

This file contains documents relevant to the MPCA rulemaking for Water Quality Standards – Use Classification 2.

Included are:

- Comments received during the comment period for the Notice of Hearing on Proposed Amendments to Rules Governing Water Quality Standards – Class 2 Use Designations

37415 Minnesota Pollution Control Agency Notice of Hearing (Initial Comment Period)

Closed Feb 03, 2023 · Discussion · 2 Participants · 1 Topics · 2 Answers · 0 Replies · 0 Votes

2

PARTICIPANTS

1

TOPICS

2

ANSWERS

0

REPLIES

0

VOTES

SUMMARY OF TOPICS

SUBMIT A COMMENT

 2 Answers · 0 Replies


Important: All comments will be made available to the public. Please only submit information that you wish to make available publicly. The Office of Administrative Hearings does not edit or delete submissions that include personal information. We reserve the right to remove any comments we deem offensive, intimidating, belligerent, harassing, or bullying, or that contain any other inappropriate or aggressive behavior without prior notification.

Micah Bennett · Citizen · (Postal Code: unknown) · Feb 01, 2023 11:46 am

 0 Votes

Please see attached comment letter from U.S. EPA Region 5.

Minnesota Center for Environmental Advocacy · Citizen · (Postal Code: unknown) · Feb 03, 2023 8:34 am

 0 Votes

Please see attached comment from the Minnesota Center for Environmental Advocacy



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:
WW-16J

The Honorable Administrative Law Judge Suzanne Todnem
Office of Administrative Hearings
600 North Robert Street
P.O. Box 64620
St. Paul, Minnesota 55164-0620

Dear Judge Todnem:

On November 29, 2022, Minnesota Pollution Control Agency (MPCA) published notice of a public comment period on “Proposed Amendments to Rules Governing Water Quality Standards – Use Classification 2, Minnesota Rules, chapter 7050; Revisor’s ID Number R-04692, OAH docket number 23-9003-37415.”

The U.S. Environmental Protection Agency reviewed the proposed rules and supporting documents posted on MPCA’s website for consistency with the requirements of Section 303(c) of the Clean Water Act and federal regulations at 30 CFR Part 131. EPA’s comments are enclosed. These comments do not constitute final Agency action but are provided for consideration as MPCA develops its water quality standards revisions for adoption and subsequent submittal for EPA review under Section 303(c) of the CWA.

Thank you for the opportunity to comment on MPCA’s use designation revisions. If you have any questions regarding our comments, please contact Micah Bennett of my staff at (312) 886-7946 [or bennett.micah@epa.gov](mailto:bennett.micah@epa.gov).

Sincerely,

David Pfeifer, Manager
Watersheds and Wetlands Branch

Enclosure

cc via email w/enclosure: Will Bouchard, MPCA

Enclosure – Comments on Minnesota’s “Proposed Amendments to Rules Governing Water Quality Standards – Use Classification 2, Minnesota Rules, chapter 7050; Revisor’s ID Number R-04692, OAH docket number 23-9003-37415”

Comment 1. Clarify language for Nicadoo Creek segment 04010102-985. Under the proposed rules, Nicadoo Creek segment 04010102-985 is being changed from a Class 2Bg to Class 1B, 2Ag, according to Table 2 in the May 2022 document “Amendments to aquatic life (Class 2) use designations for streams.” However, later in this document, in the description of the reach designation on p. 23, MPCA outlines the reasoning for a Class 2A designation, but then states: “Due to the lack of assessable biological data, this reach will remain an unconfirmed Class 2Bg in the beneficial use table.” EPA recommends MPCA clarify whether this segment of Nicadoo Creek is being proposed for Class 2A designation.

Comment 2. Use change segments with no biological data. As EPA stated in comments to MPCA’s draft revisions on May 7, 2021, several segments currently classified as Class 2A (cold water aquatic biota) have limited data on which to base a proposed use re-designation to Class 2B. The draft technical support document (*Amendments to aquatic life (Class 2) use designations for streams*, May 2022, hereinafter referred to as “draft TSD”) provides information suggesting that the primary reason these streams are being proposed for re-designation is that the initial designations of these streams as Class 2A were erroneous, with support for the re-designations often drawn from changes to the trout management status of these segments made by Minnesota Department of Natural Resources (DNR).

Regardless of the basis for the initial designation of a stream, federal regulations at 40 CFR § 131.10(g) require that states demonstrate that attaining the current use is not feasible because of one of the six factors found in that section whenever designating a use based on a required use attainability analysis. Because Minnesota’s WQS apply less stringent criteria for the Class 2B and 2Bd (cool and warm water aquatic biota) aquatic life subclasses than for the Class 2A aquatic life subclass, a use attainability analysis is required whenever re-designating a water body from Class 2A to Class 2B or 2Bd, per 40 CFR § 131.10(j)(2).

