

HENNEPIN COUNTY

MINNESOTA

Recommendation to approve the amendment to the Shingle Creek and West Mississippi Watershed Management Commissions' Watershed Management Plan

Purpose

The purpose of this report is to inform the county board of staff's review and recommendations to approve a proposed minor plan amendment to the Shingle Creek and West Mississippi Watershed Management Commissions' (commissions) Watershed Management Plan (plan).

Staff review and recommendations

Staff reviewed the commissions' proposed minor plan amendment and found it to be consistent with the Surface Water Management section of the Hennepin County 2030 Comprehensive Plan Update and the Hennepin County Natural Resources Strategic Plan.

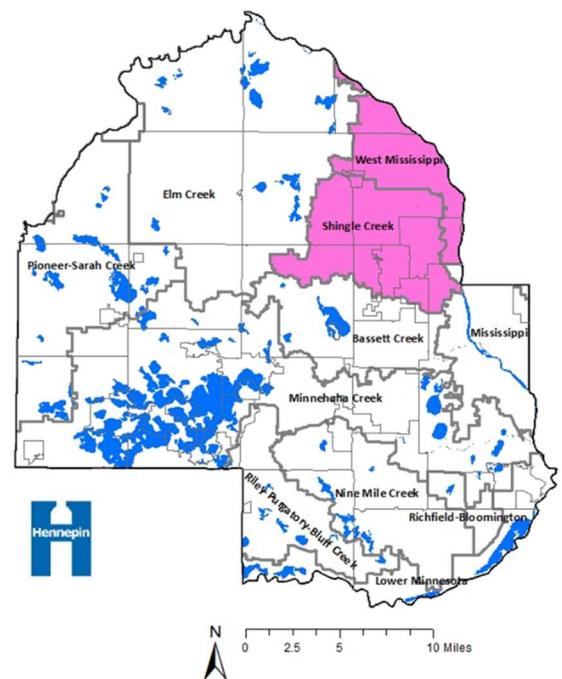
The commissions held a public hearing regarding the proposed minor plan amendment at its regular meeting on May 10, 2018. They received no public or state agency comment on the proposed amendment.

Staff recommends approval of the proposed minor plan amendment to the plan.

Background

The Shingle Creek Watershed is located in the east-central part of the county and includes portions of the cities of Brooklyn Center, Brooklyn Park, Crystal, Maple Grove, Minneapolis, New Hope, Osseo, Plymouth, and Robbinsdale. The West Mississippi watershed includes portions of the cities of Brooklyn Center, Brooklyn Park, Champlin, Maple Grove, and Osseo (Figure 1). These two commissions have a joint Watershed Management Plan and joint meetings but maintain two separate boards and levy for and complete projects only within their respective watershed boundaries.

Figure 1. Shingle Creek and West Mississippi Watershed Locations



The commissions have proposed a minor plan amendment to revise the plan's Capital Improvement Program (CIP). Pursuant to Minnesota Statutes section 103B.231, subd. 7, the proposed amendment was forwarded to the county for review and action on water quality and quantity projects in the CIP where it may seek to certify funding to implement the water quality and quantity projects under Minnesota Statutes section 103B.251.

The amendment adds a new phosphorus reduction project and specifies lakes that will receive an alum treatment (previously a generic project).

New project

1. The SRP (Soluble Reactive Phosphorus) Reduction Project (Brooklyn Park, Crystal) will evaluate the effectiveness of three types of filter media at reducing soluble reactive phosphorus concentrations in the discharge from altered wetlands. The project will then permanently install the best-performing filter at the outlet of two wetlands that currently discharge high concentrations of soluble reactive phosphorus to impaired bodies of water downstream. Installation locations will be Wetland 639W just upstream of Upper Twin Lake in Crystal and the Cherokee Wetland on Bass Creek at Cherokee Drive in Brooklyn Park. This project will include inflow and outflow monitoring to document results. The estimated cost of the project is \$124,680, all of which will be paid by the Shingle Creek Watershed Management Commission. If the minor plan amendment is approved, \$55,700 will be levied for this project in 2019. The remainder will be paid with grant funds.

Revise project already in CIP

1. The general Lake Internal Load Improvement Project scheduled to be levied in 2019 will be revised to the Bass and Pomerleau Lakes Alum Treatment Project. The Shingle Creek Watershed Management Commission is implementing 13 total maximum daily load studies for lakes in the watershed. Several of these studies recommend internal load improvements for several lakes. The commission has included a general Internal Load Reduction Project in the CIP every other year and adds specificity to that project as specific project plans are prepared. The Bass and Pomerleau Lakes Alum Treatment Project will treat the lakes twice with alum, which is a chemical that reacts with phosphorus in the water and makes it unavailable to algae. The project will also manage responses of undesirable aquatic vegetation, or increases of aquatic invasive species, to make improvements in lake clarity. The project results will be monitored. The estimated cost of the project is \$390,000, all of which will be paid by the commission using grant funds and levy certified in previous years.

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