

# Ryann Geldner

## Comment on 2026 Impaired Waters List and Assessment Manual – Need for Biological Monitoring, Nature-Based Solutions, and Chemical Transparency

Hello,

I am submitting comments on the 2026 draft Impaired Waters List and Assessment Manual.

Minnesota's current lake-assessment framework relies heavily on nutrient-only monitoring, which leads directly to alum recommendations even when lakes are impaired for biological reasons. For example, AUID 40-0063-00 (German Lake) is listed as impaired for FishesBio, yet the county monitoring program collects only phosphorus data. Nutrient-only monitoring cannot assess or address biological impairments.

I request that MPCA update the Assessment Manual and TMDL framework to include the following:

Alum should not be used unless external nutrient sources (including agricultural tile drainage) have been addressed first. Internal-loading treatments cannot succeed when external loading continues.

Engineering firms conducting lake studies should be required to evaluate nature-based solutions (wetlands, shoreline restoration, stormwater filtration, cover crops, etc.) before recommending alum. These alternatives are consistent with MPCA's watershed-based approach and often provide longer-term ecological benefits.

A 51% homeowner approval threshold should be required for any chemical treatment in public waters, even algae. Residents should have a voice in decisions that affect long-term ecological health.

MPCA should create a public, statewide database documenting all chemical applications to lakes, including herbicides, algaecides, and alum. This transparency is essential for evaluating cumulative impacts and for understanding long-term ecological trends.

These changes would bring Minnesota's lake-assessment practices into closer alignment with MPCA's own biological-monitoring standards and with EPA guidance on evaluating ecological condition.

Thank you for considering these comments.