For the streams listed in Table 1 below, please provide further information and explanation to support MPCA’s determination that these streams do not currently support and would not be expected to support a cold water aquatic community consistent with Minnesota’s Class 2A aquatic life use subclass. Based on the TSD and discussions with MPCA, EPA’s understanding is that MPCA’s determination for some of these waters may be based on the fact that there are no downstream or nearby waterbodies within the same watershed that support a coldwater aquatic community consistent with Minnesota’s Class 2A aquatic life use subclass and, therefore, these segments are not part of a coldwater aquatic system. Such an approach may be appropriate to support these re-designations; however, more information would be helpful to evaluate such a rationale.

The TSD states (p. 20) that “[i]n cases where only DNR was available, a determination to retain the current use was sometimes made because sufficient data were not available to determine the existing use. For these reaches, additional data would need to be collected for the MPCA to

propose a use designation in a future rulemaking.” EPA recommends MPCA provide further explanation for why it did not take this approach with these segments with no or limited biological and temperature data.

Table 1. List of waterbodies proposed for re-designation from Class 2A to Class 2B with no biological data for which additional information is requested.

Watershed	Segment Name	Waterbody Identification
Lake Superior - South Watershed	Unnamed creek (Skunk Creek Tributary) - T54 R9W S17, west line to Skunk Cr	04010102-A25
Lake Superior - South Watershed	Unnamed creek - Headwaters to T55 R8W S21, south line	04010102-B70
Rainy River - Headwaters Watershed	Unnamed creek (Ash River Tributary) - Headwaters to Unnamed cr	09030001-874
Rainy River - Headwaters Watershed	Unnamed creek (Ash River Tributary) - Unnamed cr to Unnamed cr	09030001-875
Rainy River - Headwaters Watershed	Unnamed creek (Ash River Tributary) - Headwaters to Unnamed cr	09030001-876
Rainy River - Headwaters Watershed	Unnamed creek (Ash River Tributary) - Headwaters to Unnamed cr	09030001-877
Rainy River - Headwaters Watershed	Unnamed creek (Blackduck River Tributary) - Headwaters to T67 R20W S2, north line	09030001-887
Rainy River - Headwaters Watershed	Unnamed creek (Ash River Tributary) - Unnamed cr to T68 R20W S27, north line	09030001-A29
Rainy River - Headwaters Watershed	Unnamed creek (Blackduck River Tributary) - Headwaters to T68 R20W S27, south line	09030001-A30

Comment 3. Coldwater use changes segments where more information may be useful. For several segments that MPCA is proposing to re-designate from Class 2A to Class 2Bd or Class 2B, the available data indicate the presence of multiple coldwater species, as classified by MPCA as well as stream temperatures that may be suitable for some coldwater species, even if not a fully thriving and reproducing trout fishery.

For instance, segment 09020103-665 in the Otter Tail River watershed is reported to have had three coldwater macroinvertebrate taxa sampled and is indicated as potentially supporting a brown trout fishery (a coldwater indicator species as defined by MPCA), and, although MPCA

notes it has 4% of recordings with lethal temperatures for trout, some segments being re-designated as 2A from 2B have similar percentages (e.g., 09030001-987) As another example, segments on Spider Creek in the St. Louis River watershed (e.g., 04010201-617, 04010201-862) had moderate abundances of sculpin over multiple sampling periods and presence of multiple coldwater macroinvertebrate indicators, and temperature data indicated relatively low summer average temperatures and low-to-moderate stress conditions for trout. Several such segments are identified in Table 2 below that could use additional explanation or comparison with confirmed coldwater segments.

Since some coldwater indicator species were found in these segments, MPCA should provide additional information to further explain why it concluded that these streams cannot support a coldwater community consistent with Minnesota’s Class 2A aquatic life use subclass. Further information from MPCA on what it considers indicative of a coldwater community is necessary in providing this explanation. MPCA provides general considerations used for coldwater reviews in its October 2018 document *Technical Guidance for Reviewing and Designating Aquatic Life Uses in Minnesota Streams and Rivers*; however, review of the proposed redesignations will be aided by additional information from MPCA on the temperature and species composition of confirmed Class 2A waters and/or those being proposed to be re-designated from Class 2B to Class 2A. For instance, the range and central tendency of summer and relevant monthly temperatures of “known” coldwater streams is important information to consider. The range and central tendency of temperature tolerances (based on distribution) of selected coldwater taxa in Minnesota in these confirmed coldwater streams; and/or the range and central tendency of coldwater species abundances in confirmed coldwater segments compared to segments being re-designated from Class 2A to Class 2B, and the range and central tendency of percentages of coldwater species/individuals for these groups is important information to provide. MPCA provides some of this information for trout but not for other coldwater indicator species.

