

# 2023-2033 Comprehensive Watershed Management Plan Summary



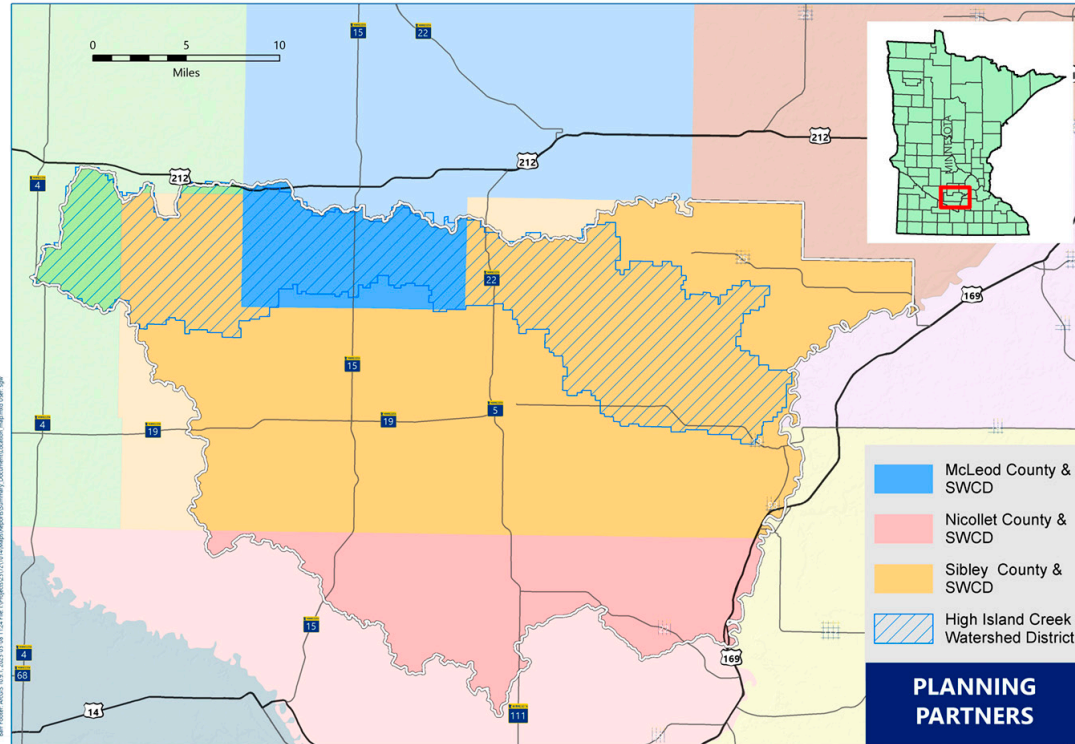
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*Prepared for the*  
**Lower Minnesota River West  
Planning Partnership**



## ABOUT US

The Lower Minnesota River West Planning Partnership (partnership) is a collaborative effort of McLeod, Nicollet, and Sibley Counties, their respective Soil and Water Conservation Districts (SWCDs), and the High Island Creek Watershed District (HICWD). Together, the Partners will cooperate to achieve shared goals focused on protecting and restoring water resources within a 780 square-mile area west of the Minnesota River while sustainably supporting the agricultural land uses that dominate the local landscape and economy.



Geographic extent of the Lower Minnesota River West Planning Partnership

## ABOUT THIS PLAN

The Partnership developed a 2023-2033 Comprehensive Watershed Management Plan (Plan) through the State of Minnesota's One Watershed, One Plan (1W1P) program. This Plan does not create a new unit of government but outlines a cooperative and coordinated strategy by which the existing Partner organizations will work together to protect and restore the water resources within the planning area over a 10-year period. Through prioritized and targeted actions, the partners will make progress towards measurable goals established during the planning process.

The Plan been designed to leverage the existing programs, capacities, and expertise of the Partners while providing a framework for expanded and collaborative roles and access to financial support from State and Federal organizations.

The Plan was developed through the efforts of:

- **Planning Work Group**—comprised of technical staff of the Partners organizations
- **Advisory Committee**—including staff from state and local cooperators and invited stakeholders
- **Policy Committee**—comprised of elected officials representing the Partner organizations

Plan development also considered the input of almost 300 residents identifying as farmers, students, elected officials, and outdoor enthusiasts – all of whom expressed their concerns, interests, and priorities for local water and natural resource management.



