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Water Quality

November 2017

# 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, First Special Session chapter 150, article 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."

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## Foreword

In keeping with the requirements of Laws of Minnesota 2015, First Special Session chapter 150, article 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 2013 Triennial Standards Review and the progress made since then. The inventory in this report will be revised in 2018 to reflect the water quality standards development projects selected as part of the 2017 Triennial Standards Review, which is currently underway.

## New or revised water quality standards and amendments in rulemaking:

#### Group 1: Current and Active WQS Projects (See below for further information)

Subgroup 1A	Торіс	Status
In Rulemaking	Modification of the existing sulfate standard for <b>protection of wild rice</b> <u>http://www.pca.state.mn.us/ktqh1083</u> .	A Notice of Intent to Adopt was published in the <i>State Register</i> on August 21, 2017, and a series of public hearings on the proposed rules were held in October and November 2017. The public comment period for the proposed rules ended on November 22, 2017. Up-to-date information about this rulemaking is available here: <u>http://www.pca.state.mn.us/ktqh1083</u> . Lead scientists: Ed Swain, Phil Monson and Gerald Blaha
In Rulemaking	Revision of existing <b>Class 3 (Industrial Consumption) and Class 4 (Agriculture and Wildlife)</b> designations and associated water quality standards (WQS). ( <b>NOTE:</b> this does not include update of existing Class 4 designations and WQS related to the identification of waters used for production of wild rice and modification of the existing sulfate standard for protection of wild rice, which is a separate effort, as described above.)	Finalization of the technical approach for revising use class designations and associated WQS is continuing, with release of the proposed rule, SONAR, and formal public comment period anticipated in 2018. Lead scientists: Gerald Blaha and Laura Lyle
Subgroup 1B	Торіс	Status
Pre- rulemaking Development	Revision of the approach for <b>Class 1</b> (drinking water) use designations and associated WQS for groundwater and surface water.	These revisions address the inconsistencies and gaps in Minn. R. chs. 7050 and 7060 (underground waters). Minnesota Pollution Control Agency (MPCA), the Minnesota Department of Health (MDH), and other agencies with relevant authority are reviewing the specific issues to be revised. More information about likely rule changes will be shared with the public in 2018. Lead scientist: Doug Hansen
Pre- rulemaking Development	Revision of recreational WQS for human health protection from <b>surface</b> water pathogens ( <i>E. coli</i> ) based on 2012 EPA 304(a) Recreational Water Quality Criteria.	The technical review is complete and finalization of this revision is continuing. MPCA anticipates that draft rule documents will be available in 2018. Lead scientist: Laura Solem

Descriptions for each group and subgroup are on page 4.

## New or revised water quality standards and amendments that are priorities to develop 2014 to 2017:

#### Group 2: In Technical Development

SubGroup 2A	Торіс	Status
Technical Review	Revisions to <b>Use Classes 2A (cold waters) and 2B (cool and warm</b> waters).	The scope of this revision has changed to focus on updating and aligning existing Class 2A/2B designations with the improved tools now used by MPCA to assess the condition of Minnesota's waters. This project was on hold through much of 2017 but is now proceeding. Lead scientist: Will Bouchard
SubGroup 2B	Торіс	Status
Technical Information Outstanding	Addition of numeric WQS for protection of aquatic life for <b>nitrate</b> .	The U. S. Environmental Protection Agency (EPA) is continuing to develop new toxicity information for nitrate, which is expected to be available mid-year 2018. MPCA does not anticipate making progress on this project over the next year.
To be developed with nitrate	Revision 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.
Technical Information Outstanding	Revisions of numeric WQS for protection of aquatic life for <b>chloride</b> .	EPA is continuing to develop new toxicity information for chloride and related pollutants, which is expected to be available by mid- 2018. MPCA does not anticipate making progress on this project over the next year.
Technical Information Outstanding	Additions of numeric WQS for protection of aquatic life for <b>sulfate</b> .	EPA is continuing to develop new toxicity information for sulfate and related pollutants, which is expected to be available by mid- 2018. MPCA does not anticipate real progress on this project over the next year.

Descriptions for each group and subgroup are on page 4.