Table 2. List of waterbodies proposed for re-designation from Class 2A to Class 2B for which additional information may be warranted.

Watershed	Segment Name	Waterbody Identification	Considerations
St. Louis River Watershed	Spider Creek (multiple segments)	04010201-617; 04010201-862; 04010201-863; 04010201-864; 04010201-865	Moderate sculpin abundance and presence of multiple coldwater macroinvertebrate taxa; stated as potential for brown trout fishery; average temperatures below 19°C

St. Louis River Watershed	Unnamed creek (Peters Creek) (multiple segments)	04010201-823; 04010201-824	No MPCA data; DNR surveys note presence of springs and watercress; upstream segment classified as 2A
Otter Tail River Watershed	Unnamed creek (Toad River Tributary) - Toad R to Dead Lk	09020103-665	Presence of multiple coldwater invertebrate taxa; temperatures ~19°C; DNR notes potential support for brown trout fishery
Vermilion River Watershed	East Two River - Unnamed cr to T62 R15W S32, west line	09030002-648	Multiple sculpin species and trout sampled in earlier surveys; appears marginal for trout but summer temperatures ~19°C

Comment 4. Clarification for some Lake Superior – South Watershed segments. The TSD does not have a detailed description of the re-designation for the segment “04010102-678, Lake Superior - South Watershed, Unnamed creek (Encampment River Tributary) - T54 R10W S16, north line to Encampment R.” However, this segment is listed in the “Summary Table Class 2 Proposed Use Designations (wq-rulecl2-2122f)” as proposed for redesignation from Class 2Ag to Class 2Bdg. This segment is also referenced in the TSD as a partial reason for redesignating segment “Unnamed creek (Encampment River Tributary) (04010102-C46)” as Class 2Ag, since “it is an extension of an existing Class 2Ag reach (04010102-678)” (TSD p. 24). The last sentence of the paragraph also states that the segment (04010102-C46) “will remain an unconfirmed Class 2Bg in the beneficial use table.” EPA recommends MPCA clarify whether it intends to use proximity to a segment proposed for redesignation from Class 2A to Class 2B (04010102-678) as justification for redesignation of a segment from 2B to 2A (04010102-C46), and should explain the last sentence on p. 24 of the TSD that appears to contradict the intended redesignation of 04010102-C46.



February 3, 2023

Office of Administrative Hearings
Administrative Law Judge Suzanne Todnem
600 N. Robert St.
P.O. Box 64624
St. Paul MN 55164.0620

VIA OAH E-PORTAL

Re: *Request for Comments on Possible Amendments to Rules Governing Water Quality Standards Use Classification 2, Minnesota Rules, chapters 7050 and 7053; Revisor's ID Number R-04737 OAH Docket No. 71-9003-38118*

Dear Judge Todnem:

The Minnesota Center for Environmental Advocacy (“MCEA”) is a nonprofit environmental advocacy organization with offices in St. Paul and Duluth. Since 1974, MCEA has defended Minnesota’s natural resources, water, air and climate, and the health and welfare of Minnesotans. MCEA is driven by the principle that everyone has a right to a clean and healthy environment, and that decisions must be based on fact, science, and the law.

MCEA submits these comments in response to the Minnesota Pollution Control Agency (“MPCA”) request for comments on proposed changes to water quality standards (“WQS”) as referenced above.

1. MCEA supports the use of TALUs (Tiered Aquatic Life Uses) with regular data monitoring for scientifically accurate and timely rulemaking changes

MCEA supports the use of the TALU framework in assessing stream reaches for aquatic life assemblages throughout the state’s freshwater streams. MCEA also supports the proposed future use of the TALU framework for lakes and other water bodies in the assessment of aquatic life assemblages. In establishing designated uses for Minnesota streams, we anticipate MPCA’s setting and upholding of protective goals for particularly high quality waterways while also recognizing the issues associated with waterways that may have been significantly altered, such as from agricultural drainage.¹ The TALU framework, and particularly the assessment of macroinvertebrates and fish assemblages in streams as bioindicators and as a tool for comprehensive stream management, may be beneficial in more accurately determining designated uses of water bodies across the state and in a changing climate.

