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December 15, 2020

The Honorable Carrie Ruud  
Chair, Senate Environment & Natural Resources  
Policy and Legacy Finance Committee  
3233 MN Senate Building  
95 University Avenue West  
St. Paul, MN 55155

The Honorable Bill Ingebrigtsen  
Chair, Senate Environment & Natural Resources  
Finance Committee  
3207 MN Senate Building  
95 University Avenue West  
St. Paul, MN 55155

The Honorable John Persell  
Chair, House Environment and Natural  
Resources Policy Committee  
437 State Office Building  
100 Rev. Dr. Martin Luther King Jr. Blvd.  
St. Paul, MN 55155

The Honorable Peter Fischer  
Chair, House Subcommittee on Water  
551 State Office Building  
100 Rev. Dr. Martin Luther King Jr. Blvd.  
St. Paul, MN 55155

The Honorable Rick Hansen  
Chair, House Environment and Natural  
Resources Finance Division  
407 State Office Building  
100 Rev. Dr. Martin Luther King Jr. Blvd.  
St. Paul, MN 55155

The Honorable Chris Eaton  
Ranking Minority Member, Senate Environment  
and Natural Resources Policy and Legacy  
Finance Committee  
2403 MN Senate Building  
95 University Avenue West  
St. Paul, MN 55155

The Honorable David Tomassoni  
Ranking Minority Member, Senate Environment  
and Natural Resources Finance Committee  
2235 MN Senate Building  
95 University Avenue West  
St. Paul, MN 55155

The Honorable Dale Lueck  
Republican Lead, House Environment and  
Natural Resources Policy Committee  
311 State Office Building  
100 Rev. Dr. Martin Luther King Jr. Blvd.  
St. Paul, MN 55155

The Honorable Josh Heintzeman  
Republican Lead, House Subcommittee on  
Water  
353 State Office Building  
100 Rev. Dr. Martin Luther King Jr. Blvd.  
St. Paul, MN 55155

The Honorable Dan Fabian  
Republican Lead, House Environment and  
Natural Resources Finance Division  
287 State Office Building  
100 Rev. Dr. Martin Luther King Jr. Blvd.  
St. Paul, MN 55155

RE: Inventory of Water Quality Standards

Committee Chairs and Ranking Minority Members

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December 15, 2020

Dear Committee Chairs and Ranking Minority Members:

In keeping with the requirements of Laws of Minnesota 2015, First Special Session chapter 150, article 4, section 100, paragraph (b), the enclosed report - MPCA's Inventory of Water Quality Standards- identifies the water quality standards development work in progress in 2020, the lead agency scientist for each development effort, and opportunities for public input. The report's purpose is to share information about the MPCA's water quality standards development work with the public.

The Inventory reflects the priorities identified via the every three years' review of Minnesota's water quality standards needs that was most recently completed in spring 2018. This review is conducted for the explicit purpose of obtaining the public's input on the need for water quality standards and revisions; preparations for the next triennial review have begun, with a public notice to be published early in 2021.

Sincerely,

A handwritten signature in blue ink that reads "Greta Gauthier". The signature is fluid and cursive, with a horizontal line extending from the end.

Greta Gauthier

Assistant Commissioner for Legislative and Intergovernmental Relations  
Commissioner's Office

GG:CO:cbg

# Inventory of water quality standards projects, 2018 – 2020, with status as of November 2020

New or revised water quality standards and amendments in rulemaking:		
Group 1: Current and active WQS projects		
Subgroup 1A	Topic	Status
In Rulemaking	Revision of existing <b>Class 3 (industrial consumption), Class 4 (agriculture and wildlife) designations</b> , and associated water quality standards (WQS).  <a href="https://www.pca.state.mn.us/water/amendments-water-quality-standards-use-classifications-3-and-4">https://www.pca.state.mn.us/water/amendments-water-quality-standards-use-classifications-3-and-4</a>	The Minnesota Pollution Control Agency (MPCA) released draft rule language on October 30, 2020. The proposed rule language, the Statement of Need and Reasonableness (SONAR), and a notice of intent to adopt the rule are expected before the end of the year, with a public hearing to follow, likely in early 2021. The MPCA expects its rulemaking to be completed in mid-2021.  <b>Lead scientist:</b> Scott Kyser
Group 1: Current and active WQS projects		
Subgroup 1B	Topic	Status
Technical Review/Pre-rulemaking Development	Revisions to aquatic life and recreation use <b>Classes 2A (cold waters) and 2B (cool and warm waters) and Class 7 (limited resource value waters)</b> .	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 and lakes. These corrections and updates are mostly related to implementation of the <a href="#">Tiered Aquatic Life Use (TALU)</a> framework, which added new Class 2 beneficial use tiers for aquatic life. In addition, cold (Class 2A) and warm/cool (Class 2Bd and 2B) water use designations will be reviewed and corrected, if necessary. This is the second set of revisions related to implementation of the TALU framework; a similar set of revisions was completed in 2020 (see completed rulemakings and amendments on page 7). It is anticipated that a request for comment for this rulemaking will be published by mid-2021.  <b>Lead scientist:</b> Will Bouchard

