

2025 Water Quality Standards Report

New or revised water quality standards (WQS) and amendments in rulemaking:

Group 1: Current and active WQS projects

Status	Topic	Description of progress
In Rulemaking	<p>Revisions to lake eutrophication WQS.</p> <p>Lake aquatic life and recreation Minnesota Pollution Control Agency (state.mn.us)</p>	<p>This revision includes several elements needed to update and modernize the WQS for lakes. They include: 1) revising the northern lake eutrophication standards by adding standards for a shallow lake type, 2) reviewing protections for cold water fish species including lake trout, lake whitefish, and cisco and developing standards where needed, 3) review and designation of cold water lakes, 4) adoption of a Tiered Aquatic Life Use (TALU) framework for lakes, and 5) minor corrections and housekeeping revisions.</p> <p>A Request for Comment (RFC) was published on September 18, 2023, that was open through November 3, 2023. The RFC and comments received are available on the rule webpage. MPCA has revised the technical support document (TSD) based on those comments and has developed a draft Statement of Need and Reasonableness (SONAR). A Notice of Intent (NOI) to adopt rules is expected in early 2026.</p> <p>Lead scientist: Will Bouchard</p>
Technical review/Pre-rulemaking development	<p>Revisions to aquatic life and recreation use Classes 2A (cold waters) and 2B (cool and warm waters) and Class 7 (limited resource value waters).</p>	<p>This revision makes updates and corrections to Class 2 (aquatic life and recreation) and Class 7 (limited resource value waters) beneficial use designations or classifications for streams. These corrections and updates are mostly related to implementation of the (TALU) framework, which added new Class 2 beneficial use tiers for aquatic life. In addition, cold water (Class 2A) and warm/cool water (Class 2Bd and 2B) use designations will be reviewed and corrected, if necessary, as part of this rulemaking.</p> <p>This is the third set of revisions related to implementation of the TALU framework. It is anticipated that an RFC for this rulemaking will be published in late 2025 or early 2026.</p> <p>Lead scientist: Will Bouchard</p>

Status	Topic	Description of progress
In Rulemaking	<p>Revisions to Class 1 (domestic consumption) use designations and associated WQS including per- and polyfluoroalkyl substances (PFAS) for surface water and groundwater.</p> <p>https://www.pca.state.mn.us/water/amendments-water-quality-standards-use-classification-1</p>	<p>These revisions are intended to provide updates to Minnesota rules applying to Class 1 waters (Minn. R. 7050.0221), which have changed very little since first adopted in 1967. Key revisions include adopting more appropriate WQS to protect the domestic consumption use; and reviewing and updating Class 1 designated waters, including the addition of surface waters that impact the quality of groundwater. Other revisions are focused on addressing ambiguities, inconsistencies, and gaps in Minn. R. 7050 (Waters of the State), 7052 (Lake Superior Basin Water Standards) 7053 (State Waters Discharge Restrictions) and 7060 (Underground Waters), as well as Minn. Stat. ch. 103H (aka the 1989 Groundwater Protection Act).</p> <p>MPCA published a RFC in 2021 to provide more detail regarding the revisions under consideration and obtain feedback from the public on these issues.</p> <p>MPCA published a second RFC on August 28, 2023, to solicit comments on rules establishing WQS for PFAS as directed by Minnesota Session Law – 2023, Chapter 60, Article 3 Section 33. This public comment period ended on October 30, 2023.</p> <p>MPCA has collaborated with Minnesota Department of Health on the need for Class 1 water designation changes. MPCA is also drafting a TSD and anticipates publishing a third RFC that includes the draft TSD and information regarding the peer review of the draft TSD in 2026.</p> <p>Lead scientist: Laura Lyle</p>
In Rulemaking	<p>Revision of numeric WQS for protection of aquatic life based on EPA 304(a) Ambient Water Quality Criteria for ammonia.</p> <p>https://www.pca.state.mn.us/get-engaged/ammonia-water-quality-standard</p>	<p>This revision will update Minnesota's existing WQS for ammonia by incorporating current science. The U.S. Environmental Protection Agency's (EPA's) national recommended ambient water quality criteria for ammonia will be adopted as part of this revision (EPA, 2013).</p> <p>MPCA published an RFC on August 1, 2022, that was open through September 15, 2022. The RFC and comments received are available on the rule webpage.</p> <p>MPCA is currently working to develop the SONAR. MPCA anticipates publishing a NOI to adopt rules in 2026.</p> <p>Lead scientist: Robert Dietz</p>