¹ Bouchard, R.W., Niemela, S., Genet, J.A. et al. A novel approach for the development of tiered use biological criteria for rivers and streams in an ecologically diverse landscape. *Environ Monit Assess* 188, 196 (2016). <https://doi.org/10.1007/s10661-016-5181-y>

Updates to the designated uses for stream reaches occur approximately every two to three years. The first update using the TALU framework was in 2017 with another occurring in 2020. Despite two previous designated use updates since data collection occurred, the current 2022-2023 designated uses rulemaking proposal is nevertheless based primarily on the 2016 and 2017 data collection and assessments, including temperature, indices of biological integrity, and other metrics. MPCA's Technical Guidance for Reviewing and Designating Aquatic Life Uses in Minnesota Streams and Rivers explains that in the data collection phase of the review the relevant data can be older than 10 years, and "following the initial (intensive watershed monitoring [IWM]) cycle, additional use designation work will stem from data collected on previously unmonitored reaches, improvements in biological condition, and some corrections, as more data is available." MPCA encourages older data to be included in the review, but does not specify any minimum requirements for data to be included. It is unclear from the MPCA what additional data availability (outside of the intensive watershed monitoring cycle) prompts redesignation and review including specific habitat or bioindicator data. There are significant lags in data collection and proposed changes to designated uses and the reviewed data may not be current and/or fully representative when considered in rulemaking proposals.

MCEA recommends proposed rulemaking changes as soon as practicable within each cycle of IWM data collection to ensure that the assessed data is still relevant to the water body in a rapidly changing climate. MCEA also recommends that the monitoring schemes and collected data for these redesignation efforts be made readily available to the public and that the collected data is sufficiently interpreted for the public.

2. The MPCA must achieve the highest attainable uses for Minnesota's waters and should not downgrade based on little-to-no data.

The principal function of designated uses in water quality standards is to communicate to interested stakeholders and the public the "desired state of surface waters."² Numeric and narrative standards are tied to the designated use. In addition, if a stretch of stream becomes polluted or is otherwise not attaining its designated use, the MPCA must attempt to restore it to the appropriate use. Designated uses are therefore critical to the overall framework of protecting water quality in Minnesota.

The largest proportion of stretches (123 stretches comprising 539 miles of stream) in this proposed rulemaking are being downgraded from a "general" use to a "modified" use. The effect of this change is that modified streams are only expected to be capable of supporting an aquatic community comparable to the median biological condition gradient level 5 as established in Calibration of the Biological Condition Gradient for Streams of Minnesota, Gerritsen et al. (2012).³ General use streams, in contrast, are expected to be capable of supporting a level 4 aquatic

² Yoder, Chris. Midwest Biodiversity Institute. Framework and Implementation Recommendations for Tiered Aquatic Life Uses: Minnesota Rivers and Streams, a report to Minnesota Pollution Control Agency. (2012).

³ Minn. R. 7050.0222 subp. 4c(D).

community.⁴ Level 5 stretches are ones where “sensitive taxa are markedly diminished,” the ecosystems are unbalanced and have reduced function. The biocriteria associated with the redesignation of stream reaches from 2Bg to 2Bm include lower numeric thresholds for aquatic life communities (both fish and macroinvertebrates). The change from 2Bg to 2Bm may therefore negatively impact water quality and the natural resource management of these streams, and MPCA can only take such action if it complies with the Clean Water Act’s limitations on downgrading attainable uses.

The Clean Water Act limits the ability to redesignate uses in a way that removes protections.⁵ In order to remove a use that is not an existing use, MPCA must complete a use attainability analysis.⁶ The Use Attainability Analysis to support the proposed downgrading of 539 miles of stream began with a review of the biological condition of these stretches. According to the proposed rule:

If one or both assemblages do not meet the General Use, then the process proceeds to a review of the habitat. . . . This step uses habitat models to predict if habitat is limiting the biology. . . . [I]f habitat is limiting, then it would need to be determined if this habitat condition is the result of legal alterations to the water body (e.g., ditching). . . . If the water body was legally altered, then the reach would be reviewed to determine if it is restorable or if it is likely to recover on its own in the next five years.

The last step is to determine if a General Use was attained or channel modifications occurred after November 28, 1975. If the stretch was illegally altered, or altered after 1975, it should remain as a general use, not a modified use.

MPCA’s review of the biological condition of the streams and its determination that these streams were habitat limited were based on data (albeit some of it relatively old). In contrast, the determinations that the habitat in these stretches cannot be restored, that the modifications were done legally and before 1975, and the fact that the stretch has not attained a general use at any point after 1975 are all based on little-to-no data. As MPCA stated in its 2018 Technical Guidance, “in most cases [drainage] records are difficult to obtain and this review may be limited until electronic versions of these records are available.” And yet nowhere in the proposed rule does MPCA admit that drainage records for any stretches were unavailable or not reviewed.