Group 1: Current and active WQS projects		
Subgroup 1B	Topic	Status
Pre-rulemaking Development	Revisions to <b>Class 1 (domestic consumption) use designations and associated WQS</b> for groundwater and surface water.	<p>These revisions address the inconsistencies and gaps in Minn. R. chs. 7050 (waters of the state) and 7060 (underground waters) and may include revisions to Class 1 WQS (Minn. R. ch. 7050.0221), including consideration of the domestic consumption use on trout streams. The MPCA, the Minnesota Department of Health, and other agencies with relevant authority are reviewing the specific items to be revised. More information about likely rule changes will be shared with the public when they are available, likely in mid-2021.</p> <p><b>Lead scientists:</b> Doug Hansen and Angela Preimesberger</p>

Descriptions for each group and subgroup are on page 6.

## New or revised water quality standards and amendments that are priorities to develop 2018 to 2020:

### Group 2: In technical development

SubGroup 2A	Topic	Status
Technical Development	Revisions to <b>lake eutrophication WQS</b> .	<p>This revision potentially includes several elements needed to update and modernize the eutrophication 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 TALU framework for lakes, and 5) minor corrections and housekeeping revisions. It is anticipated that a request for comment for this rulemaking will be published before the end of 2021.</p> <p><b>Lead scientist:</b> Will Bouchard</p>
Technical Development	Additions of numeric WQS for protection of aquatic life for <b>nitrate</b> .	<p>U.S. Environmental Protection Agency (EPA) sponsored studies of nitrate toxicity are mostly complete or in manuscript form, sufficient that staff can begin updating the 2010 technical support document and developing a path to move forward with updating the standard.</p> <p><b>Lead scientist:</b> Phil Monson</p>
To be developed with nitrate	Revisions of numeric WQS for protection of aquatic life based on EPA 304(a) Ambient Water Quality Criteria for <b>ammonia</b> .	<p>MPCA will revise the WQS for ammonia concurrently with nitrate to address implementation considerations relevant to both pollutants.</p> <p><b>Lead scientist:</b> To be determined (TBD)</p>
SubGroup 2B	Topic	Status
Technical Information Outstanding	Revisions of numeric WQS for protection of aquatic life for <b>chloride</b> .	<p>EPA is currently working to revise a previously developed chloride-sulfate model to incorporate the effects of hardness and potentially other ions on toxicity. This work is expected to continue for some time and drive the need for additional toxicity data. MPCA is tracking EPA's work on this model as well approaches being taken re: chloride by at least one other state. Further resolution and support for a technical approach to chloride (or general ion-based) toxicity is needed to support development of this WQS.</p> <p><b>Lead scientist:</b> TBD</p>

SubGroup 2B	Topic	Status
Technical Information Outstanding	Additions of numeric WQS for protection of aquatic life for <b>sulfate</b> .	EPA is currently working to revise a previously developed chloride-sulfate model to incorporate the effects of hardness and potentially other ions on toxicity. This work is expected to continue for some time and drive the need for additional toxicity data. MPCA is tracking EPA's work on this model as well as approaches being taken regarding sulfate by at least one other state. Further resolution and support for a technical approach to sulfate (or general ion-based) toxicity is needed to support development of this WQS. <b>Lead scientist:</b> TBD
Group 3: Tracking and evaluation		
Group 3	Topic	Status
Tracking and Evaluation	Addition of numeric WQS for <b>perfluoro-octane sulfonate (PFOS) in fish tissue</b> , employing updated human-health based WQS methods (these methods were adopted into Minn. R. chs. 7050 and 7052 on March 16, 2015).	MPCA anticipates developing 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. Alternatively, MPCA may develop site-specific criteria for specific water bodies, similar to the recent approach used in the Twin Cities Metro Area to address PFOS in fish tissue and in the water column in several metro water bodies. For further information see: <a href="https://www.pca.state.mn.us/waste/water-quality-criteria-development-pfas">https://www.pca.state.mn.us/waste/water-quality-criteria-development-pfas</a> . <b>Lead scientist:</b> Angela Preimesberger

Descriptions for each group and subgroup are on page 6.

