	Hearing Exhibit C	pre-hearing eComment	I-1.3
Robert Sip & John Finney, Red River Watershed Management Board	Minn. R. 7050.0222	Natural variability	**12. Differing Lake Classification System Between Lake Eutrophication Standards and Biological Criteria for Lakes:** Why is the lake classification system under the biological criteria different from the eutrophication standards? The proposed classification system for LES is mixing type (dimictic or polymictic) and ecoregion. The LES of the biological criteria uses Deep, complex lakes; Deep, moderately complex lakes; Moderately deep lakes, and Shallow lakes. Due to the switch of lake type under the classification for LES, would it make sense to use mixing type (dimictic or polymictic) instead of reverting back to the current system of depth type (deep and shallow)? It would result in less confusion. In addition, how are Deep, complex lakes; Deep, moderately complex lakes; Moderately deep lakes classified? What criteria are used to determine a lake's complexity? When and who determines it? This information is not easily accessible, laid out in the supplemental material or found when searched for "complex". The rules can be improved by clearly defining these classifications in the rule to increase the accessibility of information to general readers in understanding the rules.	Attachment 2, Section D.3	Schupp (1992); SONAR Exhibits S-5 [p. 3, 12-13, 27-50] and S-8 [p. 5]	pre-hearing eComment	I-1.3

Robert Sip & John Finney, Red River Watershed Management Board	Minn. R. 7050.0222	Natural variability	**13. Are Polymictic and Dimictic Determined Solely on Geometric Ratio?** Is geometric ratio, i.e. as the fourth root of lake surface area (m2) divided by maximum depth (m) (A00.25/Zmax, where A0 is lake surface area and Zmax is maximum depth), the sole indictor that is going to be used to for determining mixing type, or is it going to be a starting point and final determination be made during professional judgement? What about lakes with a littoral area of greater than 80%? If a lake has a large littoral area where most of the lake acts like a polymictic lake but has a small deep area with a maximum deep above 15 feet and the geometric ration identifies it as a dimictic lake, would it be still considered a dimictic lake? If profile data is available, will it be used over the geometric ratio? It is important to use all available profile data when determining the mixing state of a lake. This was not clear under the materials provided. Please clarify.	Hearing Exhibit I-2; Attachment 2, Section D.1	Hearing Exhibit D, SONAR [pp. 14, 23-24, 25-27]; SONAR Exhibit S-4 [p. 1]; EPA 2021	pre-hearing eComment	I-1.3
Robert Sip & John Finney, Red River Watershed Management Board	Minn. R. 7050.0222	Modified use designation for lakes	**14. Why no "Modified" TALU Class for Lakes?** Unlike streams, there is no "modified" designation for lakes. Are there any future plans to investigate if a "modified" designation may be needed for lakes that historically have not supported a healthy fish and macroinvertebrate community?	Hearing Exhibit I-2; Attachment 2, Section I	(SONAR Exhibit S-5 [p. 6]	pre-hearing eComment	I-1.3
Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board	NA	Request for additional information	Please provide a list of the three NPDES/SDS facilities upstream of proposed exceptional use lakes. [MPCA SONAR, Minn. R. ch. 7050, at 54 (Aug. 2026) (Doc. No. wq-rule4-27d)]	Hearing Exhibit I-2; Attachment 2, Section G.2	NA	pre-hearing eComment	I-1.4
Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board	NA	Request for additional information	Please provide a list of the 12 permit holders identified as potentially impacted by the revised eutrophication standards for northern lakes. [See SONAR p. 55]	Hearing Exhibit I-2; Attachment 2, Section G.2	NA	pre-hearing eComment	I-1.4
Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board	NA	Request for additional information	Please also provide the list of the 7 lakes identified that would likely be considered assessed as impaired under the proposed northern dimictic standards but not under the existing standards.	Hearing Exhibit I-2; Attachment 2, Section G.2	NA	pre-hearing eComment	I-1.4
Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board	NA	Request for additional information	Please provide a list of the 15 wastewater permits located upstream or adjacent to lakes that MPCA determined could become impaired based on the proposed coldwater aquatic life and habitat standards and designations. [See SONAR p. 58]	Hearing Exhibit I-2; Attachment 2, Section G.2	NA	pre-hearing eComment	I-1.4
Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board	NA	Economic review	Please confirm that when the agency identified the above-referenced 15 wastewater treatment facilities, MPCA evaluated all new chemical and physical standards that come with the proposed new Class 2A and 1B designations. Specifically, MESERB requests that MPCA confirm whether it evaluated the potential impacts to wastewater facilities that will result from the application of new and more stringent standards for ammonia, nitrate, sulfate, and TDS, in addition to the new eutrophication standards.	Hearing Exhibit I-2; Attachment 2, Section G.2	NA	pre-hearing eComment	I-1.4
Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board	Minn. R. 7050.042	Class 1 designation	The SONAR states that the rule is not "a change to any use class other than Class 2." [SONAR at 13 & n.3.] However, in operation, it appears that it is. Under Minn. R. 7050.0420, a Class 2A designation carries Class 1B, and the Agency acknowledges that Class 1B adds standards for sulfate, total dissolved solids, fluoride, nitrate plus nitrite, and several metals. [Minn. R. 7050.0420; SONAR, supra note 1, at 51, 56, 58.] The proposal designates 410 lakes as Class 2A, which then results in many, if not all, of those lakes becoming subject to drinking water standards as well. [SONAR, supra note 1, at 27-28 (Table 5).] Based on our review, it appears that MPCA is proposing to designate these lakes as Class 1 waters (many for the first time) without specifically evaluating or confirming whether the Class 1 designation is appropriate for those Lakes. [SONAR at 13 n.3 ("Class 1 designations are not reviewed as part of the scope of this rule.")] Please confirm whether MPCA has specifically evaluated the appropriateness of the Class 1 designation for the lakes at issue? If not, why?	Hearing Exhibit I-2; Attachment 2, Sections E.2 and J	Hearing Exhibit D, SONAR [p. 57]	pre-hearing eComment	I-1.4

Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board	Minn. R. 7050.042	Request for additional information	Please provide more information on how many lakes will receive a new Class 1 designation because of the proposed rule amendments.	Hearing Exhibit I-2; Attachment 2, Sections G.2 and J	Hearing Exhibit D, SONAR [pp. 22 (body text and footnote 10), 23 (footnote 13), 27-28, 41]; SONAR Exhibit S-3 [pp. 12-13]; SONAR Exhibit S-4 [p. 3]; State Register, 1 June 2020, Volume 44, Number 49 [p. 1416]; State Register, 26 June 2023, Volume 47, Number 52 [p. 1207]	pre-hearing eComment	I-1.4
Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board	Minn. R. 7050.047	Use classification tables	As part of this rulemaking, beneficial use designations for lakes will be listed in tables incorporated by reference into Minn. R. 7050.0470. We request that MPCA confirm whether it is required to conduct rulemaking before changing or adding waters or new beneficial use designations to waterbodies on the lists incorporated by reference into that rule.	Hearing Exhibit I-2; Attachment 2, Section K	SONAR Exhibit S-10	pre-hearing eComment	I-1.4
Colin Jefferis submitting for Jason Schlender, Great Lakes Indian Fish & Wildlife Commission	Minn. R. 7050.0222; Minn. R. 7050.0150	General support	"The proposed lake eutrophication standards, oxythermal and eutrophication standards for cold water aquatic life uses, and Tiered Aquatic Life Use (TALU) framework are meaningful improvements that address the natural diversity of lakes throughout the Ceded Territories." "Commission staff support the addition of oxythermal and eutrophication habitat standards specific to the requirements of cold water fish species, including cisco, lake whitefish, lake trout, and stream trout. *Support for refined lake eutrophication standards which acknowledge polymictic and dimictic lakes in the North region. "Staff of the Commission support the use of a TALU scale as it is more representative of the diversity of non-human beings throughout the 1854 and 1837 Ceded Territories and creates more stringent criteria for exceptional waters. "	Attachment 2, Section A	Hearing Exhibit D, SONAR [pp. 13-16, 32-40]	pre-hearing eComment	I-1.5
Colin Jefferis submitting for Jason Schlender, Great Lakes Indian Fish & Wildlife Commission	Minn. R. 7050.0222; Minn. R. 7050.0150	General support	Commission staff support the addition of oxythermal and eutrophication habitat standards specific to the requirements of cold water fish species, including cisco, lake whitefish, lake trout, and stream trout [Exhibit SO4 at 2].	Attachment 2, Section A	Hearing Exhibit D, SONAR [pp. 13-16, 32-40]	pre-hearing eComment	I-1.5
Colin Jefferis submitting for Jason Schlender, Great Lakes Indian Fish & Wildlife Commission	Minn. R. 7050.0222	Implementation of additional protections for lakes	...in a technical support document for the draft amendments, the authors write that the criteria of the amendments “do not necessarily reflect optimal conditions for these fish species but rather are minimal conditions for their protection.” [Exhibit SO4 at 36] While these standards do maintain aquatic conditions for species protection as required by MN R 7050.0250 (a), this comment encourages the promulgated standards to reflect the optimal conditions for the growth of non-human being populations. Maintaining the populations of cold water fishes at replacement levels provides no resilience for the species to demographic or environmental disturbance. GLIFWC encourages the state to adopt standards that would allow for cold water fish populations to thrive. Abundant, thriving, genetically diverse populations of cold water fish are more likely to be able to adapt to a changing environment.	Attachment 2, Section C.5	Hearing Exhibit D, SONAR [pp. 34]	pre-hearing eComment	I-1.5
Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board	Minn. R. 7050.042	Class 1 designation	We understand this rulemaking primarily concerns the Class 2 use. As we read Rule 7050.0420, Class 2A waters are also automatically classified as Class 1B, as a drinking water use, and that includes standards for nitrate and sulfate, among others. The SONAR notes that Class 1 designations are outside the scope of this rule. We might be missing something and we just hope that the agency can help us understand how many of the approximately 411 new 2A lakes would become Class 1 for the first time and how it considered whether that use fits those lakes.	Hearing Exhibit I-2; Attachment 2, Section J	Hearing Exhibit D, SONAR [pp. 13-14 (body, footnote 3); p. 22 (body, footnote 9); p. 56]	hearing transcript	M
Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board	Minn. R. 7050.0470	Natural variability	Cisco seem to account for many of the new 2A designations. The technical report does note that there are many lakes that are suitable habitat, but that do not contain Cisco, so we are interested if the agency could walk us through how it confirmed that each of these new lakes would support Cisco specifically.	Attachment 2, Section D.4	SONAR Exhibit S-4 [pp. 51-57, Appendix E]	hearing transcript	M

Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board	NA	Economic review	...regarding some impacts to waste water treatment facilities, specifically economic impacts, as we understand it, the agency estimates the probable cost of complying with the rule, and this includes costs to local governments, the SONAR notes that the modeling needed to identify affected facilities wasn't feasible. No specific costs could be determined in this regard, and we're just hoping that the agency could help us understand how it reached the conclusion that the impacts won't be large or widespread without that analysis.	Attachment 2, Section E.3	Hearing Exhibit D, SONAR [pp. 49-61]	hearing transcript	M
Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board	Minn. R. 7050.0222	Natural variability	The SONAR seems to anticipate that site-specific standards will ease impacts for many of the new uses for these lakes. In our members' experience, site-specific standards, they do take a significant amount of time and resources, so we are hoping that the agency can share how it envisions the site-specific standard process working for this rulemaking, who would lead it and whether the agency will be spearheading this development or whether that's going to be municipalities.	Attachment 2, Section D.1	Hearing Exhibit D, SONAR [pp. 14, 23-24, 25-27]; SONAR Exhibit S-4 [p. 1]; EPA 2021	hearing transcript	M
David Pfeifer, United States Environmental Protection Agency, Region 5	Minn. R. 7050.0222	Clarifications and corrections to proposed rule language	There appears to be typographical errors in Subp. 3d and Subp. 4d, as the draft rule language in those subparts reference Class 2A instead of classes 2Bd and 2B, respectively.	Hearing Exhibit I-2; Attachment 2, Section H.2	Hearing Exhibit C	post-hearing comment	N.1
David Pfeifer, United States Environmental Protection Agency, Region 5	Minn. R. 7050.0470	Request for additional information	Please confirm the water body identification code (WID) for West Crab Lake and Crab Lake. The proposed “Use Designation Tables for Lakes” (Exhibit S10 to the Statement of Need and Reasonableness (SONAR)) lists the WID for West Crab Lake as 69-0297-00 and the WID for Crab Lake as 69-0220-00. However, the existing rule language lists two different WIDs for West Crab Lake. Minn. R. 7050.0470, Subp. 2(B)(29) lists the WID for Crab Lake as 69-0220-00 and the WID for West Crab Lake as 69-0297-00, but Minn. R. 7050.0470, Subp. 2(B)(180) lists the WID for West Crab Lake as 69-0220-00.	Attachment 2, Sections G.3	SONAR Exhibit S-4 [pp. 90, 99, 114-117]; Hearing Exhibit D-1, SONAR Exhibit S-10 [pp. 2, 6]	post-hearing comment	N.1
David Pfeifer, United States Environmental Protection Agency, Region 5	Minn. R. 7050.0222; Minn. R. 7050.0150	Natural variability and Clarifications and corrections to proposed rule language	...it is unclear how MPCA or others implementing the criteria would determine which biological criterion applies to a specific lake. To provide clarity on how the biological criteria will apply, MPCA could either add definitions of the water body types to the proposed rules or more explicitly link the descriptions of the waterbody types in Minn. R. 7050.0222 to the groups in Bacigalupi et al. 2021.	Attachment 2, Sections D.3 and H.4	Schupp (1992); SONAR Exhibits S-5 [p. 3, 12-13, 27-50] and S-8 [p. 5]; Hearing Exhibit C	post-hearing comment	N.1