MPCA’s process for downgrading 123 stretches from general use to modified use is impossible to verify. The descriptions in the proposal provide little information. With respect to whether the ditches were modified legally, MPCA simply states “[t]his reach has been altered for drainage.” It does not appear that any records were examined to determine whether the drainage projects were done legally. With respect to whether the stretch might have attained a General Use

⁴ Minn. R. 7050.0222 subp. 4c(C).

⁵ 40 C.F.R. § 131.10(g) (describing allowable reasons for removing a designated use).

⁶ 40 C.F.R. § 131.10(j).

after 1975, MPCA simply states “available evidence (e.g., aerial imagery) indicates that it was maintained for drainage before November 28, 1975.” MPCA makes this statement 123 times, but no imagery is included. MPCA goes on to state, without support, that every single one of these stretches “cannot be feasibly restored.” It would aid public understanding if MPCA was able to indicate whether any currently ditched stream stretches were considered restorable (or illegally ditched). And if so, what criteria were used to make that determination. Lastly, MPCA states that “no evidence indicates that the [stream] attained the aquatic life use goals for Class 2Bg on or after November 28, 1975.” But there is no indication of what evidence was examined to make this determination.

MCEA cannot verify whether these stretches should be downgraded from 2Bg to 2Bm. Accordingly, until MPCA can provide the evidence it relied on to make these determinations, MCEA opposes these proposed changes.

Other proposed downgrades raise concerns for MCEA as well. MPCA proposes to downgrade several stream reaches in highly vulnerable watersheds. The St. Louis River (“SLR”) watershed is highly impaired,⁷ while also being a heavily relied upon freshwater source for Tribal communities. MPCA should take extra precautions in understanding the cumulative impacts to aquatic life and water quality with these redesignations. The redesignation of several stream reaches within the SLR watershed, including from general cold (2Ag) to modified or cool/warm (2Bm or 2Bg), may result in lower numeric thresholds for water quality metrics in this region resulting in long-term or cumulative impacts to the SLR, and may ultimately result in changes in habitat restoration efforts. Although some drinking water components are maintained, aquatic life is the issue for many native communities, particularly with regard to subsistence fishing and the bioaccumulation of pollutants within these species. MCEA recommends that the MPCA prioritize the protection of sensitive and impaired watersheds and stream reaches in this rulemaking and others, with emphasis given to the SLR watershed. The MPCA should more closely coordinate with the Tribal nations in rulemakings that may impact subsistence fishing and drinking water.

3. The MPCA and Department of Natural Resources (DNR) should coordinate their management of agricultural ditches for aquatic life and water quality

Interagency coordination is crucial in ensuring that drainage projects do not continue to negatively affect water quality and aquatic life. Although the DNR may be a regulator alongside local drainage authorities for drainage projects, its concern primarily lies within the potential for drainage to impact the course, current, or cross section of a public water or public water wetland, but DNR does not always consider the effect on aquatic life or water quality.

However, as discussed above, the modification of natural waterways to facilitate increased drainage from agricultural lands also has lasting and cumulative impacts on the aquatic habitat in

⁷ Minnesota Pollution Control Agency. St. Louis River Watershed Mercury TMDL. (2022). <https://www.pca.state.mn.us/business-with-us/st-louis-river-watershed-mercury-tmdl>
Environmental Protection Agency 2022. Great Lakes AOC. St. Louis River AOC. <https://www.epa.gov/great-lakes-aocs/st-louis-river-aoc>

those waterways and the ability for those habitats to support balanced assemblages of aquatic life. The MPCA has recognized the impacts of drainage on these redesignation efforts in stating that “most maintained drainage ways are not presently restorable without a huge investment with uncertain results.”⁸ Impacts from drainage are oftentimes permanent and irreparable. The 2018 Technical Guidance document also describes how agricultural drainage and protecting aquatic life assemblages have not yet been able to co-exist as priorities for management; “the ability to construct multi-use drainage ways (i.e., channels that provide drainage and protect aquatic life) has not been fully demonstrated—especially on a large scale.” MPCA has broad regulatory authority under the Minnesota Water Pollution Control Act to “prevent, control or abate water pollution,” which it can use to address water quality impacts from agricultural drainage projects, including effects on the management of aquatic life.

