Response to Pre-Hearing Comments

Minnesota Pollution Control Agency

Pre-hearing responses to public comments received during the Notice of Intent to Adopt comment period regarding proposed amendments to Minnesota Rules, chapter 7050, governing water quality standards for lake aquatic life and recreation (Lakes WQS rule); Revisor's ID R-04740; CAH docket #23-9003-39503

This document contains the Minnesota Pollution Control Agency's (MPCA or Agency) responses to public questions on the proposed amendments submitted during the pre-hearing comment period (August 24 - October 8, 2026). This document does not respond to all comments submitted during this period and is only focused on comments seeking clarification on specific aspects of the proposed rule. A full response to comments from the pre-hearing period and the hearing will be submitted by the MPCA after the public hearing to be held on November 2, 2026. All comments received during the pre-hearing comment period are posted in their entirety on the MPCA webpage for this rulemaking: https://www.pca.state.mn.us/get-engaged/lake-aquatic-life-and-recreation.

1. 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)]

Submitted by Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board

Agency Response: The following table includes the requested permit list.

Facility Name	Agency interest ID
Dan's Prize	34521
Jennie-O Long Prairie Shavings	127760
La Grande Sanitary Landfill	4297

2. 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]

Submitted by Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board

Agency Response: The following table includes the requested permit list.

Facility Name	Agency interest ID
MDNR Spire Valley Hatchery	121128
Premier Horticulture Inc - Black Lake and Wright Bogs - Plant Site	1003
Anderson Contracting Inc	5998
Cass County Longville-Remer Sanitary Landfill	1798

Fehrs Pit	250627
Dave Barrett Construction	64071
Aitkin Area Sanitary Landfill	4300
Waste Management - Oak Ridge Landfill	35895
Bemidji Aviation Services, Inc.	39592
MN Bioenergy Park	34332
UPS - Bemidji	38200
Veit - Bemidji Shop	125546

3. 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.

Submitted by Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board

Agency Response: The following table includes the requested list of lakes.

Lake name	Waterbody ID
Daggett	18-0271
Mitchell	18-0294
Upper (North) Island	09-0060
Grace	29-0071
Fifth Crow Wing	29-0092
Hanging Kettle	01-0170
Turtle River	04-0111

4. 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]

Submitted by Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board

Agency Response: The following table includes the requested permit list.

Facility Name	Agency interest ID
Osakis WWTP	1618
Detroit Lakes Water Reclamation Facility	1746
Bemidji WWTP	2320
Grey Eagle WWTP	1623

Facility Name	Agency interest ID
Vergas WWTP	1615
Southern Minnesota Beet Sugar Coop	1682
AMPI - Paynesville	1263
Belgrade WWTP	3499
Great Lakes Gas Transmission LP	2298
Forest Hills Golf & RV Resort WWTP	1748
Xcel Energy - Rice Street Service Center	4458
Cormorant Park Place Estates	87231
Brooten WWTP	13811
Vergas WTP	4346
Becker County Sanitary Landfill - Closed	90412

5. 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.

Submitted by Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board

Agency Response: The Agency can confirm that it reviewed all parameters that would be new or more stringent when Classes 1B and 2A are proposed for waters currently classified as Class 2B.

6. Please provide more information on how many lakes will receive a new Class 1 designation because of the proposed rule amendments. 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?**

Submitted by Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board

Agency Response: There are 346 lakes which are proposed to go from Class 2B to Class 2A which carries with it the Class 1B designation. Class 1B is automatically assigned to Class 2A waters (see Minn. R. 7050.0420, Item D) regardless of any actual domestic consumption use of the water and the Agency is

following this rule. The Agency has not specifically reviewed these lakes for domestic consumption uses because that task is outside the scope of this rule.

7. 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.

Submitted by Cooper Silburn submitting for Scott Gilbertson, Minnesota Environmental Science and Economic Review Board

Agency Response: The process for designating uses to waters will be unchanged and will require a rule making to change a designated beneficial use. This is currently the case for stream designations which are listed in documents incorporated by reference (see https://www.pca.state.mn.us/get-engaged/incorporations-by-reference).

8. The standard states "an average T_{DO3} 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?

Submitted by Robert Sip & John Finney, Red River Watershed Management Board

Agency Response: The calculation of T_{DO3} is not from a specific depth. This metric is calculated by interpolating the temperature (°C) where dissolved oxygen equals 3 mg/L from temperature and dissolved oxygen profiles. A detailed description of metric is provided in the Statement of Need and Reasonableness (SONAR) Exhibit S-4, pp. 13-14.

