

Adjusting water quality standards

Making changes to Class 3 and 4 standards will protect state waters while lowering regulatory hurdles

The standards that Minnesota adopted in 1967 to protect water quality for industrial uses, irrigation, livestock, and wildlife (known as use classifications 3 and 4) are outdated, and the Minnesota Pollution Control Agency (MPCA) is planning to revise them. Minnesota has many standards to protect water quality for drinking, swimming, fishing, boating, and more. The standards all work together to ensure we all benefit from our lakes, rivers, and groundwater.

The water quality standards that address use classifications 3 and 4 are generally concerned with “salty parameters,” which refer to the presence of sulfate, chloride, bicarbonate, total dissolved salts, and boron in the water, as well as water hardness and specific conductance (a measure of how well water conducts electrical current). Implementing the standards can be extremely complex. The salty parameters in Minnesota lakes, rivers, and groundwater vary widely depending on location, natural features, discharges, runoff, and other factors.

At the same time, what is required of the water used for irrigation and by industry (e.g., power plants, paper mills, refineries, etc.) is highly dependent on the type of use. For example, water used in high-pressure boilers must have no hardness at all. And certain crops and soil types can tolerate more salt from irrigation than others. Ensuring that water quality is protected for industrial uses or irrigation means many different things, depending on where the water comes from and how it will be used.



Proposed changes

Applying modern science to the standards will provide a more nuanced, localized approach to protecting water quality. In addition, the revised standards will allow for flexibility in creating permits, reduce wastewater permitting delays, and avoid wastewater treatment costs that don't provide environmental benefits. The MPCA is proposing several changes within each use classification:

Industrial water consumption water quality standards (Class 3)

- Replace numeric standards with single narrative standard
- Use a “narrative translator” process to protect water quality for industrial consumers
- Consolidate multiple sub-classes into a single general class.

Irrigation water quality standards (Class 4A)

- Replace numeric standards with single narrative standard
- Use a “narrative translator” process to protect water quality for irrigators based on site-specific factors such as crops, soil type, seasonality, soil drainage, and local water quality

Livestock and wildlife water quality standards (Class 4B)

- Revise salinity standard based on current science and common water usage for livestock and wildlife
- Add a sulfate and nitrate standard that will protect livestock and wildlife

Who is affected?

More than 150 municipal wastewater treatment plants and some industrial plants that discharge treated wastewater could face unaffordable costs if the current standard is applied. Many organizations and individuals have submitted comments to the MPCA on revising these standards. Some favor revisions, while others fear that changes will worsen Minnesota's water quality and harm drinking water, recreational uses, or aquatic life and plants. In the draft technical document, the agency proposes a robust implementation process to ensure water quality is protected.

How to get involved

The MPCA is in the initial phase of revising the Class 3 and 4 water quality standards. No final decisions have been made about the rule revisions. The agency is seeking the public's input on its [draft technical support document](#). The agency also included questions in the [request for comments](#) to which it is especially encouraging responses. Comments must be received by 4:30 p.m. on April 22, 2019. Send written comments, questions, and requests for updates to [Katie Izzo](#), Minnesota Pollution Control Agency, 520 Lafayette Rd. North, St. Paul, MN, 55155-4194, 651-757-2595, 800-657-3864.

After it receives public comments, the MPCA will conduct a formal peer-review process on the science underlying the proposal. The agency will then develop the rulemaking proposal and documents, incorporating public and peer-review comments, and begin the formal notice, comment, and hearing process. The revisions must receive approval from both a Minnesota administrative law judge and the U.S. Environmental Protection Agency to be adopted into Minnesota rule. The agency anticipates that the rule revisions will be finalized in 2020.