

## EXECUTIVE SUMMARY

The Lower Minnesota River Watershed District (District) Watershed Management Plan (Plan) describes how the District will address water resources management over the next 10 years as required by M.S. 103B and 103D and Minnesota Rules (MN Rules) 8410. The purpose of this Plan is to protect, preserve, and manage the surface water resources (Minnesota River, lakes, streams, and wetlands) and groundwater within the District.

The District was organized by petition from Hennepin, Ramsey, Dakota, Scott, and Carver counties in 1960 in response to the Minnesota Watershed Act of 1955. The District's first Watershed Management Plan was prepared, approved, and adopted in 1961.

The Metropolitan Surface Water Management Program (M.S. 103B) and Watershed Act requires the District to review and update its Plan every ten years. The second generation plan was prepared and adopted in 1999 and expired in 2009. This current amended Plan represents a third generation plan and will be effective from 2011 to 2020. In addition to complying with the aforementioned laws, this Plan meets the requirements of MN Rules 8410, 8420, and 7050. The Plan includes management standards and procedures for addressing surface water, wetland, and groundwater issues; and issues related to navigation along the Minnesota River.

### E1. PLAN ORGANIZATION

This Plan documents the Lower Minnesota River Watershed and its management, and therefore, much of the information presented is technical. Background information regarding scientific terms and processes is provided where practical. An acronym list is also provided. Readers are encouraged to consult area professionals or professional references for more information.

The Plan contains the following sections as required by MN Rule 8410:

**Executive Summary:** Provides an overview of the plan.

**Introduction:** Summarizes State statutes, plan requirements, the organization and its history, and District accomplishments since the District's 1999 Second Generation Watershed Management Plan (Second Generation Plan).

**Section 1.0:** Land and Water Resource Inventory: Presents current and historic background and inventory information regarding the physical, hydrological, biological, and human environment of the watershed.

**Section 2.0:** Issues Identification/Assessment of Problems: Provides an overview of the issues identified during the planning process, assesses the adequacy of existing controls, and identifies potential management gaps.

**Section 3.0:** Goals, Policies, and Management Strategies: Presents the management framework (goals, policies, and strategies) adopted by the District Board of Managers (Managers) to address the priority issues and management gaps.

**Section 4.0:** Implementation Program: Describes the implementation elements of the Plan and its impact on local governments and residents. This section provides an implementation program table and preliminary annual budgets.

**Section 5.0:** Impact on Local Units of Government: Expresses the potential financial impact that the Plan changes will have on local government units (LGU).

**Section 6.0:** Amendment and Reporting: Describes the procedures for amending the Plan and addressing the annual reporting requirement.

## **E2. WATERSHED ISSUES**

Watershed issues are problems or concerns identified by the Managers, by the Technical Advisory Committee (TAC), and the Citizen Advisory Committee (CAC). These issues need attention and, in some cases, resolution. The TAC and CAC held workshops and partnership work sessions to develop a list of watershed issues. Information generated at those sessions was presented to the Board and is addressed here. The following issues were identified, and are discussed in detail in Section 2.0 Issues and Problems Assessments.

1. Unclear role of the District
2. Outside influences
3. Water quality
4. Flooding and floodplain management
5. Erosion and sediment control
6. Groundwater
7. Commercial and recreational navigation
8. Public education and outreach
9. Potential problems

## **E3. WATERSHED MANAGEMENT FRAMEWORK**

Section 3.0 presents the management framework of the Plan in terms of goals, policies, strategies, and standards. This framework is based on the issues identified by the TAC, CAC, and Manager, given their priority and the adequacy of existing controls. The mission and purpose of the District, presented below, were also taken into consideration when developing the framework.

### **E3.1. MISSION**

The mission of the District is to manage and protect the Minnesota River, lakes, streams, wetlands, and groundwater, and to assist and facilitate in providing river navigation by:

- Promoting open communication, and partnering, with citizens, community organizations, and local, state, and federal agencies.
- Improving and protecting the quality of the Minnesota River and all water bodies in the watershed.
- Minimizing the negative effects of floods and droughts on the Minnesota River and all water bodies in the watershed.
- Collecting and distributing information regarding surface water and groundwater in the watershed to assist in establishing priorities and developing local plans to improve water resources in the watershed.
- Monitoring and understanding the effects of municipal groundwater appropriations and drought on groundwater levels.
- Working with LGUs to enforce the Wetland Conservation Act.
- Assisting and facilitating the efforts of state and federal agencies to maintain the navigation channel.
- Educating stakeholders about the impact they have on the water resources in the watershed and motivating them to change behaviors that have a negative impact.

### **E3.2. WATERSHED PURPOSE**

The Metropolitan Surface Water Management Act states that the purposes of the District and other water management programs (quoted from M.S.103B.201) are as follows:

- Protect, preserve, and use natural surface and groundwater storage and retention systems.
- Minimize public capital expenditures needed to correct flooding and water quality problems.
- Identify and plan for means to effectively protect and improve surface and groundwater quality.
- Establish more uniform local policies and official controls for surface and groundwater management.
- Prevent erosion of soil into surface water systems.
- Promote groundwater recharge.
- Protect and enhance fish and wildlife habitat and water recreational facilities.
- Secure the other benefits associated with the proper management of surface and groundwater.

Unlike other water management programs in the state subject to M.S.103B, the District has an additional purpose, as noted in the District's mission, which is to assist and facilitate the efforts of state and federal agencies to maintain the Minnesota River 9-Foot navigation channel.

### **E3.3. GOALS**

The following goals were established by the District. These goals are not presented in any particular order and do not reflect rank within the District.