For assessments, T_{DO3} must be measured from a lake for at least 3 years within a 10-year period and measured within the period of maximum oxythermal stress (July 26 through August 24). These measurements are averaged for assessment. Some data collected outside of the period of maximum oxythermal stress may be used as supplemental data. A detailed description of data processing and assessment requirements are provided in SONAR Exhibit S-4, pp. 42-43.

9. 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.**

Submitted by Robert Sip & John Finney, Red River Watershed Management Board

Agency Response: Each question is answered in order below.

The number of Red River Basin water bodies potentially affected by the revised standards.

Categories and numbers of affected lakes in the Red River Basin:

- New Class 2A lakes (44 lakes): New oxythermal standard for all 44 lakes; TP, chlorophyll-a, and Secchi depth standards more stringent for 3 lakes and TP standard more stringent, Secchi depth standard less stringent for 41 lakes
- Existing Class 2A lakes (3 lakes): TP standard more stringent, Secchi depth standard less stringent
- Dimictic lakes in the North region (~ 58 lakes[1]): TP standard more stringent, Secchi depth standard less stringent
- Polymictic (shallow) lakes in the North region (~ 36 lakes): Lake eutrophication standards (i.e., total phosphorus, chlorophyll-*a*, and Secchi depth) less stringent
- Class 2B/2Bd lakes in the South and Central regions: Not affected

The number potentially subject to a different impairment determination.

The exact number cannot be determined as assessment determinations undergo a rigorous process which reviews available and relevant data and includes collaboration with other state and local groups/organizations. Based on a preliminary comparison of available data against the proposed standards, there are 3 lakes in the Red River basin that possibly exceed the new and revised standards. This includes 2 coldwater lakes that possibly exceed the T_{DO3} standard and 1 dimictic lake that possibly exceeds new standards but meets old standards.

The number potentially receiving exceptional use classifications.

As part of the analysis for this rule, no Exceptional Use lakes were identified in the Red River Basin. However, not all major watersheds in the Red River Basin been reviewed for lake Exceptional Uses. It is likely use designation reviews could identify Exceptional Use lakes in the Red River Basin when those watersheds are reviewed. There are fish data from some lakes in the Upper/Lower Red Lake, Clearwater River, Buffalo River, and Otter Tail River watersheds which indicate potential for Exceptional Use designations. However, these lakes will need to undergo a full use designation review to determine if they will be proposed for Exceptional Use designation in a future rule. If the Exceptional Use is recommended for some of these lakes, these use changes will be part of outreach to local partners in the watershed.

The likely effects on future WRAPS and TMDLs.

The effects of these rules are broadly discussed in the SONAR (pp. 49-62). Specific impacts cannot be determined without full and detailed assessments, development of Watershed Restoration and Protection Strategies (WRAPS), and the development of Total Maximum Daily Loads (TDML). However, based on the small number of lakes in the Red River Basin potentially impacted by the revised standards, the effects on WRAPS and TMDLs are likely to be small.

Additional monitoring requirements.

Most of the proposed revisions impact existing parameters (i.e., lake eutrophication, fish community) and do not change monitoring requirements for assessments. The only new parameter is T_{DO3} and this measure is calculated from lake profiles. Lake profiles are currently sampled from lakes as part of Intensive Watershed Monitoring efforts. However, the currently monitoring framework includes 2 years

[1] The number of dimitic and polymictic lakes are approximate because determination of lake type requires detailed review of stratification status and other lake characteristics. In addition, some lentic waters could be reviewed and categorized as a wetlands.

of sampling and the assessment of T_{DO3} requires a minimum of 3 years of data. This means that for the assessment of oxythermal habitat in coldwater lakes, an additional year of lake profile data are required.

Potential implementation costs.

The potential implementation costs are discussed in the SONAR (pp. 49-62). Specific costs cannot be determined without full and detailed assessments and subsequent WRAPS and TDMLs if needed. Again, given the small number of lakes in the Red River Basin potentially impacted by the revised standards, the costs are likely to be small.

A use attainability analysis for the standards within the region.