New or revised WQS and amendments that are priorities to develop:

Group 2: In technical development

Status	Topic	Description of progress
Technical development	Update of the fish consumption rate (FCR) for protection of human health.	<p>The FCR is an important component in the calculation of any new or updated fish tissue-based WQS, such as perfluorooctane sulfonate (PFOS) and mercury. MPCA has identified the need to consider populations who rely on fishing for subsistence, as well as for developmental contaminants in populations who may become pregnant. Because of this, MPCA is prioritizing the work of updating the FCR, which needs to be completed prior to development of any new or updated fish tissue WQS.</p> <p>MPCA is currently consulting with Tribal Nations and developing a fish consumption survey to collect additional data about fish consumption habits in Minnesota.</p> <p>Lead scientist: Nicole Neth</p>
Technical development	Revision of numeric WQS for protection of aquatic life for aluminum and copper .	<p>EPA 304(a) Ambient Water Quality Criteria are available for aluminum (2018), and copper (2007). MPCA plans to revise existing WQS for aluminum and copper using EPA's updated criteria to maintain currency with newer science. This work will commence as staff are available.</p> <p>Lead scientist: To be determined (TBD)</p>
Technical information outstanding	Addition of numeric WQS for protection of aquatic life for clothianidin and imidacloprid .	<p>The Minnesota Department of Agriculture (MDA) named clothianidin and imidacloprid as pesticides of concern in surface water in 2020. These pesticides were detected at concentrations of concern to aquatic life in rivers and streams relative to a water quality reference value (i.e., EPA benchmark values). Minnesota does not have WQS for these pesticides.</p> <p>Lead scientist: Phil Monson</p>

Status	Topic	Description of progress
Technical development	Addition of numeric WQS for protection of aquatic life for nitrate .	<p>Technical development for this WQS resulted in a 2022 draft TSD that is available for review: (https://www.pca.state.mn.us/sites/default/files/wq-s6-13.pdf).</p> <p>MPCA, in coordination with its partners, has been pursuing a holistic, stepwise approach to help reduce nitrogen levels statewide prior to proposing a new nitrate aquatic life water quality standard. This includes:</p> <ol style="list-style-type: none"> 1) Developing a detailed Wastewater Nitrogen Reduction Strategy with targeted actions to reduce nitrogen coming from wastewater treatment plants to protect drinking water, aquatic life, and meet the Nutrient Reduction Strategy's point source goals. 2) Completing a 10-year revision of the Nutrient Reduction Strategy, updated with enhanced strategies and actions designed to achieve reductions in nonpoint and point sources of nitrogen. <p>The schedule for the completion of this rulemaking process has not been determined.</p> <p>Lead scientist: Phil Monson</p>

New or revised WQS that need to be developed:

Group 3: Tracking and evaluation

Status	Topic	Description of progress
Tracking and evaluation	Sulfate water quality standard	<p>MPCA is evaluating tools for standard implementation in consideration of wild rice presence in relationship to sulfate concentrations including, but not limited to, segments of the Lower Mississippi River.</p> <p>Lead scientists: Robert Dietz, Meghan Hemken, Emily Brault, and Dennis Wasley</p>
Tracking and evaluation	Revisions to numeric WQS for dissolved oxygen (DO) to protect aquatic life.	<p>This revision is under consideration to address a potential gap in the existing DO WQS, which may not appropriately consider streams that have naturally lower DO concentrations. Current DO standards do not take natural factors such as wetland influence, ecoregion, stream gradient, etc., into consideration. A DO framework that better addresses natural conditions would better serve the assessment process.</p> <p>Lead scientist: TBD</p>
Tracking and evaluation	Revisions of numeric WQS for protection of aquatic life for chloride and sulfate .	<p>EPA is working to develop a more complex ion criteria that would include chloride, sulfate, and other major ions. This ion model would utilize more robust science, and MPCA plans to wait and incorporate this model for chloride and sulfate.</p> <p>Lead scientist: TBD</p>
Tracking and evaluation	Revisions to numeric WQS for total suspended solids (TSS) to protect aquatic life.	<p>This revision is under consideration to address a potential gap in the existing TSS WQS, which may not appropriately consider Minnesota rivers that have naturally high TSS and also high-quality biological communities.</p> <p>Lead scientist: TBD</p>