David Pfeifer, United States Environmental Protection Agency, Region 5	Minn. R. 7050.0222	Clarifications and corrections to proposed rule language	...Subp. 2 does not specify the averaging period or duration of the criterion. Not specifying the averaging period or duration will make the criteria difficult to interpret and implement. This can be avoided by providing additional details as to how the oxythermal habitat standard is to be implemented as a spatial and temporal average and how the averaging period or duration relate to protection of coldwater fish. For example, MPCA could provide additional information in the rule as to how many years of data should be included in the averaging period.	Attachment 2, Section H.3	Hearing Exhibit C	post-hearing comment	N.1
David Pfeifer, United States Environmental Protection Agency, Region 5	Minn. R. 7050.0222	Request for additional information	Additional explanation of MPCA’s decision-making would be helpful in demonstrating that requirements have been met under 40 CFR 131.5(a)(2). ...MPCA determined site-specific criteria are appropriate because the low catch rate or population decline is due to factors other than elevated TDO3; however, the Coldwater TSD does not provide MPCA’s basis for this conclusion. Additional explanation of MPCA’s decision-making would be helpful in demonstrating that requirements have been met under 40 CFR 131.5(a)(2).	Attachment 2, Section G.5	SONAR Exhibit S-4	post-hearing comment	N.1
David Pfeifer, United States Environmental Protection Agency, Region 5	Minn. R. 7050.0222	Request for additional information	Data presented in Appendix C of the Coldwater TSD appear to show a declining trend in cisco populations and recreation suitability scores at Jessie Lake indicated non-attainment of recreation goals greater than 11% of the time. Because the available data suggest that the lake may not be supporting the coldwater aquatic life and recreation goals, MPCA set the proposed site-specific criteria for Jessie Lake “slightly below the current conditions.” Additional explanation of MPCA’s decision-making regarding the selection of the draft site-specific TDO3 criterion of 22.0°C and the site-specific total phosphorus criterion of 45 □g/L would be helpful in demonstrating that requirements have been met under 40 CFR 131.5(a)(2).	Attachment 2, Section G.5	SONAR Exhibit S-4	post-hearing comment	N.1
David Pfeifer, United States Environmental Protection Agency, Region 5	Minn. R. 7050.0222	Request for additional information	MPCA proposes site-specific TDO3, total phosphorus and chlorophyll-a criteria for Lake Itasca (WID 15-0016-00). Appendix C of the Coldwater TSD indicates that data for total phosphorus and chlorophyll-a are available from only two summer means, both of which appear to be from before 2010. Additional information about how MPCA evaluated the available data for this lake in developing the site-specific criteria would be helpful in demonstrating that requirements have been met under 40 CFR 131.5(a)(2).	Attachment 2, Section G.5	SONAR Exhibit S-4	post-hearing comment	N.1
David Pfeifer, United States Environmental Protection Agency, Region 5	Minn. R. 7050.0470	Request for additional information	Based on the descriptions in Appendix C, it appears that MNDNR’s designation decisions do not consider other coldwater fish, such as cisco or lake whitefish. The additional information listed below and identified for specific lakes in Table 1, would assist MPCA in documenting that it has met requirements under 40 CFR 131.5(a)(1). - For the 25 lakes proposed to be re-designated as Class 2B or Class 2Bd, additional information about whether these lakes support coldwater fish other than stream trout and are expected to be part of the subset that naturally support stream trout would help support the use change. For example, MPCA could provide additional information about whether any fisheries surveys conducted on these lakes documented the presence of coldwater fish species. - Information about the number of fisheries surveys conducted on each lake and why the available data are considered sufficient to conclude that coldwater fish are not present in the lake may be helpful in demonstrating that 40 CFR 131.5(a)(1) has been met.	Attachment 2, Section G.4	SONAR Exhibit S-4 [p. 53-58, Appendix C]	post-hearing comment	N.1

David Pfeifer, United States Environmental Protection Agency, Region 5	Minn. R. 7050.0222	Request for additional information	MPCA has proposed to revise the aquatic life use designation of Normanna Lake (WID 69-1383-00) from Class 2A to Class 2B because MNDNR intends to remove this lake from the trout water list. Because MNDNR's proposed removal of this lake from the trout water list is not final, it is possible that data will be presented to MNDNR that would lead to MNDNR maintaining the trout lake designation for Normanna Lake. The EPA encourages MPCA to verify that it has reviewed all available data before finalizing the proposed use designation for this lake.	Attachment 2, Section G.6	SONAR Exhibit S-4 [p. 85]	post-hearing comment	N.1