## PRIORITY ISSUES AND RESOURCES—WHAT’S THE PROBLEM?

Studies and monitoring performed in the planning area by local organizations and state agencies have helped to identify the drivers of water and natural resource concerns in the watershed. During Plan development, the Partners considered, existing studies, geospatial data, monitoring and modeling results, stakeholder input, and their own vast local experience to articulate 8 key issues to be the focus of the Plan.

### LEVEL 1 ISSUES



#### Degraded Surface Water Quality

Surface water quality is threatened or impaired by pollutant loading and other stressors.



#### Excessive Erosion & Sedimentation

Excessive in-field, ravine, shoreline, and in-channel erosion diminishes agricultural productivity, damages riparian areas, and degrades surface water quality and stream habitats.



#### Altered Hydrology and Drainage

Changes to natural hydrologic systems, tiling of fields, and loss of flood storage increase runoff and negatively impact water quality, flood risk, and ecology.



#### Excessive Runoff and Flooding

Increased runoff and frequent flooding threaten public safety, property, and infrastructure and carry significant financial and environmental costs.

### LEVEL 2 ISSUES



#### Degraded Soil Health

Degraded soil health diminishes agricultural productivity, landscape resilience, and the associated benefits to the environment.



#### Protection of Groundwater/Drinking Water Quality

The high quality of groundwater and drinking water must be protected from potential threats.

### LEVEL 3 ISSUES



#### Threats to fish, wildlife & habitat

Human activity threatens natural areas, prairies, bluffs, and wetlands providing habitat and other ecological benefits, and the species that inhabit them.



#### Threatened Groundwater Supply

Groundwater sustainability is at risk from consumptive use and loss of recharge.

## ESTABLISHING MEASURABLE GOALS

The Partners established measurable goals to address each of the issues described in the Plan with emphasis given to the highest priority issues. The Plan identifies **long-term goals** that describing desired future conditions as well as **10-year goals** that measure the progress expected within 10-years of Plan implementation.

Some goals are applicable watershed-wide while some focus on specific drainage areas, natural resources, or target audiences. Goals address the restoration of degraded resources as well as prevention of future water and natural resource management issues.

### GOAL EXAMPLES AND RELATED ISSUES



Increase watershed storage by 20,000 acre-feet. Increasing watershed storage will reduce flooding that negatively impacts agricultural productivity and infrastructure. **(Excessive Runoff and Flooding)**



Increase the use of cover crops, perennial vegetation, and conservation till strategies relative to baseline by 4,000 acres. **(Excessive Erosion & Sedimentation)**



Implement cost-share projects with private landowners to reduce sediment and phosphorus loading from the landscape to improve water quality in downstream lakes and rivers. **(Degraded Surface Water Quality)**



Promote multipurpose drainage management and implement 10 multipurpose drainage management projects. Altered hydrology and poor drainage conditions provide opportunities to achieve ecological goals while promoting land productivity. **(Altered Hydrology and Drainage)**



Minimize groundwater contamination by sealing and/or providing cost sharing to seal 100 private wells. **(Protection of Groundwater/Drinking Water Quality)**