## Other water quality standards projects:

### Group 4: Other WQS projects

Group 4	Topic	Status
Intermittent activity	Updates to the list of <b>outstanding resource value waters</b> in Minn. R. 7050.00335.	Review of outstanding resource value waters is conducted on an as needed basis. <b>Lead scientist:</b> (TBD)
Intermittent activity	Review of <b>limited resource value waters</b> (Class 7).	Review of Class 7 waters is conducted on an as needed basis. A conceptual model for integrating review of listed Class 7 waters into the MPCA's watershed approach is in development. <b>Lead scientist:</b> Will Bouchard
Inactive	Removal of <b>domestic consumption (Class 1B), industrial consumption (Class 3B), and irrigation (Class 4A) designated uses</b> for a segment of the Dark River, St. Louis County. <a href="https://www.pca.state.mn.us/water/wqs-dark-river">https://www.pca.state.mn.us/water/wqs-dark-river</a>	A technical review was initiated in response to a request under Minn. R. 7050.0405 to consider the attainability of the domestic consumption, industrial and irrigation designated uses for the trout stream segment of the Dark River, located downstream of Dark Lake in St. Louis County. Monitoring data was later submitted that precludes removal of the Class 4A irrigation use. The review of other designated uses (Class 1B and Class 3B) is impacted by rulemaking projects now underway that address these beneficial use classifications on a statewide basis. This project is currently inactive. <b>Lead scientist:</b> TBD
Inactive	Revision of recreational WQS for human health protection from <b>surface water pathogens (<i>E. coli</i>)</b> based on the EPA's 304(a) Recreational Water Quality Criteria from 2012.	MPCA has decided not to finalize this WQS. Analysis shows this WQS revision will have little impact on water quality but will require a significant staff effort to complete and promulgate; other WQS topics are a higher priority and may provide better opportunities to address surface water pathogens (e.g. Class 1 revisions in Group 1A). <b>For further information:</b> William Cole

Descriptions for each group and subgroup are on page 6.

## Explanation of group designations:

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

**Group 1A projects** 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 peer review (where applicable), finalizing the technical support document (TSD), and developing the SONAR and final rule language. The need for peer review will influence how long it takes to complete a WQS.

**Group 1B projects** are in the process of preparing supporting documentation (the TSD), and there is a basic concept of what will be included in rule language. Draft TSDs for new or revised numeric WQS go through an initial public comment period and an independent peer review process. When the TSD is sufficiently complete (i.e. complete enough to allow it to go through peer review), Group 1B projects move into Group 1A, about two to three years.

**New or revised water quality standards and amendments that are priorities to develop 2018 to 2020** include **Group 2 and 3 projects**. These WQS projects were selected as priorities for development in the 2017 Triennial Standards Review and have not yet advanced into rulemaking; their progress during 2020 is provided here.

**Group 2 projects** are in technical development. Information needs and technical approaches for developing WQS vary widely, making it difficult to estimate the time needed to advance these projects.

**Group 2A projects** 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 2A projects are likely to move into Group 1B within one to two years.

**Group 2B projects** are in initial technical development. This 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. Projects in Group 2B lack some needed information, such as a scientific study, that prevents completion of technical development. Months to years may pass before the information needed to complete basic technical development is available. Once it is, Group 2B projects move into Group 2A.

**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 three-year triennial period.

**Group 4 projects** do not have a priority status with regard to development but are important WQS work.

NOTE: Under Minn. R. chs. 7050 and 7052, MPCA has authority to develop site-specific water quality standards and site-specific criteria that do not apply statewide and are not subject to rulemaking. More information is available here: <https://www.pca.state.mn.us/water/site-specific-water-quality-standards> and <https://www.pca.state.mn.us/water/site-specific-criteria>.



## Completed water quality standards and amendments:

Topic	Date of adoption
<p>Revisions to aquatic life and recreation use <b>Classes 2A (cold waters) and 2B (cool and warm waters) and Class 7 (limited resource value waters)</b>.</p> <p><a href="https://www.pca.state.mn.us/water/wqs-designated-uses">https://www.pca.state.mn.us/water/wqs-designated-uses</a></p>	<p>This revision made updates and corrections to Class 2 (aquatic life and recreation) and Class 7 (limited resource value waters) beneficial use designations or classifications for streams and lakes. These corrections and updates are mostly related to implementation of the <a href="#">TALU</a> framework, which added new Class 2 beneficial use tiers for aquatic life. In addition, a number of cold (Class 2A) and warm/cool (Class 2Bd and 2B) water use designations were reviewed and corrected. The revisions were adopted into state rule on June 1, 2020 and were effective June 8, 2020.</p> <p><b>Lead scientist:</b> Will Bouchard</p>

**Completed water quality standards and amendments:** these WQS projects were completed since the 2017 Triennial Standards Review.

## Opportunities for public comment:

Opportunities for public input on water quality standards occur with the adoption of standards into Minnesota rule. 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. The next Triennial Standards Review began in late 2020 and continues into 2021.

Specific information about opportunities to comment on standards proposed for adoption (Group 1A) is available here:

<http://www.pca.state.mn.us/index.php/view-document.html?gid=16321>).

**Note:** The easiest way to stay current with water quality standards development and adoption is to sign up for GovDelivery notices on the MPCA's Water Quality Standards webpage: <http://www.pca.state.mn.us/qzqh1081>.

*This report fulfills the requirement of Laws of Minnesota 2015, chapter 4, section 100, paragraph (b).*