Status	Topic	Description of progress
Tracking and evaluation	<p>Addition of numeric WQS for PFOS in fish tissue, employing updated human-health based WQS methods (these methods were adopted into Minn. R. chs. 7050 and 7052 on March 16, 2015).</p>	<p>MPCA expects to develop a WQS for PFOS in fish tissue to address the increasing number of water bodies across the state in which fish have been impacted by PFOS. Currently, updated site-specific criteria for PFOS in fish tissue are available for certain water bodies in the Twin Cities Metro Area. For more information about MPCA's approach to addressing PFAS, see: the PFAS Blueprint and https://www.pca.state.mn.us/waste/water-quality-criteria-development-pfas.</p> <p>MPCA plans to update the FCR before moving forward with the development of this standard.</p> <p>Lead scientist: TBD</p>

Completed WQS:

Status	Topic	Description of progress
Completed	Red Lake eutrophication site-specific standards	<p>The Red Lake Nation and MPCA developed site-specific eutrophication standards for Upper and Lower Red lakes. These lakes have unique characteristics that cause the lakes to not fit into the existing regional lake eutrophication standards framework. These site-specific standards, developed cooperatively between the MPCA and Red Lake Nation, were needed to address this discrepancy.</p> <p>An RFC was published on April 22, 2024, that was open through June 14, 2024. Comments were considered, and the revised site-specific standards were approved by EPA on July 23, 2025.</p> <p>Lead scientist: Will Bouchard</p>

Completed water quality standards and amendments: these WQS projects were completed since the 2024 Water Quality Standards Report.

Explanation of group designations:

New or revised water quality standards (WQS) and amendments in rulemaking are **Group 1 projects that are in active development**. These WQS projects are in rulemaking or are expected to enter rulemaking before the next triennial review (within two to three years).

Group 1 projects in rulemaking have had a request for public comment published and there is a projected timeline for adoption into state law. The MPCA is focused on responding to any changes needed due to external peer review (where applicable), finalizing the technical support document (TSD), and developing the SONAR and final rule language. External peer review is required when the MPCA proposes new or revised WQS for which a numeric federal recommended criterion is not available. The need for peer review will influence how long it takes to complete a WQS.

Group 1 projects in development are in the process of preparing supporting documentation (the TSD), and there is a basic concept of what will be included in rule language, but no request for comment has been published. Draft TSDs for new or revised numeric WQS go through an initial public comment period and an independent peer review process.

New or revised WQS and amendments that are priorities to develop include **Group 2 and 3 projects**. These WQS projects were selected as priorities for development in the 2021-2023 Triennial Standards Review, or their need arose after the review, and have not yet advanced into rulemaking; their progress during 2025 is provided here.

Group 2 projects that are in technical development are those for which all necessary supporting studies and other information from outside the MPCA is available. The information is sufficient to conduct a basic evaluation of how the standard will address environmental or programmatic concerns, and to assess the resources needed to promulgate and implement the standard. An important consideration in whether and when a WQS project moves into Group 1 is whether MPCA programs can accommodate the added work to develop policy and implement the new WQS, and still maintain regular permitting and related work. Group 2 projects that are currently under technical development are likely to move into Group 1 with an in-development status within one to two years.

Group 2 projects with technical information outstanding lack some needed information, such as a scientific study, that prevents completion of technical development. The work being done can involve many different tasks, such as: compiling and reviewing scientific literature about a pollutant; collecting and reviewing Minnesota-specific data; designing and undertaking one or more studies; and reviewing an EPA criteria document. Months to years may pass before the information needed to complete basic technical development is available.

Group 3 projects are being tracked. Group 3 projects are those that MPCA has not started developing, either because of missing technical information, a lack of capacity, or both. Group 3 projects may remain in Group 3 with no significant progress made throughout the next three-year triennial period.

Opportunities for public comment:

Opportunities for public input on individual new or revised water quality standards proposals occur through the rulemaking process. In addition, all of Minnesota's water quality standards are open for public review and comment every three years as part of the Clean Water Act required Triennial Standards Review (TSR). The most recent TSR accepted public comment in early 2025, and is currently being finalized. The next TSR is anticipated to be put on public notice in 2027.

Specific information about upcoming opportunities to comment on standards proposed for adoption (Group 1) is available here: <https://www.pca.state.mn.us/get-engaged/proposed-rules>. **Note: The easiest way to stay current with water quality standards development and adoption** is to sign up for GovDelivery notices. The link to sign up is near the top of the same webpage. Follow the instructions and look for "Water Rulemaking."

This report fulfills the requirement of Minn Stat. 115.035 paragraph (g).