

Minnesota Board of Water and Soil Resources
520 Lafayette Road North
St. Paul, Minnesota 55155

In the Matter of the review of the Comprehensive Watershed Management Plan for the Pine River Watershed, pursuant to Minnesota Statutes, Sections 103B.101, Subdivision 14 and 103B.801.

**ORDER
APPROVING
COMPREHENSIVE
WATERSHED
MANAGEMENT PLAN**

Whereas, the Local Government Units of the Pine River Watershed submitted a Comprehensive Watershed Management Plan (Plan) to the Minnesota Board of Water and Soil Resources (Board) on July 17, 2019, pursuant to Minnesota Statutes, Sections 103B.101, Subdivision 14 and Board Resolution #16-17, and;

Whereas, the Board has completed its review of the Plan;

Now Therefore, the Board hereby makes the following Findings of Fact, Conclusions, and Order:

FINDINGS OF FACT

1. **Partnership Establishment.** The Partnership was established November/December of 2017 through adoption of a Memorandum of Agreement for the purposes of developing a Comprehensive Watershed Management Plan. The membership of the Partnership includes: Cass County, Cass Soil and Water Conservation District (SWCD), Crow Wing County and Crow Wing SWCD.
2. **Authority to Plan.** Minnesota Statutes, Sections 103B.101, Subdivision 14 allows the Board to adopt resolutions, policies or orders that allow a comprehensive plan, local water management plan, or watershed management plan, developed or amended, approved and adopted, according to Chapter 103B, 103C, or 103D to serve as substitutes for one another or be replaced with a comprehensive watershed management plan. Minnesota Statutes, Sections 103B.801 established the Comprehensive Watershed Management Planning Program; also known as One Watershed, One Plan program. And, Board Resolution #16-17 adopted the One Watershed, One Plan Operating Procedures and Plan Content Requirements policies.
3. **Nature of the Watershed.** The Pine River Watershed covers over 502,400 acres (785 square miles). The headwaters of the watershed starts at Pine Mountain Lake west of Backus in south central Cass County where the Pine River winds east into Crow Wing County and the Whitefish Chain of Lakes before its confluence with the Mississippi River. In addition, the watershed drains an area south of the City of Remer down to Pelican Lake near the City of Breezy Point. Forests cover almost half of the watershed area with an additional one third of the area covered by wetlands. The watershed contains over 500 lakes including 64 lakes of biological significance, 18 cold water cisco refuge lakes and wild

rice is found in 63 lakes and 5 streams. Under the forest floor and throughout the watershed, sandy and coarse loamy soils are the dominant soil types. The water quality in this watershed is of high quality with only five impaired lakes and four impaired streams and a limited number of lakes with a declining water quality trend. Due to this high water quality, the overall goal for this watershed is protection in nature with limited enhancement. Agricultural production is a strong land use in the western part of the watershed with other economic drivers being tourism and the forest industry. Cities in the planning area include Backus, Pine River, Breezy Point and Crosslake, Fifty Lakes and Emily.

4. **Plan Development.** The Plan was developed as a single, concise, and coordinated approach to watershed management. The Plan consolidates policies, programs, and implementation strategies from existing data, studies and plans, and incorporates input from multiple planning partners to provide a single plan for management of the watershed. The Plan focuses on prioritized, targeted, and measurable implementation efforts and lays out specific actions to protect existing forests and both surface and groundwater resources. The Plan also set goals to enhance water quality in lakes with declining water quality trends, protect and enhance natural habitat, recreational uses and drinking water sources in the watershed.
5. **Plan Review.** On July 17, 2019, the Board received the Plan, a record of the public hearings, and copies of all written comments pertaining to the Plan for final State review pursuant to Board Resolution #16-17. State agency representatives attended and provided input at advisory committee meetings during development of the Plan. The following state review comments were received during the comment period.
 - Minnesota Department of Agriculture (MDA): MDA provided comments requesting revisions and resulted in a change to the Plan. MDA did confirm receipt of the Plan at the final formal review and did not submit additional comments.
 - Minnesota Department of Health (MDH): MDH provided comments requesting no revisions to the Plan. MDH confirmed receipt of the Plan at the final formal review, did not submit additional comments and recommended approval of the plan.
 - Minnesota Department of Natural Resources (DNR): DNR provided comments and resulted in changes to the Plan. DNR confirmed receipt of the Plan at the final formal review, did not submit additional comments and recommended approval of the plan.
 - Minnesota Pollution Control Agency (MPCA): MPCA provided comments requesting two revisions to the Plan which resulted in one change to the Plan. MPCA confirmed receipt of the Plan at the final formal review, did not submit additional comments and recommended approval of the plan.
 - Minnesota Environmental Quality Board (EQB): EQB confirmed receipt of the Plan and did not provide comments.
 - Minnesota Board of Water and Soil Resources (BWSR) regional staff: BWSR provided comments requesting revisions to the Plan to ensure consistency throughout the Plan and that plan content requirements were met. All comments were adequately addressed in the final Plan. BWSR staff recommended approval of the plan

