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December 15, 2018

The Honorable Dan Fabian  
Chair, Environment and Natural Resources  
Policy and Finance Committee  
359 State Office Building  
St. Paul, MN 55155

The Honorable Bill Ingebrigtsen  
Chair, Environment and Natural Resources  
Finance Committee  
3207 Minnesota Senate Building  
St. Paul, MN 55155

The Honorable Rick Hansen  
DFL Lead, Environment and Natural Resources  
Policy and Finance Committee  
247 State Office Building  
St. Paul, MN 55155

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

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

The Honorable Carrie Ruud  
Chair, Environment and Natural Resources  
Policy and Legacy Finance Committee  
3233 Minnesota Senate Building  
St. Paul, MN 55155

RE: Inventory of Water Quality Standards

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 2018, 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 review will begin towards the end of 2020.

We hope this report will increase the public's understanding of the water quality standards development process, the water quality standards expected to enter rulemaking in the near future, and the associated opportunities for public comment.

Committee Chairs and Ranking Minority Members

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December 15, 2018

This report is also available on the MPCA's website at <https://www.pca.state.mn.us/about-mpca/legislative-reports>.

If you have any questions regarding this report, please contact me at 651-757-2031.

Sincerely,



Greta Gauthier  
Legislative Director  
Commissioners Office

GG/CO:cbg

November 2018

# Annual Report of MPCA's Water Quality Standards Development Work

An inventory with project status





## **Legislative charge**

*This report fulfills the requirement of Laws of Minnesota 2015, chapter 4, section 100, paragraph (b), which reads as follows:*

*“By December 15 each year, the commissioner shall post on the agency's Web site a report identifying the water quality standards development work in progress or completed in the past year, the lead agency scientist for each development effort, and opportunities for public input.”*

## **Minnesota Pollution Control Agency**

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This report is available in alternative formats upon request, and online at [www.pca.state.mn.us](http://www.pca.state.mn.us).

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## Contributors/acknowledgements

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# Foreword

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In keeping with the requirements of Laws of Minnesota 2015, chapter 4, section 100, paragraph (b), this report identifies the water quality standards development work in progress or completed in the past year, 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. We hope this report will increase the public's understanding of the water quality standards development process, the water quality standards expected to enter rulemaking in the near future, and the associated opportunities for public comment.

Note that this report reflects the water quality standards development priorities from the 2017 Triennial Standards Review (completed in April 2018) and the progress made since then.

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

## 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>	A draft technical support document (TSD) for revising the Class 3/Class 4 use class designations and the associated WQS is nearing completion; the Minnesota Pollution Control Agency (MPCA) expects the draft TSD will be out for public comment in early 2019. Following public comment, the TSD will go through formal peer review. The scope and timeline for the peer review process is unknown at this time and will depend in part on the public comments received.  <b>Lead scientists:</b> Gerald Blaha and Laura Lyle
In Rulemaking	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 is focused on making 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. The technical review for this project is complete and a request for comments was published in the State Register on September 24, 2018. Proposed rule language is in development.  <b>Lead scientist:</b> Will Bouchard
Subgroup 1B	Topic	Status
Pre-rulemaking Development	Revision of the approach for <b>Class 1 (domestic consumption) use designations and associated WQS</b> for groundwater and surface water.	These revisions address the inconsistencies and gaps in Minn. R. chs. 7050 (waters of the state) and 7060 (underground waters). The MPCA, the Minnesota Department of Health (MDH), and other agencies with relevant authority are continuing to review the specific items to be revised. More information about likely rule changes will be shared with the public when they are available.  <b>Lead scientist:</b> Doug Hansen

Pre-rulemaking Development	Revision of recreational WQS for human health protection from <b>surface water pathogens (<i>E. coli</i>)</b> based on the U. S. Environmental Protection Agency (EPA's) 304(a) Recreational Water Quality Criteria from 2012.	The technical review is nearly complete and finalization of this revision is continuing. MPCA anticipates a request for comment will be published mid-2019, with draft rule language and the statement of need and reasonableness (SONAR) to follow in 2020. <b>Lead scientist:</b> Laura Solem
Pre-rulemaking Development	Removal of <b>domestic consumption (Class 1A), industrial consumption (Class 3B), and irrigation (Class 4A) designated uses</b> for a segment of the Dark River, St. Louis County.	The technical review is underway to evaluate the basis for use class removals for the trout stream segment of the Dark River, located downstream of Dark Lake in St. Louis County. This review is being conducted in response to a request under Minn. R. 7050.0405 to consider the attainability of the domestic consumption, industrial and irrigation designated uses. <b>Lead scientist:</b> Laura Lyle

Descriptions for each group and subgroup are on page 5.



## 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 Review	(No WQS projects are currently in this subgroup.)	
SubGroup 2B	Topic	Status
Technical Information Outstanding	Additions of numeric WQS for protection of aquatic life for <b>nitrate</b> .	The EPA is continuing to support development of new toxicity information for nitrate, some of which is expected to be available in late 2018 or early 2019 <sup>1</sup> . The MPCA does not anticipate making progress on this project over the next year. <b>Lead scientist:</b> Phil Monson
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> .	MPCA plans to revise the WQS for ammonia concurrently with nitrate to address implementation considerations relevant to both pollutants. <b>Lead scientist:</b> To be determined
Technical Information Outstanding	Revisions of numeric WQS for protection of aquatic life for <b>chloride</b> .	The EPA is continuing to support development of new toxicity information for chloride and related pollutants, which is expected to be available in late 2018 or early 2019 <sup>2</sup> . The MPCA does not anticipate making progress on this project over the next year. <b>Lead scientist:</b> Laura Lyle
Technical Information Outstanding	Additions of numeric WQS for protection of aquatic life for <b>sulfate</b> .	EPA is continuing to support development of new toxicity information for sulfate and related pollutants, including new studies that are just beginning <sup>2</sup> . The MPCA does not anticipate making progress on this project over the next year. <b>Lead scientist:</b> Phil Monson

### 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 plans to develop a WQS for PFOS in fish tissue to address an expected increase in the number of water bodies in which fish have been impacted by PFOS. <b>Lead scientists:</b> Angela Preimesberger and Laura Solem

<sup>1</sup>Since 2010, when MPCA completed a draft technical support document for nitrate, a number of studies have been conducted to assess nitrate's toxicity to specific aquatic organisms. Currently, at least three species are being studied to evaluate nitrate's impact on more sensitive species; these studies will add to the now robust basis for development of this standard.

<sup>2</sup>Although some toxicity studies for chloride and sulfate are nearing completion, other studies are showing that chloride and sulfate can interact (along with other ions) and impact toxicity. This finding may be a factor in WQS development. EPA is funding new studies to refine the understanding of this phenomenon.

## 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 <b>outstanding resource value waters</b> is conducted on an as needed basis. <b>Lead scientist:</b> Gerald Blaha
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 very early development. <b>Lead scientist:</b> Will Bouchard

Descriptions for each group and subgroup are on page 5.

## 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 Statement of Need and Reasonableness (SONAR) and final rule language. The need for peer review will impact 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 2018 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.

### 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 will begin in 2020.

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>.

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