As a first step, and in order to allow review of MPCA’s proposals to downgrade 539 miles of stream to “modified,” it is critical to have publicly accessible data to verify whether these ditches were legally modified under Minnesota drainage law. MCEA recommends that MPCA and DNR work together to ensure that the extensive document record of legally established drainage projects across the state (1) directly informs MPCA’s Use Attainability Analysis, and (2) is available to the public. Because local drainage authorities and the DNR hold this project documentation in hard copy form, MCEA recommends the development of a comprehensive GIS drainage database that includes digital copies of drainage project documentation. While this type of a database would likely be administered by the DNR given their regulatory role over drainage systems, it would allow MPCA to cite a public record for any class use redesignations that stem from drainage modifications, and it would give the public adequate information to review those proposed redesignations.

Sincerely,

/s/Nadia Alsadi

Water Policy Associate
Minnesota Center for Environmental Advocacy
1919 University Avenue West, Suite 515
St. Paul, MN 55104
651-223-5969
nalsadi@mncenter.org

/s/Leigh Currie

Director of Strategic Litigation
Minnesota Center for Environmental Advocacy
1919 University Avenue West, Suite 515
St. Paul, MN 55104
651-223-5969
lcurrie@mncenter.org

/s/Carly Griffith

Water Program Director
Minnesota Center for Environmental Advocacy
1919 University Avenue West, Suite 515
St. Paul, MN 55104
651-223-5969
cgriffith@mncenter.org

⁸ Minnesota Pollution Control Agency, Technical Guidance for Reviewing and Designating Aquatic Life Uses in Minnesota Streams and Rivers, (2018).



February 3, 2023

Office of Administrative Hearings
Administrative Law Judge Suzanne Todnem
600 N. Robert St.
P.O. Box 64624
St. Paul MN 55164.0620

VIA OAH E-PORTAL

Re: *In the Matter of the Proposed Amendments to Rules Governing Water Quality Standards- Use Classification 2, Minnesota Rules, Chapter 7050*
Revisor's ID Number R-04692
OAH Docket No. 23-9003-37415

Dear Judge Todnem:

The Minnesota Center for Environmental Advocacy (“MCEA”) is a nonprofit environmental advocacy organization with offices in St. Paul and Duluth. Since 1974, MCEA has defended Minnesota’s natural resources, water, air and climate, and the health and welfare of Minnesotans. MCEA is driven by the principle that everyone has a right to a clean and healthy environment, and that decisions must be based on fact, science, and the law.

MCEA submits these comments in response to the Minnesota Pollution Control Agency (“MPCA”) request for comments on proposed changes to water quality standards (“WQS”) as referenced above.

1. MCEA supports the use of TALUs (Tiered Aquatic Life Uses) with regular data monitoring for scientifically accurate and timely rulemaking changes

MCEA supports the use of the TALU framework in assessing stream reaches for aquatic life assemblages throughout the state’s freshwater streams. MCEA also supports the proposed future use of the TALU framework for lakes and other water bodies in the assessment of aquatic life assemblages. In establishing designated uses for Minnesota streams, we anticipate MPCA’s setting and upholding of protective goals for particularly high quality waterways while also recognizing the issues associated with waterways that may have been significantly altered, such as from agricultural drainage.¹ The TALU framework, and particularly the assessment of macroinvertebrates and fish assemblages in streams as bioindicators and as a tool for comprehensive stream management, may be beneficial in more accurately determining designated uses of water bodies across the state and in a changing climate.

¹ Bouchard, R.W., Niemela, S., Genet, J.A. et al. A novel approach for the development of tiered use biological criteria for rivers and streams in an ecologically diverse landscape. *Environ Monit Assess* **188**, 196 (2016). <https://doi.org/10.1007/s10661-016-5181-y>

Updates to the designated uses for stream reaches occur approximately every two to three years. The first update using the TALU framework was in 2017 with another occurring in 2020. Despite two previous designated use updates since data collection occurred, the current 2022-2023 designated uses rulemaking proposal is nevertheless based primarily on the 2016 and 2017 data collection and assessments, including temperature, indices of biological integrity, and other metrics. MPCA's Technical Guidance for Reviewing and Designating Aquatic Life Uses in Minnesota Streams and Rivers explains that in the data collection phase of the review the relevant data can be older than 10 years, and "following the initial (intensive watershed monitoring [IWM]) cycle, additional use designation work will stem from data collected on previously unmonitored reaches, improvements in biological condition, and some corrections, as more data is available." MPCA encourages older data to be included in the review, but does not specify any minimum requirements for data to be included. It is unclear from the MPCA what additional data availability (outside of the intensive watershed monitoring cycle) prompts redesignation and review including specific habitat or bioindicator data. There are significant lags in data collection and proposed changes to designated uses and the reviewed data may not be current and/or fully representative when considered in rulemaking proposals.