6. Plan Summary and Highlights.

- This is a protection based watershed plan with some enhancement activities. The primary goals of the Plan are to achieve 75% protection of existing forests in the watershed in targeted subwatersheds with lakes that have stable or increasing water quality trends. The other primary goal is to reduce phosphorous inputs by 5% into lakes with declining water quality trends.
- Due to its status as a protection-focus watershed, one protection focused goal was written to include all three resource categories because the implementation actions for the goal would be the same. Minnesota's state agencies that manage surface water, drinking water, and habitat (DNR, MDH, MPCA, BWSR) agree that forest and vegetative cover benefits clean surface water, drinking water, and habitat. More specifically, DNR Fisheries research has shown that once a minor watershed is over 25% disturbed (urban, agriculture, mining), the water quality is negatively affected. Therefore, the measure of 75% of the minor watershed being in protected land uses is used in this combination protection goal. Protected land uses are defined as surface water, public land, private wetlands, conservation easements, and Sustainable Forest Incentive Act lands.
- The surface water goals encompass a variety of issues including phosphorus loading to lakes, culvert management and wetland protection. None of the economically significant lakes in the Pine River Watershed are currently impaired, but some have declining transparency trends. It is important economically to the region to work to reverse these trends before they exceed water quality standards. Stormwater and agricultural phosphorus loading to priority declining lakes was quantified using the HSPF model developed during the Watershed Restoration and Protection Strategy (WRAPS 2017). A phosphorus reduction of 5% was determined to be achievable in a 10-year timeframe, and it was also the reduction goal used in the DNR's Phosphorus Sensitivity Analysis (Radomski 2018).
- Historical installation of ditches and culverts in the watershed has changed the water drainage, storage and connections in the watershed. In addition, when culverts are not sized correctly or installed properly, they can cause impacts to habitat, fish migration, water levels, channel stability and increase nutrient transfer. The culvert management goal addresses the issues of stream channelization, culvert installation, connectivity, channel stability, and altered hydrology as it affects nutrient transfer and habitat.
- Wetlands can reduce the effects of flooding and high water, store water to allow nutrients to settle out, and are also important habitat for fish, wildlife, and birds. Although the Pine River Watershed has not lost large numbers of wetlands like western Minnesota, wetlands around lakeshore have been filled for development over time. Wetlands throughout the watershed have varying amounts of protection enforced by different government agencies, federal (Clean Water Act, ACOE), state (Wetlands Conservation Act, BWSR, MN DNR) and county (County Wetlands Ordinance). This goal aims to continue current programs and administration of ordinances.
- The groundwater goals include addressing subsurface sewage treatment systems (SSTS), chlorides, nitrates, well sealing and Drinking Water Supply Management Areas (DWSMAs). The Pine River Watershed sits atop a surficial sand aquifer, making it vulnerable to surface contaminants. Chlorides, SSTS, and nitrates are all potential contaminants for drinking water. Sealing unused wells and protecting DWSMAs are ways to prevent contaminants from reaching the aquifer.
- The Pine River Watershed has abundant forests and habitat, but some of these areas, especially along lakes and streams (riparian), have been lost over time as the area has developed. The forestry and habitat goals address protection of undeveloped riparian lands and corridors and enhancing and restoring riparian areas that have been disturbed.

7. **Northern Regional Committee.** On August 7, 2019, the Northern Regional Committee met to review and discuss the Plan. Committee members in attendance were Committee Chair Rich Sve, Tom Schulz and Jeff Berg. BWSR staff in attendance were Northern Regional Manager Ryan Hughes, Board Conservationist Chris Pence and Clean Water Specialist Jeff Hrubes. The representatives from the Partnership were Melissa Barrick, Crow Wing SWCD, Kelly Condiff, Cass County Environmental Services Department and SWCD. Policy Committee members in attendance were Bill Brekken (Crow Wing County), Jeff Peterson (Cass County) and Jim Ballenthin (Cass SWCD). Board regional staff provided its recommendation of Plan approval to the Committee. After discussion, the Committee's decision was to present a recommendation of approval of the Plan to the full Board.
8. This Plan will be in effect for a ten-year period until September 25, 2029.

CONCLUSIONS

1. All relevant substantive and procedural requirements of law have been fulfilled.
2. The Board has proper jurisdiction in the matter of approving a Comprehensive Watershed Management Plan for the Pine River Watershed pursuant to Minnesota Statutes, Sections 103B.101, Subd. 14 and 103B.801 and Board Resolution #16-17.
3. The Pine River Watershed Plan attached to this Order states water and water-related problems within the planning area; priority resource issues and possible solutions thereto; goals, objectives, and actions of the Partnership; and an implementation program.
4. The attached Plan is in conformance with the requirements of Minnesota Statutes Section 103B.101, Subd. 14 and 103B.801 and Board Resolution #16-17.
5. The attached Plan when adopted through local resolution by the members of the Partnership will serve as a replacement for the comprehensive plan, local water management plan, or watershed management plan, developed or amended, approved and adopted, according to Chapter 103B, 103C, or 103D, but only to the geographic area of the Plan and consistent with the One Watershed, One Plan Suggested Boundary Map.

ORDER

The Board hereby approves the attached Comprehensive Watershed Management Plan of the Pine River Watershed, dated September 25, 2019.

Dated at St. Paul, Minnesota, this twenty-fifth day of September, 2019.

MINNESOTA BOARD OF WATER AND SOIL RESOURCES


BY: Gerald Van Amburg, Chair