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I am submitting this comment for the Cannon River WRAPS Update 2026 to request that the MPCA strengthen its watershed-level guidance by requiring public approval, macroinvertebrate impact analysis, and evaluation of nature-based watershed solutions before alum or other in-lake chemical treatments are recommended.

The Cannon River Watershed has 216 impaired water bodies, many of which are impaired for aquatic life. Because macroinvertebrates form the base of aquatic food webs, any restoration strategy should explicitly evaluate how sediment-binding treatments like alum affect benthic organisms such as mayflies, midges, amphipods, snails, freshwater shrimp, and oligochaete worms. Most lake macroinvertebrates live in or on the sediments where alum settles, including mayflies, midges, amphipods, freshwater shrimp, worms, and many snail species. Because alum directly alters sediment chemistry, it can reduce benthic macroinvertebrate abundance, which undermines long-term lake recovery and fish populations.

Alum treatments do not address the sources of nutrient loading in the Cannon River Watershed — including agricultural runoff, tile drainage, stormwater inputs, and shoreline erosion. Repeated chemical treatments create long-term dependency and do not reduce watershed-scale phosphorus delivery.

The WRAPS process should prioritize nature-based watershed solutions, including wetland restoration, agricultural buffers, stormwater retrofits, floating treatment wetlands, and engineered pond-wetland systems such as Wisconsin's Agricultural Runoff Treatment Systems (ARTS). These systems remove sediment, suspended solids, and dissolved phosphorus before they reach lakes, while protecting macroinvertebrates and reducing long-term costs.

I respectfully request that the WRAPS include:

A requirement for public approval before alum is recommended.

A macroinvertebrate impact assessment for any proposed in-lake treatment.

A clear preference for source-reduction strategies and nature-based solutions over chemical interventions.

These additions will help ensure that restoration efforts in the Cannon River Watershed protect aquatic life, reduce long-term costs, and address nutrient pollution at its source.