## New or revised water quality standards and amendments that are priorities to develop 2014 to 2017:

#### **Group 3: Tracking and Evaluation**

Group 3	Торіс	Status
Tracking and Evaluation	Revision of or additions to <b>pollutant-specific human health-based</b> <b>WQS</b> , employing updated human-health based WQS methods (adopted into <i>Minn. R.</i> chs. 7050 and 7052 on March 16, 2015).	MPCA reviewed candidate pollutants for which updated values would provide the most benefit relative to protecting human health for recreation and fish consumption in surface waters. Based on the review, these pollutants were identified as likely candidates for updating or addition: 1) toxins associated with harmful algal blooms (e.g., microcystin, anatoxin-a), 2) PCBs (polychlorinated biphenyls), 3) dioxins/furans, and/or 4) PFOS (perfluorooctane sulfonate). MPCA will consider this topic further in connection with the 2017 Triennial Standards Review.
		Lead scientists: Angela Preimesberger and Laura Solem

#### Group 4: Other WQS projects

Group 4	Торіс	Status
Inactive	Revision of numeric WQS for protection of aquatic life based on EPA 304(a) Ambient Water Quality Criteria or guidance for <b>copper</b> .	No timeline for this revision has been set. Lead scientist: To be determined
Inactive	Revision of numeric WQS for protection of aquatic life based on EPA 304(a) Ambient Water Quality Criteria or guidance for <b>cadmium</b> .	No timeline for this revision has been set. Lead scientist: To be determined
Inactive	Updates to the list of <b>outstanding resource value waters</b> in <i>Minn.</i> <i>R.</i> 7050.0180.	No timeline for this update has been set. Lead scientist: Gerald Blaha
Inactive	Review of <b>limited resource value waters</b> (Class 7).	Review of Class 7 waters is conducted on an as-needed basis. A timeline for comprehensive review of all listed Class 7 waters has not been set. Lead scientist: Will Bouchard

Descriptions for each group and subgroup are on page 4.

## **Explanation of group designations:**

New or revised water quality standards and amendments in rulemaking are Group 1 projects: current and active WQS projects in rulemaking. 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 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, in about two to three years.

**New or revised water quality standards and amendments that are priorities to develop 2014 to 2017** include **Group 2, 3 and 4 projects**. These WQS projects were selected as priorities for development in the 2013 Triennial Standards Review and have not yet advanced into rulemaking; their progress since 2013 is provided here. Note this report will be revised in 2018 to reflect the WQS development projects selected as part of the 2017 Triennial Standards Review, which is currently underway.

**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 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. Whether MPCA programs can accommodate the added work to develop policy and implement the new WQS, and still maintain regular permitting and related work is an important consideration in whether and when a WQS project moves into Group 1. 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 and refining 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 without significant progress into regulatory development throughout the three-year triennial period.

Group 4 projects are inactive. Though these projects were selected for review or revision during the 2013 Triennial Standards Review, there has been no activity on them, primarily due to a lack of capacity.

## Completed water quality standards and amendments:

Торіс	Date of adoption
Addition of <b>eutrophication</b> WQS for river systems and replacement of the existing turbidity WQS with WQS for Total Suspended Solids (TSS) <u>http://www.pca.state.mn.us/6paqdkc</u> .	This amendment was adopted into Minnesota rule on August 4, 2014. The EPA issued its approval of the rule amendment on January 23, 2015. Lead scientists: Steve Heiskary (retired) and Phil Monson
Updates to the <b>methods for deriving human health-based WQS</b> to maintain consistency with the MDH Health Risk Limits and EPA Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health (2000) <u>http://www.pca.state.mn.us/chdfaa8</u> .	These amendments were adopted into Minnesota rule on March 16, 2015. The EPA issued its approval of the rule amendments on November 5, 2015. Lead scientist: Angela Preimesberger
Revisions to <b>variance</b> rule language <u>http://www.pca.state.mn.us/zihy1479</u> .	These revisions were adopted into Minnesota rule on October 17, 2016. EPA The EPA issued its approval of the rule amendments on March 7, 2017. Lead scientist: Elise Doucette
Modification to the existing <b>non-degradation</b> rules (now termed <b>anti-degradation</b> )	These modifications were adopted into Minnesota rule on November 14, 2016. The EPA issued its approval of the modifications on June 13, 2017.
http://www.pca.state.mn.us/oxpg919.	Lead scientist: William Cole
Revision of the existing aquatic life use classifications to incorporate a <b>Tiered</b> <b>Aquatic Life Use</b> framework <u>http://www.pca.state.mn.us/zihy1082</u> .	These revisions were adopted into Minnesota rule on October 16, 2017 and were sent to EPA for approval.
	Lead scientist: Will Bouchard

**Completed water quality standards and amendments:** these WQS projects were completed since the 2013 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 2017 Triennial Standards Review public comment period begins November 27, 2017 and ends on February 9, 2018.

Specific information about opportunities to comment on standards proposed for adoption (Group 1A) is available here: <a href="http://www.pca.state.mn.us/index.php/view-document.html?gid=16321">http://www.pca.state.mn.us/index.php/view-document.html?gid=16321</a>).

**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: <u>http://www.pca.state.mn.us/qzqh1081</u>.

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