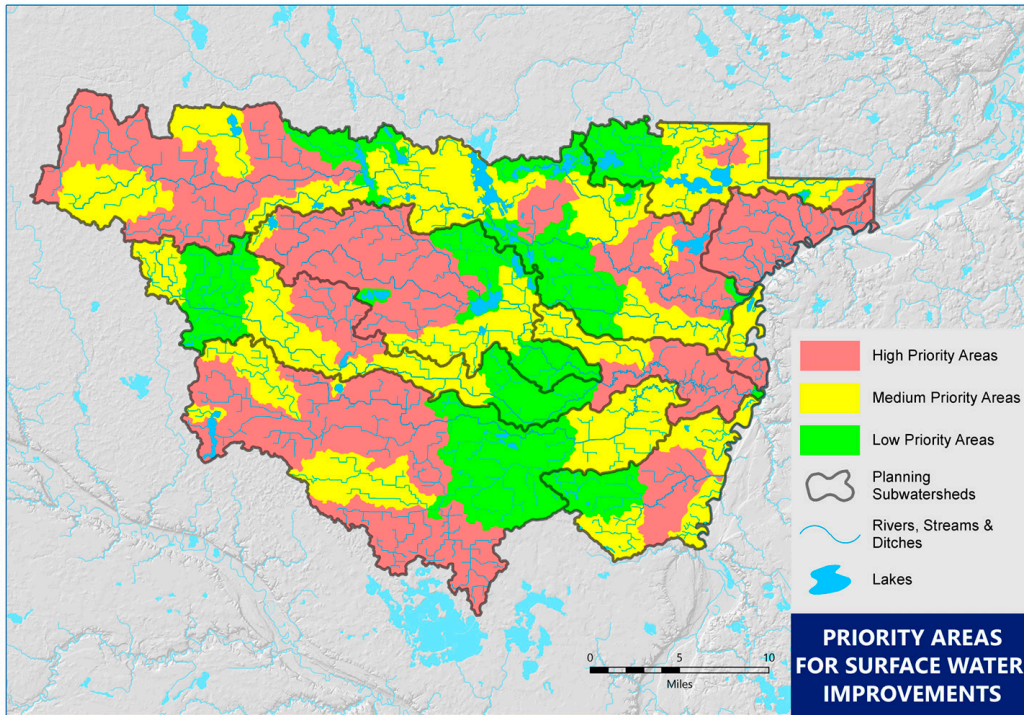
Protect and preserve natural areas adjacent to stream corridors through easements and enrollment of 2,000 acres in conservation programs. Protected wetland and shoreland areas provide water quality benefits, water storage, and wildlife habitat. **(Threats to fish, wildlife & habitat)**



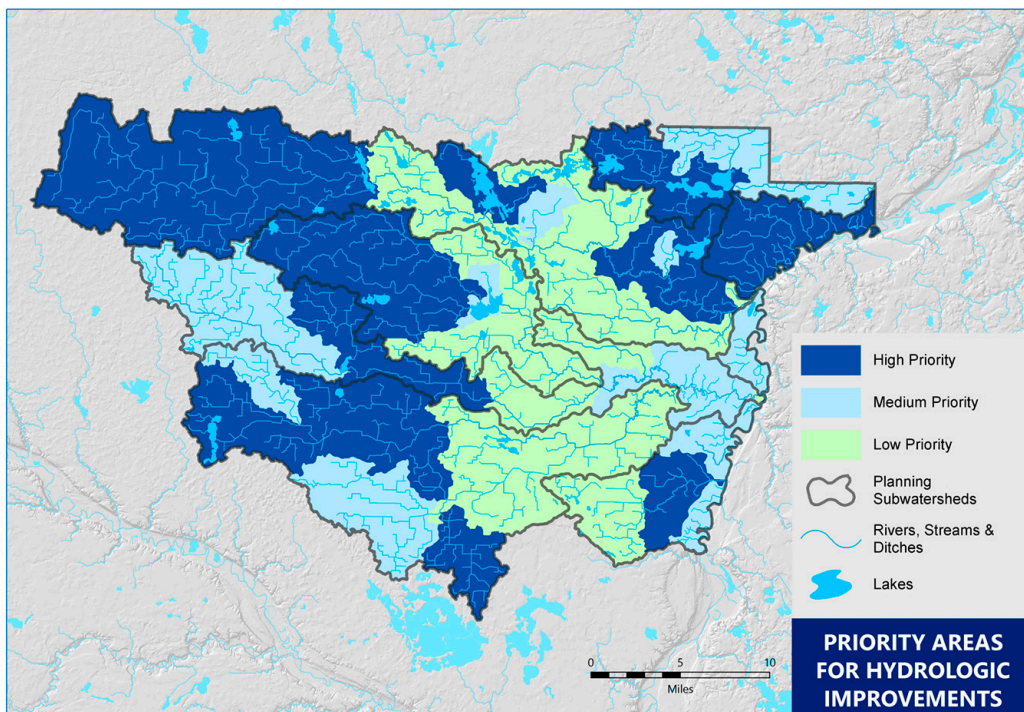


## IMPROVEMENT THROUGH TARGETED ACTIONS

The Partners have a plan for implementing projects and programs that will make a difference. To achieve the greatest benefit from available staff and funding, the Partners prioritized areas of the watershed in which to target projects that improve water quality and restore altered hydrology. Priority areas were identified based on hydrologic and water quality modeling, monitoring data, and input received during planning. While project resources are focused in the highest priority areas, projects and programs are planned throughout the planning area.