MCEA recommends proposed rulemaking changes as soon as practicable within each cycle of IWM data collection to ensure that the assessed data is still relevant to the water body in a rapidly changing climate. MCEA also recommends that the monitoring schemes and collected data for these redesignation efforts be made readily available to the public and that the collected data is sufficiently interpreted for the public.

2. The MPCA must achieve the highest attainable uses for Minnesota's waters and should not downgrade based on little-to-no data.

The principal function of designated uses in water quality standards is to communicate to interested stakeholders and the public the "desired state of surface waters."² Numeric and narrative standards are tied to the designated use. In addition, if a stretch of stream becomes polluted or is otherwise not attaining its designated use, the MPCA must attempt to restore it to the appropriate use. Designated uses are therefore critical to the overall framework of protecting water quality in Minnesota.

The largest proportion of stretches (123 stretches comprising 539 miles of stream) in this proposed rulemaking are being downgraded from a "general" use to a "modified" use. The effect of this change is that modified streams are only expected to be capable of supporting an aquatic community comparable to the median biological condition gradient level 5 as established in Calibration of the Biological Condition Gradient for Streams of Minnesota, Gerritsen et al. (2012).³ General use streams, in contrast, are expected to be capable of supporting a level 4 aquatic

² Yoder, Chris. Midwest Biodiversity Institute. Framework and Implementation Recommendations for Tiered Aquatic Life Uses: Minnesota Rivers and Streams, a report to Minnesota Pollution Control Agency. (2012).

³ Minn. R. 7050.0222 subp. 4c(D).

community.⁴ Level 5 stretches are ones where “sensitive taxa are markedly diminished,” the ecosystems are unbalanced and have reduced function. The biocriteria associated with the redesignation of stream reaches from 2Bg to 2Bm include lower numeric thresholds for aquatic life communities (both fish and macroinvertebrates). The change from 2Bg to 2Bm may therefore negatively impact water quality and the natural resource management of these streams, and MPCA can only take such action if it complies with the Clean Water Act’s limitations on downgrading attainable uses.

The Clean Water Act limits the ability to redesignate uses in a way that removes protections.⁵ In order to remove a use that is not an existing use, MPCA must complete a use attainability analysis.⁶ The Use Attainability Analysis to support the proposed downgrading of 539 miles of stream began with a review of the biological condition of these stretches. According to the proposed rule:

If one or both assemblages do not meet the General Use, then the process proceeds to a review of the habitat. . . . This step uses habitat models to predict if habitat is limiting the biology. . . . [I]f habitat is limiting, then it would need to be determined if this habitat condition is the result of legal alterations to the water body (e.g., ditching). . . . If the water body was legally altered, then the reach would be reviewed to determine if it is restorable or if it is likely to recover on its own in the next five years.

The last step is to determine if a General Use was attained or channel modifications occurred after November 28, 1975. If the stretch was illegally altered, or altered after 1975, it should remain as a general use, not a modified use.

MPCA’s review of the biological condition of the streams and its determination that these streams were habitat limited were based on data (albeit some of it relatively old). In contrast, the determinations that the habitat in these stretches cannot be restored, that the modifications were done legally and before 1975, and the fact that the stretch has not attained a general use at any point after 1975 are all based on little-to-no data. As MPCA stated in its 2018 Technical Guidance, “in most cases [drainage] records are difficult to obtain and this review may be limited until electronic versions of these records are available.” And yet nowhere in the proposed rule does MPCA admit that drainage records for any stretches were unavailable or not reviewed.

MPCA’s process for downgrading 123 stretches from general use to modified use is impossible to verify. The descriptions in the proposal provide little information. With respect to whether the ditches were modified legally, MPCA simply states “[t]his reach has been altered for drainage.” It does not appear that any records were examined to determine whether the drainage projects were done legally. With respect to whether the stretch might have attained a General Use

⁴ Minn. R. 7050.0222 subp. 4c(C).

⁵ 40 C.F.R. § 131.10(g) (describing allowable reasons for removing a designated use).

⁶ 40 C.F.R. § 131.10(j).

after 1975, MPCA simply states “available evidence (e.g., aerial imagery) indicates that it was maintained for drainage before November 28, 1975.” MPCA makes this statement 123 times, but no imagery is included. MPCA goes on to state, without support, that every single one of these stretches “cannot be feasibly restored.” It would aid public understanding if MPCA was able to indicate whether any currently ditched stream stretches were considered restorable (or illegally ditched). And if so, what criteria were used to make that determination. Lastly, MPCA states that “no evidence indicates that the [stream] attained the aquatic life use goals for Class 2Bg on or after November 28, 1975.” But there is no indication of what evidence was examined to make this determination.