- Goal 1: Organizational Management – To manage the different roles of the District
- Goal 2: Surface Water Management – To protect, preserve, and restore surface water quality
- Goal 3: Groundwater Management – To protect and promote groundwater quantity and quality
- Goal 4: Unique Resources Management – To protect and manage unique resources
- Goal 5: Wetland Management – To protect and preserve wetlands
- Goal 6: Floodplain and Flood Management - To manage floodplains and mitigate flooding
- Goal 7: Erosion and Sediment Control – To manage erosion and control sediment discharge
- Goal 8: Commercial and Recreational Navigation – To maintain and improve navigation and recreational use of the Lower Minnesota River
- Goal 9: Public Education and Outreach – To increase public participation and awareness of unique natural resources and the Minnesota River

### **E3.4. PLAN IMPLEMENTATION**

The three major elements of the implementation program described in Section 4 are highlighted below:

**Administrative/Managerial Efforts:** This includes staffing, day-to-day operations, and funding for audits, reporting, training, and contingency.

**Studies and Programs:** The Plan includes the following studies and programs.

- Governance study
- Monitoring and data collection
- Data analysis and assessment
- Cost share incentive program
- Water quality restoration program
- Conservation easement studies
- Resource inventory and assessment program (Strategic Resource Evaluation)
- Dredge material beneficial use plan
- Dredge material management plan execution
- Education and Outreach Program
- District monitoring program
- Wetland and Fen Assessment

**Capital Improvements Projects:** The Plan includes the projects listed below in Table E-1. Additional projects can be added during the annual meeting before the start of the budgeting process.

**Table E-1: Lower Minnesota River Watershed District – Capital Improvement Projects\***

Project Name	Project Partner	Estimated Cost	Estimated Timeline
Gully Erosion Projects	LGUs	\$125,000	2012-2016
Mound Springs Gully Project	City of Bloomington	\$250,000	2013-2014
Seminary Fen Restoration at Engler	City of Chaska	\$35,500	2012
Ravine Stabilization at Seminary Fen	City of Chaska	\$400,000	2012-2013
Heritage Hills Park and Gully Restoration Project	City of Bloomington	\$100,000	2015-2016
Dean Lake Restoration Project	Scott County, City of Shakopee and Prior Lake Spring Lake WD	\$200,000	2014-2016
Minnesota River Study Area 3 Bluff Stabilization	City of Eden Prairie	\$250,000	2016
Bluff Creek Restoration Project	DOT, City of Chanhassen and Riley-Purgatory Bluff Creek WD	\$50,000	2015
Long Meadow Outfall Project	City of Bloomington	\$100,000	2014-2015
Wetlands and Fens Assessment	DNR and BWSR	\$45,000	2016
Brickyard Clayhole Lake – Gully Stabilization	Cities of Chaska and Carver	\$100,000	2016
East Chaska Creek Restoration	City of Chaska, Carver County Env. Services and Carver Soil and Water Conservation District (CSWCD)	\$93,500	2018-2019
Riley Creek Restoration	City of Eden Prairie	\$168,500	2018-2019

\* Costs presented in this table represent the District’s portion pending a match of up to 50 percent from project partners.

**E3.4.1. LOCAL WATER PLANS**

The required content of local water plans, as stipulated by MN 8410, is addressed in Section 4.2.1-4. In general, local water plans shall include

- Surface Water, Ground Water, Wetlands, Floodplain and Flood Management, Unique Natural Resources, and Erosion and Sediment Control Goals and Policies

- Watershed Management Standards
- Water Conservation Act (WCA) responsibilities and Wetland Inventories and Management Plans

**E3.5. MEASURABLE OUTCOMES**

The success of this Plan will be measured by the successful implementation of policies and strategies set forth to attain the nine identified goals mentioned above. Recognizing that the best measure of success is more quantitative and less qualitative, the trends generated by the annual review and assessment of program short-term and long-term metrics will be used to determine success. The short-term and long-term metrics are provided below in Table E-2.

**Table E-2: Lower Minnesota River Watershed District Short-term and Long-term Metrics**

Goal	Short-term Metric	Long-term Metric
Goal 1: Organizational Management	Completion of scheduled activities Annual LGU Audits Amount of dollars leveraged for projects from other agencies and property owners	Formation of a Minnesota River Basin Commission
Goal 2: Surface Water Management	Number and types of projects completed as part of the Cost Share Incentive Program and Water Quality Restoration Programs Number of targeted studies and projects completed	Trends in water quality parameters identified for monitoring efforts
Goal 3: Groundwater Management	Number of targeted studies and projects completed	Trends in water quality parameters identified for monitoring efforts
Goal 4: Unique Natural Resources Management	Number of targeted studies and projects completed	Number and acreage of unique natural resources protected, restored or enhanced Acquisition of high valued easement
Goal 5: Wetland Management	Completion of scheduled activities	Number and acreage of wetlands protected, restored or enhanced
Goal 6: Floodplain and Flood Management	Completion of scheduled activities	Number of structures damaged and value of flood damages
Goal 7: Erosion and Sediment Control	Completion of scheduled activities	Trends in water quality

<b>Goal</b>	<b>Short-term Metric</b>	<b>Long-term Metric</b>
Goal 8: Commercial and Recreational Navigation	Completion of scheduled activities Number of targeted studies and projects completed	Secure regular congressional and state legislative funding for the 9-foot channel
Goal 9: Public Education and Outreach	Number and types of sponsored events Number of participants at events Number of articles, press releases and pamphlets developed Number of articles, press releases and pamphlets printed Number of volunteers	Same as short-term metrics