*The Partners identified subwatersheds as high, medium, and low priority based on a combination of nutrient and sediment loading, water quality impairments, and protection priorities.*



*The Partners classified drainage areas as high, medium, and low priority based on potential to generate runoff and location relative to headwater streams, bluffs, and priority lakes.*

Within each subwatershed, we analyzed the landscape to identify likely project locations for field practices to reduce pollutant loading, minimize erosion, and slow or retain runoff.

Some of the planned implementation activities (organized by key issues) include:



### Altered Hydrology and Drainage

- We will implement multipurpose drainage projects for public ditches in priority areas to mitigate adverse impacts to hydrology and water quality.
- We will identify locations where two-stage ditches are feasible to maintain capacity while reducing velocity and/or erosion potential and provide technical support for implementation.
- We will support (through cost-share) the implementation of tile system BMPs to mitigate hydrologic impacts of upstream tile systems.
- We will host outreach events to promote application and interest in multipurpose drainage projects.



### Degraded Surface Water Quality

- We will work with landowners to implement practices to reduce erosion and filter pollutants in priority areas by providing technical and financial assistance.
- Provide financial assistance to implement animal waste management systems to reduce waste loading to streams.



### Accelerated Erosion & Sedimentation

- We will provide technical support for landowner projects to stabilize streambanks using natural designs.
- We will provide technical and cost share support for landowners to implement soil health like planting cover crops and no-till practices.



### Excessive Flooding

- We will implement and support projects to increase watershed storage targeted in priority subwatersheds
- We will reconnect or restore disconnected floodplain areas to increase flood resilience
- We will support landowner flood risk mitigation projects through cost-share grant program and technical assistance

### SOIL HEALTH PRACTICES



Practices such as rotational grazing, cover cropping, perennial cropping and no-till systems maintain and improve soil health. These practices promote habitat for wildlife, reduce erosion, and improve water quality while retaining nutrients, moisture and organic matter in our soil. The Plan includes technical and financial support to increase the adoption and continued use of soil health practices like this cover crop mix on canning crop acres in headwaters of the Rush River watershed.



### EROSION CONTROL PRACTICES

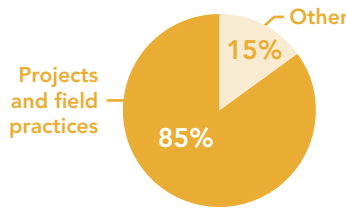
Grade stabilization, terraces, and water and sediment control basins are common edge-of-field practices to reduce erosion and sedimentation. The Plan includes technical and financial support to promote landowner erosion control practices like this terrace in the High Island Creek watershed—this project mitigates erosion and traps sediment while maintaining productive cropland acres.



## HOW WE CARRY-OUT THE PLAN

Over 85% of Plan implementation funding is directed towards projects and field practices, including cost-share support for landowners to implement conservation practices on their land. The Plan also includes other activities and programs in support of Partner goals, including:

- Monitoring and studies
- Education and public involvement
- Coordination of regulatory programs
- Administration of the partnership



The Plan carries an estimated price-tag of approximately \$17 million over 10 years. This cost is split between local government partners and State and Federal grant funding, including dedicated grant funding via Minnesota’s Clean Water Land and Legacy legislation.

## OPPORTUNITIES TO GET INVOLVED

This Plan was developed with input from stakeholders like you. Its successful implementation relies on cooperation with landowners who support conservation practices that promote the sustainability of the land and waters we all rely on.

Contact your local partner organization to get more information about opportunities for you to protect the soils, waters, and natural resources in your community, including our cost-share grant opportunities.

The Plan can be found at <https://www.sibleyswcd.org/1w1p>



### LANDOWNER COST-SHARE PROGRAM

The Planning Partners aim to use much of the funding available for implementation to support field practices constructed in cooperation with local landowners through a cost-share program similar to the traditional SWCD service model.

Project cost-share funding amounts will be based on estimated project benefits, location within priority watersheds, and other factors. Eligible practices include traditional conservation practices, both structural and non-structural, that retain and control runoff to improve water quality, reduce erosion, promote infiltration, and protect groundwater. Structural practices that may be eligible include water and sediment control structures or drainage water management practices. Nonstructural practices eligible for cost share include cover crops, alternative till strategies, abandoned well sealing, and others.

The Partners anticipate that many projects will provide multiple additional benefits beyond improving surface water quality and restoring altered hydrology. The specific practices implemented at project locations identified in the Plan will depend on local landscape considerations, landowner willingness, and potential for multiple benefits.



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