MINNEHAHA CREEK
WATERSHED DISTRICT
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Title: Long Lake Creek Roadmap and Downtown Long Lake Stormwater Study Presentation

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Purpose
At the August 5, 2026, Long Lake City Council Meeting, in coordination with City staff, the Minnehaha Creek Watershed District (MCWD) will present an overview of the Long Lake Creek Roadmap, the recommended strategy for achieving lasting water quality improvements in Long Lake, and the findings of the draft Downtown Long Lake Stormwater Study.

Long Lake Background
Long Lake is included on Minnesota's impaired waters list because it does not meet state water quality standards for nutrients. Under Section 303(d) of the federal Clean Water Act, Minnesota was required to develop a Total Maximum Daily Load (TMDL), establishing the phosphorus reductions needed to meet state standards and restore the Lake.

The Long Lake TMDL, developed in 2014, assigns waste load allocations to regulated municipal separate stormwater systems (MS4s), including the cities whose land drains to the Lake. These allocations are assigned through each city's MS4 permit and represent regulatory obligations to reduce external phosphorus loading from the landscape and demonstrate progress toward compliance.

Long Lake Creek Roadmap Development
Following requests for support from cities subject to the TMDL to develop a clear, actionable plan to reduce phosphorus loading across the Long Lake Creek Subwatershed, in 2023, MCWD delivered the Long Lake Creek Roadmap**.** With funding from the state of Minnesota and completed in close coordination with the Cities of Long Lake, Medina, and Orono, and the nonprofit Long Lake Waters Association, the Roadmap involved:

1. Conducting a data-driven assessment to identify the relative drivers of water quality issues in the Subwatershed
2. Identifying cost-effective capital improvement projects that could achieve meaningful improvements
3. Mapping an implementation strategy to make measurable progress on the Cities' water quality goals

The Roadmap outlined a tiered, comprehensive implementation strategy that prioritizes addressing significant sources of external pollutant loading, to achieve lasting water quality improvements and restore the Subwatershed's five impaired lakes, including Long Lake.

1. **Regional Treatment –** Prioritize implementation of regional projects to treat large drainage areas, cost-effectively capturing significant sources of external pollution before it reaches Long Lake

2. **Landscape Projects –** Implement additional projects on the landscape as development, infrastructure, landowner interests, and capacity allow to further reduce external pollution before it reaches Long Lake

3. **Upstream Lakes –** Restore upstream shallow lakes, which are also impaired, to reduce pollution flowing downstream to Long Lake

4. **Internal Load Management –** Address phosphorus loading inside Long Lake once sufficient progress is made to reduce external pollutant sources, achieving lasting water quality improvements

Roadmap Implementation Status and Progress

County Road 6 Pond Retrofit

MCWD completed the County Road 6 Pond Retrofit in 2026, which was identified in the Roadmap as a priority regional treatment project opportunity. The $725,000 project treats runoff from more than 3,000 acres before it reaches Long Lake and is projected to remove an additional 40 pounds of phosphorus annually.

Downtown Long Lake

The Roadmap also identified downtown Long Lake as a priority area because of its concentrated impervious surface, direct drainage to the Lake, and opportunity to provide regional stormwater treatment. With approximately $150,000 in funding from the Minnesota Board of Water and Soil Resources, MCWD and the City of Long Lake have competed the Downtown Long Lake Stormwater Study, which evaluated downtown stormwater management opportunities.

Upstream Lakes and Landscape Projects

MCWD is advancing restoration opportunities in the impaired upstream shallow lakes, and is initiating scoping of ravine stabilization projects associated with Wolsfeld Lake. Improving water quality in these upstream lakes is critical to achieving lasting improvements in Long Lake because these areas store and release phosphorus downstream to Long Lake. Advancing this work will require continued coordination with the City of Medina, affected landowners, and other project partners. MCWD is also monitoring wetlands downstream of Spring Hill Golf Club. This work will help determine whether future wetland, drainage, or landscape improvements are warranted in this area.

Together, this work reflects the Roadmap's recommended sequence: complete high-value regional treatment projects, develop downtown stormwater improvements, investigate upstream sources and restoration opportunities, and monitor the resulting progress to guide future consideration of in-lake management.

Downtown Long Lake Stormwater Study (Attached)

The Downtown Management Unit encompasses approximately 518 acres and contributes an estimated 194 pounds of phosphorus annually to Long Lake, making it a priority area for treatment before stormwater reaches the Lake. Under the Roadmap's refined nutrient budget and implementation strategy, the target reduction from this area is 88 pounds annually through landscape and regional stormwater projects.

The study screened 22 potential project concepts and advanced 11 for water quality modeling, concept design, and cost estimating. Projects were evaluated based on expected water quality benefit, cost, constructability, site control, permitting, and operations and maintenance. The evaluation also considered potential community, ecological, and public realm benefits.

That process resulted in five recommended projects: two that could be advanced now and three that could be integrated into future capital improvement planning as other municipal infrastructure investments or redevelopment opportunities occur. Together, the two immediate implementation projects are estimated to reduce phosphorus loading by approximately 33-65 lbs annually, representing 38-74% of the downtown reduction target. The lower end of this range reflects the modeled improvement over current conditions, while the upper end reflects the treatment potential that may result from restoring existing, aging stormwater facilities.

Council Presentation and Next Steps

Pending discussion and direction from the Council, the City and MCWD can initiate implementation planning by advancing recommended next steps identified in the Downtown Long Lake Stormwater Study and beginning to outline potential funding strategies to be reported back to the Council.