MCEA cannot verify whether these stretches should be downgraded from 2Bg to 2Bm. Accordingly, until MPCA can provide the evidence it relied on to make these determinations, MCEA opposes these proposed changes.

Other proposed downgrades raise concerns for MCEA as well. MPCA proposes to downgrade several stream reaches in highly vulnerable watersheds. The St. Louis River (“SLR”) watershed is highly impaired,⁷ while also being a heavily relied upon freshwater source for Tribal communities. MPCA should take extra precautions in understanding the cumulative impacts to aquatic life and water quality with these redesignations. The redesignation of several stream reaches within the SLR watershed, including from general cold (2Ag) to modified or cool/warm (2Bm or 2Bg), may result in lower numeric thresholds for water quality metrics in this region resulting in long-term or cumulative impacts to the SLR, and may ultimately result in changes in habitat restoration efforts. Although some drinking water components are maintained, aquatic life is the issue for many native communities, particularly with regard to subsistence fishing and the bioaccumulation of pollutants within these species. MCEA recommends that the MPCA prioritize the protection of sensitive and impaired watersheds and stream reaches in this rulemaking and others, with emphasis given to the SLR watershed. The MPCA should more closely coordinate with the Tribal nations in rulemakings that may impact subsistence fishing and drinking water.

3. The MPCA and Department of Natural Resources (DNR) should coordinate their management of agricultural ditches for aquatic life and water quality

Interagency coordination is crucial in ensuring that drainage projects do not continue to negatively affect water quality and aquatic life. Although the DNR may be a regulator alongside local drainage authorities for drainage projects, its concern primarily lies within the potential for drainage to impact the course, current, or cross section of a public water or public water wetland, but DNR does not always consider the effect on aquatic life or water quality.

However, as discussed above, the modification of natural waterways to facilitate increased drainage from agricultural lands also has lasting and cumulative impacts on the aquatic habitat in

⁷ Minnesota Pollution Control Agency. St. Louis River Watershed Mercury TMDL. (2022). <https://www.pca.state.mn.us/business-with-us/st-louis-river-watershed-mercury-tmdl>
Environmental Protection Agency 2022. Great Lakes AOC. St. Louis River AOC. <https://www.epa.gov/great-lakes-aocs/st-louis-river-aoc>

those waterways and the ability for those habitats to support balanced assemblages of aquatic life. The MPCA has recognized the impacts of drainage on these redesignation efforts in stating that “most maintained drainage ways are not presently restorable without a huge investment with uncertain results.”⁸ Impacts from drainage are oftentimes permanent and irreparable. The 2018 Technical Guidance document also describes how agricultural drainage and protecting aquatic life assemblages have not yet been able to co-exist as priorities for management; “the ability to construct multi-use drainage ways (i.e., channels that provide drainage and protect aquatic life) has not been fully demonstrated—especially on a large scale.” MPCA has broad regulatory authority under the Minnesota Water Pollution Control Act to “prevent, control or abate water pollution,” which it can use to address water quality impacts from agricultural drainage projects, including effects on the management of aquatic life.

As a first step, and in order to allow review of MPCA’s proposals to downgrade 539 miles of stream to “modified,” it is critical to have publicly accessible data to verify whether these ditches were legally modified under Minnesota drainage law. MCEA recommends that MPCA and DNR work together to ensure that the extensive document record of legally established drainage projects across the state (1) directly informs MPCA’s Use Attainability Analysis, and (2) is available to the public. Because local drainage authorities and the DNR hold this project documentation in hard copy form, MCEA recommends the development of a comprehensive GIS drainage database that includes digital copies of drainage project documentation. While this type of a database would likely be administered by the DNR given their regulatory role over drainage systems, it would allow MPCA to cite a public record for any class use redesignations that stem from drainage modifications, and it would give the public adequate information to review those proposed redesignations.

Sincerely,

/s/Nadia Alsadi

Water Policy Associate
Minnesota Center for Environmental Advocacy
1919 University Avenue West, Suite 515
St. Paul, MN 55104
651-223-5969
nalsadi@mncenter.org

/s/Leigh Currie

Director of Strategic Litigation
Minnesota Center for Environmental Advocacy
1919 University Avenue West, Suite 515
St. Paul, MN 55104
651-223-5969
lcurrie@mncenter.org

/s/Carly Griffith

Water Program Director
Minnesota Center for Environmental Advocacy
1919 University Avenue West, Suite 515
St. Paul, MN 55104
651-223-5969
cgriffith@mncenter.org

⁸ Minnesota Pollution Control Agency, Technical Guidance for Reviewing and Designating Aquatic Life Uses in Minnesota Streams and Rivers, (2018).