The request by the commenter is not clear but use attainability analyses are implemented when needed. Through the process of developing the revised lake standards, there was no indication that any of the lakes in the Red River Basin require a UAA. All of the new coldwater lakes were reviewed in detail in collaboration with the Minnesota Department of Natural Resources and it was determined that coldwater uses are existing uses in these lakes.

Potential costs to local governments and watershed districts.

The potential implementation costs are assessed in the SONAR (pp. 49-62). The specific costs to local governments and watershed districts cannot be determined without full and detailed assessments and subsequent WRAPS and TDMLs if needed. Again, given the small number of lakes in the Red River Basin potentially impacted by the revised standards, the costs are likely to be small.

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. Per the proposed changes to MN Rule 7050.0150, subp. 4 (definitions):

It continues under the various LES by ecoregion, polymictic and dimictic have been added to distinguish between the former lakes and shallow lakes differing standards under each ecoregion and "shallow" has been removed for the new, "polymictic" lakes LES for each ecoregion. However, under the definitions,

In addition, under the narrative eutrophication standards (Subp. 3a (Class 2Bd) and Subp 4a (Class 2)) it is proposed to remove the references to "shallow lakes". Since only reference to lakes is "lakes" remain, only lakes with a maximum depth greater than 15 feet are covered under the narrative. It is unclear if this is intentional or an unintended consequence of removing "shallow lakes" from the standards without adjusting the definition of lakes to account for both deep and shallow lakes. We suggest that the MPCA review edits around shallow lakes to ensure that the rules are in line with the protections being prioritized by Minnesota.

Submitted by Robert Sip & John Finney, Red River Watershed Management Board

Agency Response: The rule language is being revised to be more clear and to follow better defined scientific terms. The term "polymictic lake" replaces "shallow lake" and they can largely be used interchangeably. However, since the term "shallow lake" is no longer used in rule, it is reasonable to remove this definition. The Agency will propose to remove this definition from Minn. R. 7050.0150 for clarity.

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?

Submitted by Robert Sip & John Finney, Red River Watershed Management Board

Agency Response: This is a drafting error. The uses listed for lake biocriteria under 7050.0470, subp. 3d should be "2Bd" and not "2A." The uses listed for lake biocriteria under 7050.0470, subp. 4d should be "2B" and not "2A." The Agency will make this change to the rule.

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.

Submitted by Robert Sip & John Finney, Red River Watershed Management Board

Agency Response: The two classification systems (i.e., lake eutrophication and lake indices of biological criteria) differ as a result of natural factors which influence how these indicators of lake health respond to anthropogenic disturbance. Although it would be administratively more simple if these classifications were aligned, this would increase assessment errors resulting from natural factors. The Agency will consider revisions to rule language or supporting technical documentation incorporated by rule to provide additional clarity.

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.

Submitted by Robert Sip & John Finney, Red River Watershed Management Board

Agency Response: The determination of lake type does not rely solely on geometry ratio. The MPCA is updating nomenclature and refining the process for determining lake type. This means adopting language and methods that follow basic principles in limnology for categorizing lakes. Specifically, this is a focus on lake mixing type for determining which eutrophication standards are appropriate. Review of temperature profiles is the preferred method for determining lake mixing type, but other measures are also useful including geometry ratio, depth, percent littoral zone, etc. The MPCA is currently updating guidance for this review process to clarify how these determinations will be made. However, the updated process will largely result in similar determinations because there is a large amount of overlap between shallow lakes (as currently defined in Minn. R. 7050.0150 subp. 4, Item HH) and polymictic 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?

Submitted by Robert Sip & John Finney, Red River Watershed Management Board

Agency Response: A Modified Use tier is not included in the proposed TALU framework for lakes because it does not represent a large population of lakes that necessitates a separate designated use. The physical modifications to lakes are typically not as extensive as modifications to lotic systems. In addition, many modifications to lakes are not allowable reasons for the removal of uses from a lake under the Clean Water Act. Alterations to the physical habitat in lakes are more commonly the result of modifications to shorelines and littoral zones by landowners. However, such modifications are not an allowable reason for the removal of a use under the Clean Water Act (see 40 CFR 131.10(g)) and therefore cannot form the basis for the implementation of a Modified Use for lakes. Allowable reasons for the removal of a designated use could include legal physical modifications to the hydrology of lakes (e.g., through damming), but these are relatively uncommon statewide and can be addressed through site-specific standards if needed.